

Photos by Kai-Huei Yau | kyau@tricityherald.com

U Canyon prepped for demolition

Cementlike grout used to encapsulate equipment, debris

ANNETTE CARY

HERALD STAFF WRITER

Work has started to grout in the cells where radioactive waste was processed at the bottom of U Canyon at Hanford, preparing the massive building for demolition.

By the time workers are done, they will have poured 20,000 cubic yards of cementlike grout, enough material to fill six Olympic-size swimming pools.

Below the deck of the plant are 40 cells designed to chemically process radioactive material. Now they are filled with equipment, pieces of piping and other material from the plant that have been lowered by crane and fitted in like puzzle pieces.

Two small test pours of grout in April showed that the material could fill any open spaces and encapsulate equipment and debris as planned, clearing the way for full-scale grouting by CH2M Hill Plateau Remediation Group and its Tri-Cities subcontractors, AGEC and Central Pre-Mix.

A batch plant has been built outside U Canyon to produce the grout that will be needed. The material will be

inserted through 100 eight-inch holes up to 17 feet long drilled through the exterior walls of the building, the cell covers and elsewhere.

The building is called a canyon because of its approximately 800-foot-long interior, with high walls and no windows.

"The sheer size of the building has been the main driver of our planning all along," said Dave Chojnacki, CH2M Hill project manager, in a statement.

U Plant was built during World War II, but two other canyons were able to keep up with processing irradiated fuel to remove plutonium for the nation's nuclear weapons program without bringing the new plant online. However, in 1952, it was converted to recover uranium from waste generated by other processing plants and was operated for five years.

After the below-deck cells of U Canyon are grouted in, plans call for collapsing the walls and building an earthen barrier over the demolished building to keep out water.

The Department of Energy and CH2M Hill expect the canyon to be ready for demolition by fall, but money



Courtesy of DOE

Workers drilled dozens of 8-inch-wide holes through U Canyon's 5-foot-thick exterior walls to insert grout into the processing cells at the bottom of the huge plant.

for the work is not budgeted until 2015 when most of the environmental cleanup along the Columbia River is completed.

Work is being done now with federal economic stimulus money.

U Canyon will be the first processing plant in the DOE complex to be pre-

pared for demolition and could serve as a model for other plants, including the four additional chemical processing plants at Hanford.

► Annette Cary: 582-1533; acary@tricityherald.com; More Hanford news at hanfordnews.com.

Washington Closure discusses layoff plans

Hanford contractor to give individual workers notice 3 months before work ends

ANNETTE CARY

HERALD STAFF WRITER

Washington Closure Hanford plans to start reducing the number of employees working on its environ-

mental cleanup projects in the fiscal year that starts in October, the Hanford contractor told workers Wednesday.

"This is a planned reduction based on completion of work," said Todd Nelson, Washington Closure spokesman.

Washington Closure has the Department of Energy's first and only closure contract at Hanford.

When it expires Sept. 30, 2015, DOE

expects most work to be done to clean up Hanford along the Columbia River. There should be no need to rebid the contract and roll most workers over to a new company, as usually happens with Hanford's environmental cleanup contracts.

To prepare for a ramp down of work spread over four years, meetings were held Wednesday with nonunion workers for Washington Closure and its prime subcontractor,

Eberline Services, to tell them what to expect.

The two companies have 550 to 600 nonunion employees. Their union employees are covered by separate contract agreements.

More specific details of the job cuts will not be available until DOE approves Washington Closure's proposed plan.

Washington Closure plans to notify individual workers in the fiscal quar-

ter before their work ends. That will give workers at least three months to make plans.

At that time, each will be assigned a "closure coach," who will become familiar with their personal situation, Nelson said. The coaches, with backgrounds in human resources, will answer questions about retirement, education costs and jobs that might

See **PLANS** | Page B2

Waste tank drilling incident raises concerns

ANNETTE CARY

HERALD STAFF WRITER

Hanford officials should continue monitoring the soil near a Hanford tank for any sign of a leak after its footing may have been hit by a hydraulic hammer in 2009, according to the Defense Nuclear Facilities Safety Board.

The Nez Perce Tribal Executive Committee in late 2010 raised the issue of the soundness of the underground tank involved, and the defense board responded to its concerns this week.

Testing near the tank produced evidence by 2008 of plumes of underground radioactive contamination, and since then Tank C-105 has been treated as a possible leaker. The World War II tank holds at least 135,000 gallons of radioactive sludge left from the past production of plutonium, but as much

liquid as possible has been removed.

In September 2009, a hydraulic hammer rig was being used to punch a 3-inch-diameter hollow rod into the earth to drill a borehole near the tank to learn more about contamination there and help determine if it had leaked from the tank or was because of other events.

As the drilling was being done, the equipment may have hit the concrete platform around the base of the tank. Workers are directed to stop equipment if the rig fails to progress at a rate faster than 1 inch per minute, and during two 30-second cycles it did not move more than a half-inch, according to the defense board.

Analyses done this year to estimate potential damage to Tank C-105 indicated that no damage to the tank had been done. Although the

defense board thought there were uncertainties in the analyses, it did not seem likely that hitting the footing of the tank would cause a breach in the tank lining or cause other damage away from the area hit by the rig, the board concluded.

More definitive tests would be too dangerous to workers, it said.

"The board concludes that the most prudent course of action is to continue to monitor radionuclide concentrations in the soil near Tank C-105," it said.

If concentrations increase significantly, the tank may have to be moved up in the schedule to be emptied. However, a leak is unlikely since pumpable liquids have been removed, the board said. Hanford has 170 single-shell tanks with waste it is emptying into 28 sturdier double-shell tanks.

DOE is continuing to monitor for contamination near the tank and has implemented engineering controls to minimize the possibility of a similar incident, said Lori Gamache, DOE spokeswoman.

Since the incident, Hanford policy calls for drilling not to be done within five feet of underground tanks.

The drilling near Tank C-105 in 2009 did produce useful information, according to the defense board. Data collected from the borehole operation showed that waste probably had leaked several times in the past, including from a potential leak near the bottom of the tank. That will help with plans to empty the tank to make sure methods are used that will not cause more leaking.

► *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com.*

22 JV
2011

Hanford office gets new deputy manager

Stacy Charboneau has been named deputy manager for the Department of Energy



Charboneau

Hanford Office of River Protection.

She had served as acting deputy manager since December 2010 until Scott

Samuelson was named manager this spring.

As deputy manager, she will help Samuelson with managing the safe storage, retrieval and treatment of 56 million gallons of radioactive and chemical waste held in underground tanks at Hanford.

Charboneau started work at Hanford in 1994. Among her jobs has been deputy assistant manager for environmental cleanup of Hanford along the Columbia River.

21 JUN 11

DOE alleges mistakes in safety report on vit plant

Review found subculture that keeps workers from reporting safety concerns

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy plans to detail the inaccuracies in the Defense Nuclear Facilities Safety Board's highly critical review of the safety culture at Hanford's vitrification plant, Deputy Energy Secretary Daniel Poneman said in a message to employees.

The review by the national defense board completed earlier this month concluded that behavior by DOE and contractor management on the \$12.2 billion project reinforces a subculture that deters workers from reporting and management from resolving technical safety concerns.

The defense board released the review and

HANFORD P-CARD FRAUD

Judge gives ex-KIE employee probation

Man ordered to pay back \$8,821 from commissions he made

ANNETTE CARY

HERALD STAFF WRITER

A federal judge took pity Tuesday on an emotional Martin Perez and sentenced the former salesman to just a year of probation for his role in a federal credit card fraud scheme at Hanford.

He also will have to pay back \$8,821 in commissions he made

on goods bought for use at Hanford by Gregory Detloff.

Detloff was a material coordinator at Hanford who told Perez, then a Kennewick Industrial and Electric salesman, to fill some Hanford orders Detloff made through KIE and a home business owned by Detloff's wife.

Now the U.S. Attorney's Office must next decide whether to withdraw a plea agreement with Perez after he received a lighter sentence than outlined in the agreement.

See **PROBATION** | Page A2

HANFORD REACH INTERPRETIVE CENTER

Corps approves sublease

Agreement with Richland, facilities district will allow \$40.5M museum to be built

MICHELLE DUPLER

HERALD STAFF WRITER

Proponents of the Hanford Reach Interpretive Center celebrated a victory Tuesday by clearing a significant milestone toward construction of the long-awaited museum.

The victory came in the form of an announcement from the Walla Walla District of the Army Corps of Engineers that it had approved a sublease between the Richland city government and the Richland Public Facilities District that will allow the \$40.5 million museum to be built in the west end of Columbia Park.

In another important step, the Corps also announced completion of an environmental review and found the proposed project is in compliance with federal environmental laws.

"This is such a big moment for the proj-

ect," said Joel Rogo, vice president of the Public Facilities District Board, which oversees the museum's development.

"Though it's not the last hurdle, it was certainly one of the biggest," Rogo said. "Everyone has been working very hard to make this happen, and we're all very proud and relieved."

Reach officials said the announcement clears the way for construction of the 61,000-square-foot interpretive center, which has been nine years in preparation

See **REACH** | Page A2

4 jib cranes installed at vit plant

Machinery used to put lids on containers of glassified waste at end of process

HERALD STAFF

Four jib cranes have been installed in a complex operation at the Hanford vitrification plant's Low Activity Waste Facility, Bechtel National announced.

The cranes, each with a capacity of three tons, will be used to place lids on containers of glassified waste at the end of the waste treatment process. The lids will be added in the southeast corner of the building, commonly known as the "finish line."

The \$12.2 billion plant will separate

Hanford's radioactive and chemical waste now held in underground tanks into low-activity and high-level waste streams, then turn them into a stable glass form for disposal.

A team of vit plant employees worked together to develop a rigging and installation plan that allowed the cranes to be safely moved through doorways and into the finish line area, then anchored into place.

The plan included carefully rotating the 12-foot-long cranes vertically and horizontally within tight spaces multiple times during the installation process. The finish line area measures 15 feet wide, 12 feet tall and 110 feet long.

Rotations were done using chain hoists that were manually operated. A specially designed cart also was used

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to transport the cranes within the area.

The cart, which runs on permanently installed rails, continues to be used for equipment installations in the finish line area. The rails will be used to transport the filled low activity waste containers when the facility is operating.

"These were very challenging installations that required careful and detailed planning," said Joe Jacoby, assistant area superintendent for the facility, in a statement. "The cranes not only needed to be rotated to get into the area, to maintain a center of gravity on the car and to be transported, but they were designed to fit so close to

the ceiling that conventional rigging would not work."

The work required extensive collaboration between union workers, field engineers, rigging engineers and supervisors, he said.

The crane sits just six inches from the ceiling and required workers to use special low-headroom rigging attachments and customized short rigging components.

"The jib cranes had to be installed before we could install the major equipment in the finish line area," Gary Olsen, Department of Energy area project manager, said in a statement. "Now, we can install the equipment — such as the decontamination robot and the lidding arms — that will prepare filled containers for removal from the (building)."

BRIEFS

Agency gets 2 awards for Hanford tank farm work

Washington River Protection Solutions has won two 2011 Communicator Awards for projects providing information on the Hanford tank farms, where radioactive waste is stored in underground tanks.

An Award of Distinction was given to Rob Roxburgh and John Britton for the video, *The Road to Recovery: Hanford Tank Operations and the American Recovery & Reinvestment Act*, which detailed the projects and progress made using \$326 million in Recovery Act funds received by the Department of Energy contractor.

An Award of Distinction also was given to John Lawson and Britton for a full-page newspaper ad titled "The Future of Hanford is in Good Hands," which celebrated employees' contributions to the success of the tank farms project.

The two projects were selected for awards from a pool of more than 6,000 entries.

Nick Ceto retires from Department of Energy

Nick Ceto has retired from the Department of Energy, where he was the record of

decision program manager for the Hanford Richland Operations Office.



He is best known for serving as the Hanford program manager for

Ceto

the Environmental Protection Agency from 2002 through most of 2008.

At DOE he had the lead role in making sure legal requirements are met to make final decisions on much of Hanford's environmental cleanup, including key decisions needed to have Hanford cleaned up along the Columbia River by 2015.

Jim Hansen, who has worked for the Richland Operations Office since 2009, will take over Ceto's responsibilities related to cleanup along the Columbia River.

Ceto plans to start a consulting business

DOE planning cleanup in heart of Hanford

Input sought on how much contaminated waste to dig up

ANNETTE CARY

HERALD STAFF WRITER

The federal government is asking for the public's opinion as it decides how much of the soil contaminated by plutonium and other radionuclides

and chemicals in the heart of Hanford should be dug up.

The Department of Energy with the Environmental Protection Agency is preparing to make one of the first decisions about environmental cleanup in the approximately 10 square miles of

central Hanford, where permanent disposal of radioactive waste is planned.

Unlike the remainder of Hanford, the 10 square miles called the Central Plateau Inner Area is being cleaned up only to industrial standards with the plan that no one will ever live there.

The area includes massive lined landfills for low-level radioactive and chemical waste, and also for low activ-

ity waste that will be turned into a stable glass form at the vitrification plant.

It includes U Canyon, a processing plant longer than the space needle is tall, where rubble will be covered with a massive cap. It's also home to the 177 tanks used to store 56 million gallons of radioactive waste.

See **HANFORD** | Page A2

IF YOU GO

WHAT: Public meeting on central Hanford waste sites

WHEN: 6:30 to 8:30 p.m. July 19, with an open house at 5:30 p.m.

WHERE: Richland Public Library Gallery, 955 Northgate Drive.

2 July 11

Department also still disagrees with report about Hanford safety

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy will be taking steps to strengthen the nuclear safety culture at Hanford and nationwide, even though it continues to question findings of a federal nuclear safety oversight board.

Energy Secretary Steven Chu has sent a response to the Defense Nuclear Facilities Safety Board agreeing "in the spirit of continual improvement" to recommendations made by the board. But he continues to object to the conclusions the board drew that led to the recommendations.

As the Defense Nuclear Facilities Safety Board and DOE continue to be at odds a year after questions about the safe operations of the Hanford vitrification plant were raised by dismissed engineering man-

INSIDE

Defense board refuses to give DOE access to investigation. | **A2**

ager Walt Tamosaitis, Chu is recommending a neutral review to see how the two agencies can better work together. He suggested it could be done by the National Academy of Science.

Most recently, the defense board concluded in June that failings in the nuclear safety culture at Hanford's vitrification plant are endangering the success of the \$12.2 billion project.

It found that behavior by DOE and contractor management on the project reinforces a subculture that deters workers from reporting technical safety concerns and management from resolving them. It also alleged that DOE and contractor management suppressed technical dissent on the project.

At issue is whether some systems of the vitrification plant

7 Jan 11
Restructuring plan
not related to end
of stimulus money

ANNETTE CARY

HERALD STAFF WRITER

Washington Closure Hanford and its prime subcontractor will cut up to 210 jobs in the fiscal year that starts Oct. 1 under a work force restructuring plan approved by the Department of Energy.

The Hanford contractor last month told its employees about its general plans to reduce jobs as work is completed, but announced the number of jobs to be cut in fiscal 2012 to employees Wednesday after DOE approved its plan.

"This is all due to work

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coming to an end, not funding limitations," said Todd Nelson, Washington Closure spokesman.

Washington Closure has DOE's first and only closure contract at Hanford.

When it expires Sept. 30, 2015, DOE expects most work to be done on cleaning up Hanford along the Columbia River. There would be no need to rebid the contract and roll workers over to a new company, as usually happens when Hanford's environmental cleanup contracts expire.

The end of the contract will require a gradual ramp down of work as different projects

See **CONTRACTOR** | Page A2

DOE will not be given access to investigation, board says

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy will not be given confidential investigative files related to the safety culture of the Hanford vitrification plant, said Chairman Peter Winokur of the Defense Nuclear Facilities Safety Board.

In June, DOE Deputy Secretary Daniel Poneman told the defense board that "it is vital that the department be able to review the board's investigative record, including, but not limited to, all transcripts, interview notes and exhibits."

The defense board began investigating the nuclear safety culture at the \$12.2 billion vitrification plant project after former engineering manager for the project, Walt Tamosaitis, alleged he was removed for raising concerns about the safe and efficient operation of the plant.

The defense board concluded that a chilled atmosphere existed on safety issues and DOE and contractor management had suppressed technical information. DOE disagrees.

DOE needs access to the defense board's investigative record to assess and respond to

the board's findings and recommendations, including that Energy Secretary Steven Chu assert federal control to track and validate corrections made, Poneman wrote in a request to defense board Chairman Peter Winokur.

Chu added in a letter written Thursday in response to the defense board recommendations that "the board's investigative record or other supporting information will allow us to provide further details on specific discrepancies between our findings and the board's and will be of great use in defining the structure and scope of follow-on safety culture improvement initiatives and actions."

But in a letter written the same day to Chu, Winokur said DOE's need to further assess the conclusions reached by the defense board could be substantially satisfied with information DOE already has or that is part of the public record.

"This information is readily accessible without compromising the public trust in the board," Winokur wrote in declining the deputy secretary's request.

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HANFORD

30 JUN 11

Construction done on treatment plant

\$24 million facility will treat contaminated ground water

ANNETTE CARY

HERALD STAFF WRITER

Construction has been completed on a \$24 million plant to treat contaminated ground water near Hanford's former H Reactor near the Columbia River.

CH2M Hill Plateau Remediation Co. could start operating the pump and treatment plant in late summer after construction and operating reviews are completed.

The plant will pump contaminated water out of the ground, treat it to remove hexavalent chromium and then reinject the clean water into the ground. The clean water also forms a barrier that helps prevent contaminated ground water from reaching the Columbia River.

The plant near H Reactor is expected to treat 30 million gallons of water a month.

It's the third pump and treat project undertaken by DOE in recent years to meet a legally binding Tri-Party Agreement deadline to contain chromium along the Columbia River next year.

Already, it has expanded pump and treatment operations upriver near the K Reactors in 2009 and around the first of this year began operating a new pump and treat plant near the D and DR reactors.

Chromium was added to cooling water at Hanford's plutonium-production reactors to prevent corrosion. The water with the chromium then was discharged into the soil and more of it leaked from piping, staining the soil bright yellow and contaminating ground water.

It can cause cancer in humans and particularly is toxic to fish and other aquatic life.

The new plant near H Reactor is a near twin of the new one near the D and DR reactors.

Together, they will treat a plume of con-

tamination that has spread between the two reactor areas.

Both plants use a new type of resin in an ion exchange process to clean water to drinking water standards that could save an estimated \$20 million during the lifetime of each plant. The resin lasts three to four times as long as the resin that has been used at Hanford, reducing purchasing costs and the costs to change out the resin.

The treatment plant near H Reactor has a network of 31 extraction and 15 injection wells connected to the new treatment plant through more than 60 miles of high density polyethylene pipeline.

Federal economic stimulus money was used to build the treatment plant near the D and DR reactors, but DOE Hanford annual budget money paid for construction of the new plant near H Reactor.

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55 Hanford employees volunteer for layoffs

Up to 1,775 workers at site expected to lose their jobs

ANNETTE CARY

HERALD STAFF WRITER

Mission Support Alliance has approved voluntary layoff applications for 55 workers, the Hanford contractor announced Tuesday.

They're among as many as 1,775

Hanford workers expected to lose their jobs during the fiscal year that ends Sept. 29, largely because of restructuring of work forces as federal economic stimulus spending ends.

In March, Mission Support Alliance laid off 125 workers, including 68 who volunteered, and now is preparing for a second round of layoffs.

The Department of Energy has given Mission Support Alliance permission to lay off up to 300 employees

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by Sept. 29, in addition to the previous 125 layoffs.

Although Mission Support Alliance did not directly receive any of the \$1.96 billion in Recovery Act money for Hanford nuclear reservation work, it supported the ramp up of work. The contractor provides sitewide services

at Hanford, including information technology services and operation of the HAMMER training center.

Most of the employees who volunteered in the latest round at Mission Support Alliance are expected to work until Sept. 29, although some have asked to leave sooner. The contractor almost has 2,000 employees.

Most of the voluntary layoff requests were approved, said Deanna Smith, Mission Support Alliance spokeswoman. However, a few were

denied because workers held positions that Mission Support Alliance classified as "critical need."

CH2M Hill Plateau Remediation Co. also is laying off employees by Sept. 29. It received \$1.3 billion of Hanford's economic stimulus money.

Last month, it notified 148 workers that their applications for voluntary layoffs had been accepted. The contractor has announced plans to

See **LAYOFFS** | Page B2

Umatillas question Hanford land transfer

Tri-City Development Council requested DOE sign over 1,341 acres for economic development

ANNETTE CARY

HERALD STAFF WRITER

The Confederated Tribes of the Umatilla Indian Reservation should get the right of first

refusal if Hanford lands are deemed to no longer be needed, according to the tribes.

Tribal officials outlined their concerns in a letter to the Department of Energy in

response to the Tri-City Development Council's request in late May that DOE transfer 1,341 acres of Hanford land next to Richland city limits for economic development.

TRIDEC, joined by the city of Richland, the Port of Benton and Benton County, wants the land to attract businesses to

offset future Hanford staff reductions.

While most land at Hanford is planned to be used for conservation and preservation, the acreage requested by TRIDEC is identified for future industrial use under the Hanford Comprehensive Land Use Plan environmental study.

However, the Umatillas said the land use plan is not the "law of the land."

"Treaties are," the tribe said in a technical analysis of DOE land transfers sent to DOE with a letter from Leo Stewart, interim chairman of the confederated tribes board.

The letter is a formal objec-

tion to the transfer or lease of any Hanford land that affects the ability of the confederated tribes to exercise treaty rights or that results in the loss of habitat or natural resources, Stewart wrote.

The Umatillas have treaty

See **LAND** | Page A2

Triay leaving cleanup post

Undersecretary for nuclear security to oversee Office of Environmental Management

ANNETTE CARY

HERALD STAFF WRITER



Triay

Ines Triay, the Department of Energy's top environmental cleanup official, is stepping down, Energy Secretary

nuclear security, Thomas D'Agostino.

Triay, widely considered an advocate of a strong Hanford environmental

Steven Chu announced Friday.

In addition, Chu plans a reorganization that will move the DOE Office of Environmental Management, which Triay leads, under the direction of the undersecretary for

cleanup program and a friend to the Tri-Cities, has served as assistant secretary of environmental management for 2½ years.

Over the Fourth of July weekend, she told Chu that she would be stepping down as assistant secretary because of her father's poor health, Chu said in a message to staff Friday. She will continue to work for DOE, however.

BRIEFS

Bechtel considering relocation in D.C. area

FREDERICK, Md. — Federal contractor Bechtel Corp. said it is considering moving its East Coast offices out of Frederick to another location in the Washington, D.C., area.

The Frederick News-Post reports that the San Francisco-based company told its 2,000 Frederick workers on Thursday that the leases on its Frederick offices are up for renewal.

A company spokeswoman told the newspaper Bechtel views the event as an opportunity to consider the advantages of Frederick and other locations in the Washington area.

Bechtel moved three divisions to Frederick from San Francisco in 2004.

Among Bechtel's projects is building the \$12.2 billion vitrification plant at Hanford.

14 JUL 2011

Sublease sig

Work could start by end of summer in Columbia Park

PAULA HORTON

HERALD STAFF WRITER

A project that “tells the story of our region,” and has been nine years in the making, found a home Wednesday.

Construction could begin before the end of summer at the Hanford Reach Interpretative Center’s new 18-acre site in the west end of Columbia Park.

Officials from the city of Richland and Richland Public Facilities District formally signed a sublease Wednesday — marking a significant milestone for the proposed \$40.5 million museum.

“This community deserves a world-class museum,” said Kimberly Camp, the interpretive center’s chief executive officer.

15 JUL 11

Battelle, Lockheed say job cuts coming

Battelle Toxicology Northwest moving to Ohio

ANNETTE CARY

HERALD STAFF WRITER

Battelle Toxicology Northwest will be moving work from Richland to the Columbus, Ohio, area, eliminating Tri-City jobs, Battelle confirmed Thursday.

In addition, Lockheed Martin Energy Technology Solutions notified employees this week that it plans to cut jobs.

Battelle provided little specific information in response to Herald questions Thursday, including how many jobs would be lost and when the work

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would be transferred to Ohio. However, a former job posting for the toxicology center described it as having more than 100 employees in Richland.

Battelle operates Pacific Northwest National Laboratory in Richland for the Department of Energy. The national lab employs about 4,900 employees. That does not include the

27 Jul 2011

Hanford workers ship off 2,350 cubic yards of low-level radioactive waste for disposal

ANNETTE CARY

HERALD STAFF WRITER

Hanford workers have met the third of five Recovery Act goals in a solid waste disposal program, following concerns in May that the project had fallen behind schedule.

The most recent project was completed two months early and has shipped off 2,350 cubic yards — or 1,800 cubic meters — of low level radioactive waste mixed with hazardous chemicals. The waste would fill 9,000 55-gallon drums.

The waste was stored in buildings or had been buried temporarily. Much of it is being treated at Perma-Fix Northwest near Hanford and

then returned for disposal at Hanford in lined trenches.

Hanford received \$315 million in federal economic stimulus money to meet five goals for work in its solid waste program.

But in May, the Department of Energy Office of Inspector General said it was concerned that the work had fallen behind and would not be complete by Sept. 30, when Recovery Act projects are due to be completed.

In 1970 Congress said transuranic wastes — at Hanford typically waste contaminated with plutonium — must be sent to a national repository. But until the Waste Isolation Pilot Plant in New Mexico opened, waste that Hanford workers thought

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might be characterized as transuranic was stored in buildings or buried for later retrieval and surveying.

Now CH2M Hill Plateau Remediation is dealing with that waste.

It completed the first Recovery Act solid waste project in March, retrieving 65 cubic yards of transuranic waste so radioactively hot it has to be remotely handled and shipping it to New Mexico.

It has now shipped 110 cubic meters of the waste.

It also has exceeded goals for repackaging contact-handled transuranic waste for shipment to New Mexico.

Workers are getting close to meeting a goal of shipping

2,615 cubic yards of contact-handled transuranic waste off Hanford.

However, they still must retrieve by Sept. 30 more than 1,000 cubic yards of temporarily buried waste to meet the fifth goal of retrieving 3,270 cubic yards of the waste, which includes debris, equipment, tools and protective clothing, some of it buried in large boxes.

The Recovery Act money allowed Hanford to develop methods for transporting and treating large containers of waste, said J.D. Dowell of DOE.

“Shipping the waste in large containers is more efficient and is significantly cheaper than breaking the waste down into smaller containers for shipment,” he said.

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HANFORD HEALTH SERVICES CONTRACT

DOE issues bid request in process

HERALD STAFF

The Department of Energy issued on Tuesday a draft request for proposals seeking bids for the next occupational health contractor for Hanford.

The draft RFP, a type of bid request, is one step in the process toward awarding a contract and provides an opportunity for companies, Hanford stakeholders and the site's work force to provide input.

DOE will provide briefings on the proposal, including a meeting open to workers, stakeholders and the public. It's scheduled for 6 p.m. Aug. 3 at the Federal Building auditorium, 825 Jadwin Ave., Richland.

Comments will be accepted during the meeting or can be sent by email to occmed@emcbc.doe.gov. The deadline is Aug. 15.

"The department looks forward to hearing from industry, stakeholders, and Hanford workers on the proposed contract," said Matt McCormick, manager of the DOE Richland Operations Office.

The contractor chosen will provide comprehensive occupational medical services to approximately 7,000 to 9,000 federal, contractor, and regulatory oversight employees at Hanford.

For more information, go to www.emcbc.doe.gov/occmed/.

26 Jul 11

Company in P card fraud to pay \$515,000

Hanford orders were filled through wife's business by ex-worker

ANNETTE CARY

HERALD STAFF WRITER

Kennewick Industrial and Electrical Supply has agreed to pay the Department of Justice \$515,000 in a settlement agreement stemming from federal credit card fraud at Hanford, the company announced.

A former salesman for KIE was sentenced in June to a year's probation for participating in a scheme to fill some Hanford orders placed at KIE through a home business owned by the wife of a Hanford materials coordinator. The orders were paid for with a federal purchase card, called a P-card at Hanford.

The federal government

contended that KIE violated false claims or anti-kickback acts.

"Once the government brought to our attention that certain employees might be involved in improper activities, KIE cooperated fully in the investigation," said Gus Kittson, KIE president, in a statement. "Ultimately, a settlement was structured that will allow the continued viability of the business."

The costs of defense, plus the potential exposure to the claims made a settlement the company's only viable option, he said.

"These improper actions are contrary to the principles and policies that all KIE employees operate under," he said.

In the scheme, Gregory Detloff, a materials coordinator at Hanford from November 2001 through November

19 JULY 77
Manhattan Project sites, including Hanford, were part of ugly chapter in U.S., activists say.

**THE ASSOCIATED PRESS
AND HERALD STAFF**

ALBUQUERQUE, N.M. — Anti-nuclear activists are lining up against legislation to create national parks at Los Alamos National Laboratory and two other sites where the world's first nuclear bombs

were developed, calling the plan an expensive glorification of an ugly chapter in history.

"It is a debasement of the national parks idea," said Greg Mello, a co-founder of the anti-nuclear watchdog, Los Alamos Study Group.

Interior Secretary Ken

Salazar released a study to Congress last week that recommends establishing a national historical park to commemorate the top-secret Manhattan Project that developed the atomic bomb. Sen. Jeff Bingaman, D-N.M., said he is drafting legislation to create sites at Los Alamos; Hanford; and Oak Ridge, Tenn.

"The secret development of the atomic bomb in multiple

locations across the United States is an important story and one of the most transformative events in our nation's history," Salazar said in a news release announcing the project. "The Manhattan Project ushered in the atomic age, changed the role of the United States in the world community and set the stage for the Cold War."

See **PARKS** | Page B2

28 Jul 11

Hanford history book looks at how Hanford influenced Tri-Cities

Authors will discuss book today in Kennewick

ANNETTE CARY

HERALD STAFF WRITER

Perhaps the economic fortunes of the Tri-Cities could be bolstered by atomic tourism and new high-tech industries that would take advantage of the scientific and technical expertise in the community.

That's the conclusion of a federal government report issued almost 50 years ago, according to Seattle historians John M. Findlay and Bruce Hevly in their new book *Atomic*

Frontier Days: Hanford and the American West.

The information-packed book, published by the University of Washington Press, traces the economic and political fortunes of Hanford and the Tri-Cities from World War II as the federal government established the nuclear reservation and nearby company town to produce plutonium for the bomb dropped on Nagasaki, Japan.

Brush fire at Hanford blackens a square mile

An estimated square mile in the southwest corner of the Hanford nuclear reservation burned Tuesday morning.

The Hanford Fire Department began fighting the brush fire about 4 a.m. and was mopping up by 8 a.m.

No buildings or radiological waste sites were involved. The cause of the fire is unknown.

HANFORD

Layoff notices issued today

Up to 1,200 workers will be notified; job fair is planned

ANNETTE CARY

HERALD STAFF WRITER

Today will be a tense day for many Hanford workers as contractors and subcontractors begin notifying up to 1,200

workers they will be laid off at the end of September.

With most of \$1.3 billion in federal stimulus money for CH2M Hill Plateau Remediation Co. expected to be spent before the start of the new fiscal year Oct. 1, decisions have been made on what jobs to cut.

The Worker Adjustment and Retraining Notification Act, or WARN act, requires many of the Hanford workers

who will be laid off to be given 60 days notice.

CH2M Hill and three of its preselected subcontractors that fall under the act, Babcock Services, Fluor Federal Services and M&EC, plan to notify nonunion employees who will be laid off today and Friday.

Some who work weekends will be notified Saturday and Sunday, and notices

See **LAYOFFS** | Page B2

BLUE RIBBON COMMISSION REPORT

Leaders concerned about waste recommendations

Draft calls for prompt development of more facilities for disposal

ANNETTE CARY

HERALD STAFF WRITER

The draft report making recommendations on the future of

the nation's nuclear waste released Friday by the Blue Ribbon Commission was met with concerns and criticisms by those with Hanford interests.

They feared at best the draft report's recommendation could lead to high-level radioactive waste remaining at Hanford longer, and at worst that more waste could be shipped to Han-

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com

ford or that Hanford's own waste would remain at the site indefinitely.

The Blue Ribbon Commission on America's Nuclear Future was formed to make plans for radioactive waste

that had been expected to go to the Yucca Mountain, Nev., repository before the Obama administration took steps to shut down the project.

High-level radioactive defense waste, including Hanford waste, and used fuel from commercial nuclear power plants

See **WASTE** | Page B2

Washington files new Yucca lawsuit

Previous lawsuit was 'premature,' court said at the time

ANNETTE CARY

HERALD STAFF WRITER

Washington state has filed a new lawsuit to force the Nuclear Regulatory Commission to consider the license application for the Yucca Mountain nuclear repository, state

Attorney General Rob McKenna announced Friday.

The lawsuit takes a new tact, after earlier this month the U.S. Court of Appeals for the District of Columbia Circuit dismissed a previous lawsuit filed by the state. The court found that lawsuit was premature but suggested

INSIDE

Blue Ribbon Commission report criticized by those with Hanford interests. | **B1**

that other legal action might be timely.

If Yucca Mountain never opens, high-level radioactive waste could be stuck indefinitely at the Hanford nuclear reservation, McKenna said.

A projected 9,700 canisters of high-

level radioactive waste glassified at the Hanford vitrification plant and 2,347 tons of used nuclear weapons fuel at Hanford had been expected to go to the Yucca Mountain, Nev., nuclear repository.

In addition, it was planned to accept used commercial nuclear power fuel, including the fuel from the Energy Northwest plant near Richland.

"It's very important to force the

Nuclear Regulatory Commission to do its job," McKenna said.

At the first of the month, the U.S. Court of Appeals for the District of Columbia Circuit ruled that it was too soon to decide whether the Obama administration acted illegally to abandon development of the repository in Nevada. The Nuclear Regulatory Com-

See **YUCCA** | Page A2

VIT PLANT

Project 60% complete

Milestone includes engineering, construction and other activities

ANNETTE CARY

HERALD STAFF WRITER

After 10 and a half years, the \$12.2 billion Hanford vitrification plant is 60 percent complete, by the calculations of Department of Energy contractor Bechtel National.

The milestone includes engineering, procurement, construction and start-up and commissioning-related activities.

“Woohoo!” was the reaction of the regulator for the project, the Washington State Department of Ecology, as summed up by Dan McDonald, the project manager for Hanford waste treatment.

“We’re very pleased with the progress,” he said. Hitting the 60-percent mark positions work to continue the transition from the design and build

See **VIT** | Page B4

31 JUL 11

Members say they are united in goals for Reach Center

Agencies disagreed about new board member qualities, but remain committed to the project

MICHELLE DUPLER

HERALD STAFF WRITER

A week after an apparent rift between members of the Richland City Council and the city's Public Facilities District Board, representatives of both agencies said they want residents to know they are unified in their goals.

Richland Mayor John Fox, facilities district board Vice Chairman Joel Rogo and board member Nick Ceto met with the Tri-City Herald's editorial board this week to say that despite a difference of opinion

about the qualities desired in new board members, the city and the district are committed to seeing the Hanford Reach Interpretive Center built.

The facilities district was formed in 2002 to build the interpretive center — a museum intended to tell the story of Hanford's role in winning World War II and the Cold War, as well as the history, geology, flora and fauna of the region.

The estimated \$40.5 million price tag is more than the state sales tax revenue brought in by

VITRIFICATION PLANT

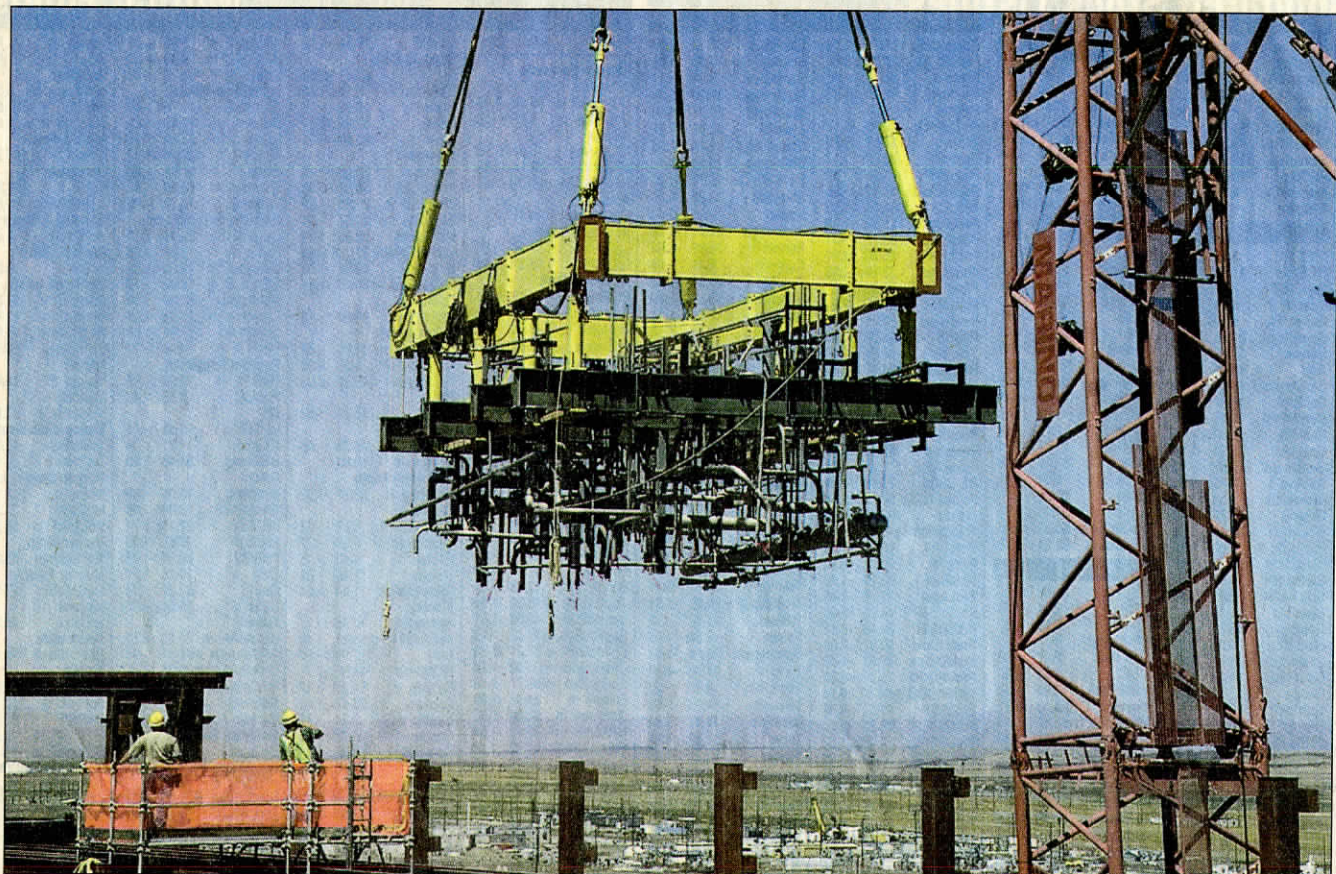


Photo courtesy of Bechtel National

Bechtel National lifts a 19-ton piping module over the 98-foot-tall walls of the Hanford vitrification plant's Pretreatment Facility. It is the first and smallest of 13 complex piping modules that will be assembled and then installed.

19-ton piping module installed

Pretreatment Facility gets first of 13 complex modules

HERALD STAFF

Crews at the Hanford vitrification plant have lifted a 19-ton piping module over the 98-foot-tall walls of the plant's largest building, the Pretreatment Facility.

The module is the first and smallest of 13 complex piping modules that will be placed in the next few years, according to Department of Energy contractor Bechtel National.

The module was lowered into a space that provided less than two inches of clearance on each side and just a few feet on each end. It was set 56 feet above the ground.

The module was assembled at ground level by union pipefitters on a temporary steel structure outside the Pretreatment Facility.

"With such tight clearances, preassem-

bly provides a safer working environment for our pipefitters because it allows them better accessibility and enables them to work at much lower heights," said Ray Patterson, area project manager for the facility.

Assembling the piping into modules before it is placed also increases efficiency because it allows piping, concrete and steel work to be done concurrently.

The module was placed in what will be one of the facility's highly radioactive areas, called a "black cell" because humans cannot enter when the plant begins pretreating radioactive waste. The black cell will house process equipment, which connects to the piping module, that will require no maintenance for the plant's planned 40-year lifespan.

"This pre-assembled module approach required extensive, detailed planning and collaboration during both the design and

construction phases," said Wahed Abdul, DOE area project manager for the facility. "It was essential to ensure the modules were built and installed with precision and to the highest nuclear-quality standards."

Engineers used advanced technology, such as laser scanners that produced detailed three-dimensional images of the piping and the cells, to ensure accurate alignment and fit.

The module is 15 feet at its highest point and spans approximately 54 feet in length and 33 feet in width. It contains 3,900 linear feet of nuclear-quality stainless steel piping, ranging in size from 0.5 to 26 inches in diameter, and more than 70 pipe hangers.

The Pretreatment Facility is 79 percent designed and 37 percent constructed. The vitrification plant will be used to turn much of Hanford's 56 million gallons of radioactive waste held in underground tanks into a stable glass form for disposal. The Pretreatment Facility will separate the waste into high level and low activity radioactive waste.

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com

5 AUG 11

Hastings goes after answers about Hanford

Congressman writes
to Energy Secretary
about move's benefits

ANNETTE CARY

HERALD STAFF WRITER



Hastings

Environmental cleanup of Hanford and other Department of Energy sites risk becoming less of a priority under a reorganization of DOE oversight of that work, according to Rep. Doc Hastings, R-Wash.

After Energy Secretary Steven Chu made the DOE reorganization official Tuesday, Hastings sent him a letter Thursday asking for answers.

"I write today to express my ongoing concerns with the

department's reorganization that moves the Office of Environmental Management under the under secretary for nuclear security," he wrote.

Chu said in a memo Tuesday that moving that office plus the Office of Legacy Management and the chief of nuclear safety and staff under the office of the under secretary for nuclear security will "capitalize on the expertise that exists throughout the department on project management, nuclear materials and waste, and nuclear safety and security."

HANFORD

Groups want land transfer to pay for more open space

ANNETTE CARY

HERALD STAFF WRITER

Two Mid-Columbia outdoor groups are recommending that some money from the possible sale of Hanford land for industrial use be used to buy undeveloped open space to replace that lost to development.

The Lower Columbia Basin Audubon Society and Ridges to Rivers Open Space Network support the use of 1,341 acres of surplus Hanford land for industrial use. But they want the most benefit for the Tri-City economy and

quality of life, the two groups said in a letter to the Department of Energy.

The Tri-City Development Council asked the Department of Energy in late May for 1,341 acres of Hanford land next to Richland city limits for economic development.

The Hanford Comprehensive Land Use Plan calls for most land in the 586 square-mile nuclear reservation to be used for preservation or conservation as environmental cleanup is completed from the past production of weapons plutonium.

See **LAND** | Page A2

10 AUG 11 Plume leads to Hanford tank farm evacuation

Hanford's C Tank Farm was evacuated shortly after noon Tuesday as a precaution after a small plume of smoke or steam was spotted coming from a new ventilation system.

Workers were allowed back into the area, which has 16 underground tanks, about 90 minutes later. No worker was near the equipment when the plume was spotted, and no worker was exposed to radiation, Washington Closure Hanford reported.

The Hanford Fire Department is investigating the source of the plume.

Hanford's tank farms hold 56 million gallons of radioactive and hazardous chemical waste in underground tanks arranged in groups called "farms."

A new ventilation system was being tested at the C Tank Farm to prepare for pumping radioactive waste out of Tank C-107 — a single-shell tank — and transferring it to a newer double-shell tank. The system had not been connected so there was no radioactive contamination.

HANFORD

4 AUG 11

Digging starts at burial ground that contains hazardous waste

Workers already uncovered 30 drums used to dispose of liquids

ANNETTE CARY

HERALD STAFF WRITER

Digging is under way on one of the most hazardous waste burial grounds near the Columbia River at Hanford.

"We expect to find up to 2,000 drums containing everything from mildly contaminated clothing and debris to highly radioactive laboratory equipment and liquids," said John Darby, the Washington Closure Hanford remediation project manager

for the 618-10 trenches, in a statement.

Excavation at the 618-10 Burial Ground has started with its 12 trenches, and planning is under way to safely remove 94 vertical pipe units there. The vertical pipe units, made of five bottomless 55-gallon drums welded together and buried upright, were used as a dump for highly radioactive wastes.

In excavating the trenches, workers already have uncovered about 30 55-gallon drums that enclose pipes surrounded by concrete. The concrete-lined drums typically were used to dispose of radioactive liquids.

See **DIGGING** | Page B2

20 AUG 11
More than 1,000 attend
event with more than 120
booths holding employers

ANNETTE CARY

HERALD STAFF WRITER

A mix of longtime Hanford workers and Tri-City newcomers who hoped temporary work would lead to permanent jobs filled TRAC in Pasco on Friday.

The job fair for displaced Hanford nuclear reservation workers had drawn more than 1,000 people looking for work by midafternoon.

They were among up to about 3,000 workers who lost their jobs starting last spring or who may lose their jobs in the next 13 months.

Travis Trulson is one of about 1,650 workers expected to lose their jobs Sept. 29. He was hired to work in waste operations at the Plutonium Finishing Plant in 2009 as Hanford hired up to spend \$1.96 billion in

BRIEFS

9 AUG 11 No 100-degree days sets Hanford record this year

For the first time since Hanford began keeping temperature records in 1945, August started without a high temperature reaching 100 degrees this summer, according to the Hanford Meteorology Station.

And the high temperatures still are not there a week into the month. The highest temperature so far this month was 98 degrees Thursday.

Nor is 100 degrees expected next week. The National Weather Service is predicting

highs in central Hanford in the upper 80s to mid-90s through Sunday.

Typically, Hanford would have had eight days with 100 degrees by now.

Nagasaki bomb dropped 66 years ago today

On Aug. 9, 1945 — 66 years ago today — an atomic bomb armed with plutonium produced at Hanford was dropped on Nagasaki, Japan, helping to end World War II.

The bomb killed 70,000 people initially, but the total fatalities eventually would climb to more than 100,000. Five days after the bomb was dropped, Japan surrendered,

SAFETY CULTURE AT VIT PLANT

DOE told to take second look

15 AUG 11

Defense board thinks agency can learn from how project manager removed from post

ANNETTE CARY

HERALD STAFF WRITER

Actions proposed by the Department of Energy to strengthen the nuclear safety culture at the Hanford vitrification plant represent a start, but DOE should take a closer look at the issue, said the Defense Nuclear Facilities Safety Board in a letter released Monday.

The defense board remains concerned that DOE does not agree with the findings of a defense board investigation into the nuclear safety culture of the plant. The safety culture concerns are related to the safe operation of the plant now under construction to turn radioactive waste into a stable glass form for disposal.

"The disparity between the stated acceptance and disagreement with the findings makes it difficult for the board to assess the response," said the letter sent to Energy Secretary Steven Chu by defense board Chairman Peter Winokur on Friday.

It asked that DOE take another look at

items such as union grievances related to vitrification plant design issues and the underlying data in a safety culture review by the DOE Office of Health, Safety and Security.

It also said DOE could learn meaningful lessons if it reviewed the effects on safety culture stemming from the way Walter Tamosaitis was removed from the project and his current treatment.

It has set a deadline of Sept. 19 for DOE to address those items.

The safety culture investigation by the defense board began after Tamosaitis,

See **DOE** | Page B2

DOE picks office manager for Richland

Nuclear security official leads site office that oversees PNNL

ANNETTE CARY

HERALD STAFF WRITER

A National Nuclear Security Administration official has been picked by the Department of Energy as the new manager of the Pacific Northwest Site Office in Richland.

Roger Snyder will lead the local office that oversees the DOE national laboratory in Richland — Pacific Northwest National Laboratory.

He's expected to start work in the Tri-

Cities near the end of the month.

Since 2007 Snyder has served as deputy manager of the NNSA's Los Alamos Site Office in New Mexico, a position he will leave at the end of the week.

Julie Erickson has been the acting site office manager in Richland since December, when former manager Mike Weis took a job as manager at the Fermi Site Office in Chicago.

"My philosophy is one of partnership," Snyder said. The joint success of the

DOE office and PNNL are dependent on each other, he said.

He also is looking forward to working with the Tri-City area community, he said.

He has some familiarity with the area after heading a review of the DOE Hanford Office of River Protection several years ago and has visited the area for training and other professional reasons, he said.

PNNL has about 4,900 staff members and is addressing difficult scientific problems of national importance in energy,

See **PNNL** | Page B2

HANFORD

\$115B needed for cleanup

DOE report projects most work to be completed by 2060

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy has taken a look at all the environmental cleanup yet to be completed at the Hanford nuclear reservation and come up with a big price tag: \$115 billion.

That's what it projects will be required to finish environmental cleanup in about 2060 and then prevent any intrusion into areas, such as landfills holding radioactive waste, until 2090.

There has never been an exact figure on remaining cleanup costs, although estimates a few years ago put the cost at more than \$100 billion, said Ron Skinnarland, the section manager of waste management for the Washington State Department of Ecology, a Hanford regulator.

DOE agreed that the cost and schedule is not far from estimates reported to Congress in January 2009.

Hanford, a 586-square-mile site, is contaminated with radioactive and chemical waste from the past production of plutonium for the nation's nuclear weapons program.

The report, the 2011 Hanford Lifecycle Scope, Schedule and Cost Report, is a new requirement of the legally binding Tri-

Party Agreement, after DOE negotiated with the state and Environmental Protection Agency to extend some environmental cleanup deadlines.

DOE is required to continue preparing the report annually. It is intended to provide costs and schedules that should provide a basis for agency and public discussion of cleanup priorities, including for discussions of annual budget requests.

Annual costs in the report are based on legal requirements and deadlines, and the report shows that in five future years annual budgets of at least \$3 billion would be required, including four years before

Mixing system called flawed

Union official, DOE papers
say system could wear out
in months, not decades

**THE LOS ANGELES TIMES
AND HERALD STAFF**

LOS ANGELES — The mixing system planned for the Hanford vitrification plant's high-level radioactive waste could wear out in only a few months rather than last the 40-year lifetime of the plant, according to a union official and Department of Energy documents obtained by Hanford Challenge.

Despite the concerns raised in the documents, DOE gave Bechtel National, its contractor for the vit plant, the go ahead to complete fabrication of the tanks that use the mixing system, according to Hanford Challenge.

A federal engineering review team found in late July that Bechtel's safety evaluation of key equipment at the \$12.2 billion plant was incomplete and that "the risks are more serious" than Bechtel acknowledged when it sought approval to continue with construction, the documents say.

Senior scientists at the site said in emails that Bechtel's designs for tanks and mixing equipment are flawed and work should be stopped on that part of the construction project. However, DOE told Bechtel National on Aug. 3 that it could proceed, according to Hanford Challenge.

The same day, Richard McNulty, president of the American Federation of Government Employees Local 788, filed a stop work order, which any Hanford worker with a safety concern has the authority to order.

BACK IN TOWN

Cleanup chief checks out Hanford

Official visit is kind of a homecoming for David Huizenga

ANNETTE CARY

HERALD STAFF WRITER

The man who is expected to be the new Department of Energy head of environmental cleanup for the nation wore a tie Monday for his first official visit to Hanford.

But David Huizenga owns a Richland Bombers T-shirt.

He already is a fan of the doughnuts at the Spudnut Shop and the Thai food at the Emerald of Siam, both at the Richland Uptown shopping center. He also knows his way around Badger Mountain from regular hikes to its top.

The Hanford visit was a homecoming of sorts for Huizenga, who is DOE's new acting assistant secretary for environmental management as he waits for Senate confirmation to head DOE's

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environmental cleanup program.

But in 1985, he was starting his career as a research engineer at Pacific Northwest National Laboratory in Richland.

INSIDE

DOE told to take new look at vit plant safety culture.

|B1

he told workers Monday at the Environmental Restoration Disposal Facility.

As he spoke, trucks rumbled by every few seconds to drop off containers of waste that were being dumped at six ramps in the huge, lined landfill for low-level radioactive waste in central Hanford.

The landfill receives most of the contaminated soil and building demolition debris

See **CLEANUP** | Page A2



Richard Dickin | rdickin@tricityherald.com

David Huizenga, left, the Department of Energy's new acting assistant secretary for environmental management, and Carol Johnson, president of Washington Closure Hanford, discuss operations of the Environmental Restoration Disposal Facility during a Monday tour.

HANFORD

24 Aug 2011

6 quit after pot found in meeting room

ANNETTE CARY

HERALD STAFF WRITER

The Benton County Sheriff's Office has confirmed that a small plastic bag found on the floor after a meeting at Hanford contained marijuana, according to Washington Closure Hanford.

All employees of the subcontractor that had been using the meeting room are being tested for drugs. However, six employees resigned rather than be tested.

The bag was found Aug. 8 in a conference room used by Washington Closure subcontractor S.M. Stoller at the Environmental Restoration Disposal Facility.

Stoller operates the facility, a huge, lined landfill in central Hanford for low-level radioactive and chemical waste, and had been holding its plan-of-the-day meeting.

Most, but not all people in the room, were Stoller employees.

See **POT** | Page B2

HANFORD

Separate review of vit plant safety culture under way

23 AUG 11
Nuclear safety board said in June
plant in need of 'major improvement'

ANNETTE CARY

HERALD STAFF WRITER

An independent review of the nuclear safety culture at the Hanford vitrification plant is under way, as promised by the Department of Energy in late June.

DOE said then that it would join its contractor Bechtel National to sponsor an independent, executive-level assessment by a group of experts in the nuclear industry with experience in Nuclear Regulatory Commission inspections or evaluations by the industry group the Institute of Nuclear Power Operations.

It was one of the actions DOE announced it would take after a Defense Nuclear Facilities Safety Board investigation concluded in June that the technical safety culture at the plant was in need of "prompt, major improvement."

The plant is being built to turn up to 56 million gallons of radioactive waste from the past production of plutonium at Hanford into a stable glass form for disposal. Questions have been raised about whether scientists and engineers feel free to raise concerns about how safely and efficiently the plant operate and how DOE and Bechtel address those concerns.

"While we believe that our nuclear safety and quality culture here at WTP (the Waste Treatment Plant) is strong, we also believe in continuous improvement,"

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com.

BRIEFS

Hanford equipment fire quickly doused

A fire in a radiologically controlled building at Hanford was quickly extinguished Monday afternoon.

A fan belt overheated and caught fire in the 291-Z building, a ventilation building in central Hanford, said Rae Weil, spokeswoman for Department of Energy contractor Mission Support Alliance.

The building was evacuated because of the loss of ventilation. However, a check of the building later showed no release of radioactive materials, she said.

The building is radiologically controlled because it has had radiological elements inside in the past.

HANFORD

Vit plant decontamination booth in place

8-ton stainless steel booth first 'significant piece' of equipment

HERALD NEWS SERVICES

Crews have assembled and placed a decontamination booth weighing more than 8 tons in the Pretreatment Facility at the Hanford vitrification plant.

The booth will be used to

decontaminate large pieces of equipment that must be removed from radioactive areas when they require maintenance.

"The decontamination booth is the first significant piece of permanent plant equipment to be placed inside the Pretreatment Facility that is not required to support the civil construction progress," said Ray Patterson, Bechtel National area project manager for the facility.

Earlier, some large vessels and cranes had to be set before the upper floors and surrounding walls could be installed.

The stainless steel booth stands 14.5 feet tall, 15 feet long and 7 feet wide. It was delivered to the vitrification plant construction site in 13 pieces, which were moved inside the Pretreatment Facility and assembled.

The ceiling of the booth will be equipped with a single-

track trolley and a hoist that can be used to move and hang equipment during cleaning. It also will be equipped with leaded-glass viewing windows, which provide shielding from radiation, and two sets of gloveboxes that allow workers to manipulate cleaning equipment inside the booth.

"Installation of the decontamination booth is another example of the transition from civil construction to mechanical installations in the Pre-

treatment Facility," said Wahed Abdul, DOE project manager for the facility. "The transition is crucial as we move toward construction completion in 2016, commissioning in 2019 and full operations in 2022."

The Pretreatment Facility is the largest building at the vitrification plant, which is being built to turn up to 56 million gallons of radioactive waste into a stable glass form for disposal.

Hastings hopeful for less painful Hanford budget

ANNETTE CARY

HERALD STAFF WRITER

There still is hope that the Hanford nuclear reservation budget for fiscal 2012 may not be as grim as proposed layoffs indicate, Rep. Doc Hastings, R-Wash., said Wednesday.

He spoke at the Tri-City Regional Chamber of Commerce lunch in Pasco, also discussing the budget deficit, saving dams, Rattlesnake Mountain and the 2012 race for the presidency.

The Department of Energy is prudent to be prepared with no DOE budget passed for the fiscal year that begins Oct. 1, Hastings said.

DOE announced last week that it will allow environmental cleanup contractors to cut 1,100 jobs — in addition to previously announced job cuts — to give them flexibility. It does not want them to be caught short by budget cuts well into the fiscal year and then have to lay off more people to make up the money.

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Hastings said money in the proposed 2012 budget for Hanford has not been correctly prioritized.

The Senate has yet to act on the DOE budget. But the House has passed an appropriations bill that would cut \$20 million from the Hanford budget, on top of the end of \$1.96 billion in federal economic stimulus money.

It's the tank farms that would be particularly hard hit as the House budget reduced proposed spending to \$408 million, which is \$113 million below the administration's budget request.

Washington River Protection Solutions, which operates the tank farms storing 56 million gallons of radioactive waste underground, has announced it will cut up to 475 jobs by mid-October to prepare for a worst-case

HANFORD

DOE is working on land transfer

26 AUG 11

Agency says it now is ready to proceed with initial steps

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is prepared to take the necessary steps to transfer a parcel of Hanford land to the Tri-City Development Council in hopes of eventually creating thousands of jobs.

In a recent letter, DOE signals that the agency is looking favorably on the TRIDEC request, although it still is an early step in the process.

"That is a very exciting letter for us," said Gary Petersen, vice president of Hanford programs for TRIDEC. "It's like setting a ball on the tee and saying we're going to drive it now."

TRIDEC has asked for 1,341 acres of

20 AUG 11

Legislation currently being written to make Hanford structure part of national park system

ANNETTE CARY

HERALD STAFF WRITER

B Reactor should take the next step this fall toward becoming a museum that anyone can visit.

Legislation to make Hanford's historic B Reactor part of the national park system should be introduced then,

Rep. Doc Hastings, R-Wash., said Monday. Hastings is chairman of the House Natural Resources Committee, which oversees the National Park Service.

Hastings, park service officials and community leaders gathered Monday at Hanford's historic B Reactor to celebrate the progress toward saving the

reactor as a museum.

In July, Ken Salazar, the secretary of the interior, recommended to Congress that a national historical park should be formed to commemorate the Manhattan Project, the top-secret effort to create an atomic bomb during World War II.

Historical facilities at Hanford and Manhattan Project sites in New Mexico and Tennessee could be included in a Manhattan Project National

Historical Park.

Legislation to create the multisite park is being written now and has support from Republicans and Democrats and the House and the Senate, Hastings said.

The park service had to overcome internal skepticism to back including B Reactor in the proposed park, said Rory Westberg, deputy director of the Pacific Northwest Region

See **MUSEUM** | Page B2

Vit plant budget doubted in review

DOE document says
\$12.2 billion target
may be hard to meet

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy may not be able to complete the Hanford vitrification plant for the projected \$12.2 billion, according to an internal DOE document.

The \$12.2 billion figure is at risk due to uncertainties in congressional funding for the project, increased cost growth, outpacing savings and delays in resolving technical waste mixing issues, according to a briefing document by the Construction Project Review team.

However, a "refined approach to treating the small fraction" of the most difficult waste, which includes plutonium, could help curb cost growth, the document indicated. That could mean finishing the design of the plant to treat the majority of the waste and then continuing to work on studies for treating the most difficult waste.

DOE has not released the briefing document, considering it "predecisional," but the document has been circulated outside Hanford by others. A formal report on the team's most recent review has not been written

Highly radioactive material moved

Hazardous californium 252
now at PNNL for studies

ANNETTE CARY

HERALD STAFF WRITER

After more than a year of planning, highly radioactive material has been transferred from central Hanford to Pacific Northwest National Laboratory.

The 222-S Laboratory in central Hanford has been storing californium 252 in an underground concrete pit covered with water to provide shielding from its radiation. Californium 252 is a strong neutron emitter, which makes it extremely radioactive. Neutrons also are particularly hazardous

to workers because they easily penetrate many materials.

Radiation from two containers of the isotope, which have been in storage since 2000, was measured at 76 and 104 rem per hour at a distance of about one foot.

"We're trying to get rid of highly radioactive sources that had a use in the past, but that we're no longer using," said John Britton, spokesman for Washington River Protection Solutions, which manages the Hanford tank farms.

The californium once was needed as a source of radiation in a program to measure the amount of sodium in waste now stored in underground tanks that is planned to be sent to the Hanford vitrification plant for treatment.

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com

"Moving these sources required extensive planning and preparations, including remote cameras and concrete shielding," said Don Hardy, 222-S facility manager, in a statement.

The two containers were lifted out in separate operations with a crane operated by workers behind concrete shielding. Each container was placed in a 5,000-pound transport cask for the trip across Hanford to a PNNL facility.

Crews conducted six mock ups of the process, before "the move was pulled off without a hitch," Hardy said.

PNNL will use the californium in dosimetry calibration studies, according to Washington River Protection Solutions. Both PNNL and the 222-S Laboratory have hot cells, where workers can perform tasks with highly radioactive materials.

Transferring the californium to PNNL will save about \$48,000 in surveillance and maintenance costs at the 222-S Laboratory.

It was the last material Washington River Protection Solutions was responsible for that had to be accounted for as special nuclear material, allowing the contractor to now close its nuclear safeguard program for accountable nuclear material.

► *Annette Cary: 582-1533; acary@tricityherald.com*

5 workers return after Hanford pot incident

Five Hanford employees who resigned rather than take a drug test are back at work at Hanford.

However, four others who failed a drug test have lost their jobs.

A bag containing marijuana was found Aug. 8 on the floor of an S.M. Stoller meeting room at Hanford's Environmental Restoration Disposal Facility.

S.M. Stoller, which operates the landfill for low-level radioactive waste, required all 108 of its employees to have drug tests, according to the Washington Closure Hanford subcontractor.

Six resigned, although one apparently resigned for other reasons than the drug test, said Brian Mathis, project manager for Stoller.

The five employees were returned to Hanford by their union and subsequently passed a drug test. However, Washington Closure described its policy earlier as allowing some employees to continue working in specialized circumstances if they pass a drug test, enter treatment and agree to random drug tests.

Workers who failed the drug test are not expected to be allowed to return to work. Most, but not all, drug tests have been completed. Only Stoller employees were tested.

- Herald staff

HANFORD

4 SEP 11 Support buildings coming down at test facility

No decision made about reactor; warehouses, office complex buildings will go

ANNETTE CARY

HERALD STAFF WRITER

Work is under way to tear down some of the buildings that once supported work at Hanford's Fast Flux Test Facility.

No decision has been made about the fate of the research reactor, but work is under way to tear down 14 buildings out-

side the secure area immediately surrounding the reactor. They include warehouses, a large office complex and security buildings that date from the mid-1970s.

In addition, an older office building that looks similar to the 1940s structures on the site will be demolished. It may have been moved to its present location to be used as an early administration building.

The Tri-City Development Council remains interested in two of the large buildings once planned to support FFTF,



A construction worker walks past a warehouse being torn down at the Fast Flux Test Facility. Work is under way to tear down 14 buildings outside the secure area immediately surrounding the reactor.

Richard Dickin |
rdickin@tricity
herald.com

See **HANFORD** | Page B2

Senate version adds to tank farm money

It's too early to tell how layoffs will be affected

ANNETTE CARY

HERALD STAFF WRITER

The Hanford tank farms would see some relief under the Senate version of the Department of Energy budget for the fiscal year that begins Oct. 1.

However, it's too early to tell how that could affect proposed layoffs at the tank farms next month.

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com

Committee on Wednesday approved the fiscal 2012 budget that includes Hanford, mostly matching the already approved House budget.

However, it increased the proposed money for work at the Hanford tank farms from the \$408 million in the House budget to \$467 million in the budget the full Senate will consider thanks to Sen. Patty Murray, D-Wash.

"The federal government has a moral and legal obligation to

INSIDE

Temporary storage proposed for high-level waste. | B1

Temporary storage proposed for waste

With doubt about plans for national waste storehouse, contractor recommends building that can be expanded

ANNETTE CARY

HERALD STAFF WRITER

Hanford contractor officials are proposing a temporary storage system for Hanford's treated high-level radioactive waste that easily can be expanded, given uncertainties about the nation's plans for a national waste repository.

Washington River Protection Solutions formed an independent review team that is recommending a new Hanford building large enough to store as much high-level radioactive waste as the Hanford vitrification plant is expected to treat in a decade. But if needed, more vaults could be added.

The initial plans do not include a shipping facility. Given austere federal budget conditions, it makes sense to wait to add that when the nation is ready to ship the waste, said Tom Fletcher, Department of Energy acting assistant manager of the Hanford tank farms.

Hanford has 56 million gallons of radioactive and hazardous chemical waste in underground tanks awaiting treatment. That includes high-level radioactive waste that DOE plans to

turn into a stable glass form at the vitrification plant starting in 2019.

The treated high-level waste then was planned to be shipped to the proposed Yucca Mountain, Nev., repository, but DOE has shut down work on the project, and the Blue Ribbon Commission on America's Nuclear Future is considering what the nation should do with its high-level radioactive waste.

The vitrification plant has space to let the treated waste cool from the

high temperatures of the plant's melters, but then it must be moved to temporary storage off the plant's grounds to allow treatment of waste to continue.

A temporary storage system had been planned at Hanford before the shutdown of the Yucca Mountain project, but with plans for a national repository uncertain now, the waste is expected to remain at Hanford longer.

The review team considered the

See **STORAGE** | Page B2

Tamosaitis to sue DOE, URS in federal court

ANNETTE CARY

HERALD STAFF WRITER

Hanford whistleblower Walt Tamosaitis plans to file a lawsuit against the Department of Energy and Hanford subcontractor URS in federal court.

At the same time, he will continue his case against DOE contractor Bechtel National in Benton County Superior Court.

His attorney, Jack Sheridan, filed a notice with the Department of Labor

this week giving a required 15 days notice of the intent to file suit in Eastern Washington Federal District Court.

Tamosaitis filed a complaint with the Department of Labor last year, but federal administrative cases may be moved to federal court if they have not been resolved within a year.

His attorney has been pursuing a claim against Bechtel, alleging it interfered with his employment with its subcontractor URS, but the

Department of Labor filing notice indicates he will be pursuing a whistleblower case in federal court.

Tamosaitis recently moved to drop URS from the lawsuit filed in Benton County Superior Court, which would allow him to pursue the whistleblower claim in federal court. That case originally was filed against Bechtel and URS and some of their managers. It is scheduled for trial in May 2012.

Tamosaitis is the former manager of research and technology at the

\$12.2 billion Hanford vitrification plant being built to turn radioactive waste into a stable glass form for disposal.

That job ended abruptly when he raised concerns about how safely the plant would operate, which put in jeopardy much of a \$6 million payment Bechtel was hoping to earn from DOE, according to his attorney.

On July 2, 2010, a day after Tamosaitis listed safety issues at a meeting, he was escorted from his vit plant

office and reassigned to a job in a basement office he's shared with a copy machine for more than a year, according to court documents. He has been given no meaningful work, according to his attorney.

URS countered in legal documents that July 1, 2010, Tamosaitis sent an email to consultants on the project, making what the consultants and URS interpreted as inappropriate

See **SUE** | Page B2

Hanford regulators will postpone some cleanup deadlines

Budget realities make it necessary to focus on highest priorities

ANNETTE CARY

HERALD STAFF WRITER

Hanford regulators have agreed to let some interim environmental cleanup deadlines slide at the nuclear reservation to focus on the highest priority work, given the realities of the federal budget.

The changes are expected to allow work to continue to demolish the Plutonium Finishing Plant, which the Department of Energy heard during public comments should be a priority.

The new plan also retains the focus on completing cleanup along the Columbia River by 2015 and cleaning up contaminated ground water beneath Hanford.

When the Obama administration proposed a fiscal 2012 budget for Hanford, it included money to meet all legal deadlines, but not money to continue accelerated environmental cleanup work at the Plutonium Finishing Plant. Work had been accelerated there with federal economic stimulus money.

Stopping work in fiscal 2012, which starts Oct. 1, and then ramping the project back up in fiscal 2013 would require six to

Bridge crane in place at vit plant

Crane will be used to move drums before, after being filled with residual waste

HERALD NEWS SERVICES

Crews at the Hanford vitrification plant have received and set a bridge crane that is key to allowing construction of the plant's High Level Waste Facility to advance.

The crane, which has a 3-ton capacity, needed to be in place before piping could be installed above and around it.

Teamwork and coordination among

engineering, procurement and construction workers allowed the crane to be delivered, then installed in a matter of days, said Joe St. Julian, Bechtel National area project manager for the facility.

The bridge crane was set in a 40-by-16-foot area on the northeast side of the High Level Waste Facility. Using a tower crane, crews lifted it over the facility's 58-foot walls and lowered it, with just a few inches of clearance at each end, onto rails installed 16 feet above the ground.

The crane, manufactured by American Crane & Equipment Corp. in Pennsylvania, weighs 6 tons and measures about 16 feet long, 9 feet wide and 4 feet tall.

It will be used to handle 55-gallon carbon-steel drums before and after they are filled with residual solid waste. The residual waste is composed of solids, such as filters, glass shards and welding material remnants, produced during the vitrification process. At the plant, radioactive waste is mixed with glass former and heated to vitrify, or glassify, it and produce a stable waste form for disposal.

It will be deposited into the drums, which will be fitted with lids and cleaned to remove any contamination on their exterior. Then they will be removed from the facility inside 9-inch-thick steel casks and taken to storage off the vit plant campus.

When operating, the bridge crane will run the length of the drum cleaning and monitoring area, as well as an additional 10 feet into a crane maintenance area. It will be operated remotely from an adjacent room.

"Setting this bridge crane is an excellent sign of advancing construction of the High Level Waste Facility from civil construction — concrete and steel — into mechanical installations," said Gary Olsen, Department of Energy area project manager.

The High Level Waste Facility is the most structurally complex vit plant facility and is 35 percent constructed with a scheduled completion in 2016.

Hastings questions vit plant budget request

Congressman wants DOE to clarify what money's for

ANNETTE CARY

HERALD STAFF WRITER

Congress needs straight answers from the Department of Energy on what requests for more money for the Hanford \$12.2 billion vitrification

plant mean, said Rep. Doc Hastings, R-Wash.

He spoke Thursday to the Energy Community Alliance in Washington, D.C., and provided a copy of his speech to the Herald.

Hastings questioned whether the increased funding requests meant that DOE



Hastings

needed more money during peak work years at the plant under construction or whether it needed more money overall to finish the plant.

Preliminary results of the most recent Construction Project Review of the vit plant indicated that the cost of the plant might increase by \$800 million to \$900 million. A final report is due in October.

DOE has proposed an accelerated

funding profile for the plant, which had planned to be built on a steady \$690 million per year. Now DOE has said it would be more efficient to move some of the overall budget forward to peak work years.

It requested \$840 million in the fiscal year that starts Oct. 1 and \$970 million in fiscal 2013. However, proposed House and Senate budgets for fiscal 2012 include \$740 million for the plant.

"Neither provides for the modified profile," Hastings said. "Congress has been clear on this point, and it's time for the department to stop adding risk to the project by planning exclusively to a funding profile that will not happen — and frankly isn't desirable given the inevitable impacts on other cleanup projects."

See **HASTINGS** | Page B2

Vit plant management to be reviewed by agency

Initial focus will be on schedule to complete plant, projected costs

ANNETTE CARY

HERALD STAFF WRITER

The Government Accountability Office is beginning a review of the Department of Energy's management of Hanford's vitrification plant.

It received a request from Rep. Henry Waxman, D-Calif. and

Diana DeGette, D-Colo., both of whom serve on the House Energy and Commerce Committee, the GAO told the Defense Nuclear Facilities Safety Board in a letter. The GAO expects the review to touch on issues of concern to the defense board.

The review's objectives are not final, but among the initial focuses will be the reliability of the projected cost and schedule for completing the plant, including how that compares to prior estimates.

See **REVIEW** | Page A2

Nuclear safety culture last reviewed by agency staff in August 2010

17 SEP 11
ANNETTE CARY

HERALD STAFF WRITER

Department of Energy health officials plan a return visit at the end of the month to begin a follow-up assessment of the nuclear safety culture at the Hanford vitrification plant.

They will be doing some things differently this visit after questions were raised about workers' comfort in raising issues in earlier interviews.

The DOE Office of Health, Safety and Security, or HSS, reviewed the nuclear safety culture at the vitrification plant in August 2010 and typically would have waited until all proposed improvements had been implemented to return.

But David Huizenga, the new DOE acting assistant manager for environmental management, asked for a follow-up as soon as possible, said Glenn Podonsky, the DOE chief of

health, safety and security, during a visit to the Tri-Cities this week.

The review last year was conducted after Walter Tamosaitis, a former research and technology manager at the plant, was abruptly removed from work on the plant in July 2010. He has filed a whistleblower complaint, alleging he lost his position for raising safety concerns about the future operation of the \$12.2 billion plant. DOE contractor Bechtel National disagrees, saying he wrote a disrespectful email that upset DOE.

The Defense Nuclear Facilities Safety Board also looked at policies and attitudes toward safety at the plant and concluded that behavior by DOE and contractor management reinforces a subculture that deters workers from reporting and management from resolving technical safety concerns.

When DOE responded that those findings are not consistent with other reviews, including the HSS review, the defense board advised DOE to take a



Secretary of the Interior Ken Salazar, seated in the operator's chair in the B Reactor, listens as Russ Fabre, B Reactor tour manager, left, explains the workings of the reactor's control panel Sunday during a tour at Hanford as Gov. Chris Gregoire, second from right, Sen. Maria Cantwell, right, and Rep. Doc Hastings, second from left, listen. [See a photo gallery at tricityherald.com.](http://tricityherald.com) Photos by Paul T. Erickson | perickson@tricityherald.com

A LOOK AT HISTORY

Official says proposed national park would tell story of reactor and of human ingenuity

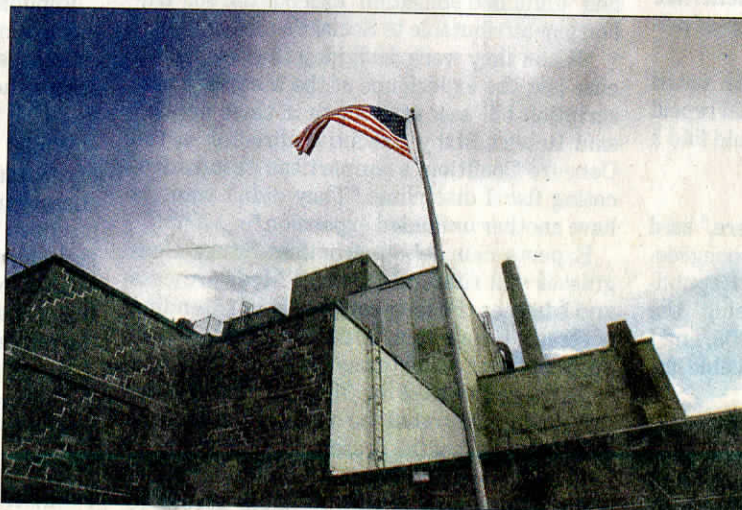
ANNETTE CARY
HERALD STAFF WRITER

The secretary of the interior took a look Sunday at Hanford's historic B Reactor, one of the property's he soon is expected to oversee within the national park system.

Sec. Ken Salazar toured the reactor at the invitation of Rep. Doc Hastings, R-Wash., at the conclusion of a weekend visit to Washington. He also was accompanied by Washington Gov. Chris Gregoire and Sen. Maria Cantwell, D-Wash.

"We have not yet done a good enough job of telling the story of World War II and the nuclear era born out of the war," he said as he stood beneath the towering front face of the reactor, where fuel once was loaded into its core.

In July, Salazar recommended



B Reactor was the world's first full-scale nuclear reactor.

to Congress that a Manhattan Project National Historical Park be formed with properties at Hanford, Los Alamos, N.M., and Oak

Ridge, Tenn., to commemorate the top-secret project to develop the atomic bomb during World War II.

B Reactor would be a key attrac-

INSIDE

Governor, interior secretary among officials to attend briefing on Yakima Basin water plan. | B1

tion of the proposed park as the world's first full-scale reactor. It produced plutonium for the first nuclear explosion in the New Mexico desert and the atomic bomb dropped on Nagasaki, Japan, helping end the war.

"It is a story that tells itself," Salazar said. It's a story about the reactor's role on the world stage and also a story of human ingenuity, he said.

Just months after scientists achieved the first man-made chain reaction, construction began at Hanford to produce plutonium at the industrial scale. Amid fears

DOE UNDERSECRETARY

D'Agostino to make first Hanford visit in new role

High-level officials
to speak at Monday
conference on safety

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy undersecretary responsible for Hanford environmental cleanup since the department's reorganization will make his first visit to the nuclear reservation next week in his new capacity.

Thomas D'Agostino, the undersecretary for nuclear security and administrator, will visit the Tri-Cities to speak at the 2011 Integrated Safety Management Champions Workshop in Kennewick, which is expected to draw 1,200 people from across the nation.

The conference, Monday through Thursday, also has scheduled other high-level DOE officials to speak, including Glenn Podonsky, the chief of health, safety and security. The conference is organized to promote safety at DOE work sites.

Other speakers will include Richard Picciotto, the highest ranking firefighter to survive the World Trade Center collapse a decade ago, and Jim Whittaker, the first American to reach the summit of Mount Everest and former chief executive of REI.



D'Agostino

D'Agostino has been responsible for the Office of Environmental Management since July, when Energy Secretary Steven Chu moved the office, which is responsible for Hanford, under his leadership. D'Agostino also leads the National Nuclear Security Administration, which was formed within DOE by Congress in 2000 for the management and security of the nation's nuclear weapons, nuclear nonproliferation and naval reactor programs.

Chu said reorganization allows knowledge and skill to

Radiological safety being improved at plutonium plant

25 SEP 11
DOE report cited problems in different areas of facility

ANNETTE CARY

HERALD STAFF WRITER

Improvements are being made to increase radiological safety at Hanford's Plutonium Finishing Plant since a critical report from the Department

of Energy in July.

"The concern, and the number and significance of deficiencies identified in the report represents a significant adverse condition with respect to regulatory and contractual requirement compliance," DOE said in a letter to contractor CH2M Hill Plateau Remediation Co. in July.

In some cases, the problems extended beyond the plant to the contractor's program for all radiological

work, the letter said. The letter and report recently were obtained by Hanford Challenge.

The Plutonium Finishing Plant was used to make plutonium produced in Hanford reactors into metal buttons the size of hockey pucks for shipment to the nation's weapons production plants. Work was done inside an extensive complex of glove boxes, with workers inserting their hands inside gloves attached to portals on the

shielded boxes to do work with radioactive material.

Now workers are decontaminating the glove boxes, detaching them and, in many cases, cutting them up to fit into containers that can be shipped to the Waste Isolation Pilot Plant in New Mexico for disposal.

Work began with some of the least challenging glove boxes, although all

See **SAFETY** | Page B2

23 Sep 11

CH2M Hill to pay \$1.5M in settlement

Payment to resolve
P-card fraud cases

**ASSOCIATED PRESS
AND HERALD STAFF**

CH2M Hill Hanford Group has agreed to pay the United States \$1.5 million to resolve allegations that it submitted false claims relating to a federal contract to manage mixed radioactive waste at the Hanford nuclear site.

The announcement Thursday by the Department of Justice centers around two former employees of the

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engineering and construction firm who were responsible for buying supplies for use by CH2M, but between 2003 and 2005 bought from companies owned by their spouses and charged it all to the Department of Energy on federal credit cards.

The more than 200 purchases never were delivered to the firm.

A total of seven people were indicted in spring 2010 in U.S.

See **SETTLEMENT** | Page A2

HANFORD LAYOFFS

20 SEP 11

Hundreds learn they will lose job

Total job cuts for fiscal 2011 is 1,825

ANNETTE CARY

HERALD STAFF WRITER

Two weeks before the end of the fiscal year at Hanford, hundreds of workers learned Monday that their names are on the list for previously announced layoffs.

Combined, the job cuts among Hanford cleanup contractors this fiscal year appear to total 1,825, most of them this month, which is slightly fewer than expected.

The year started with about 12,000 employees at Hanford. In addition, Pacific Northwest National Laboratory is laying off 45 workers.

Those totals do not include

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Hanford layoffs in fiscal 2012, which include job cuts planned as early as mid-October. In a worst-case scenario,

INSIDE

WorkSource
Columbia
Basin faces
cuts. | **B1**

cuts throughout fiscal 2012 would cost more than 1,000 more jobs.

"This is just tough for anyone," said Deanna Smith, spokeswoman for Mission Support Alliance. "We hope workers will take advantage of WorkSource and employee assistance."

Hanford employees who are laid off receive a severance

See **LEARN** | Page A2

DOE seeks way to streamline transfer of land

TRIDEC has asked for 1,341 acres for economic development to help replace jobs being lost

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is looking for ways to streamline the process of transferring unneeded land for new uses at Hanford and other sites that have environmentally clean property.

It is moving its Asset Revitalization Initiative into Phase II with new leadership and a plan that includes promoting public-private partnerships and commercial opportunities. It also calls for engaging local communities as decisions are made about land as environmental cleanup is completed.

The Tri-City Development Council has asked for 1,341 acres of Hanford land next to Richland city limits for eco-

27 SEP 11
nomic development to help replace jobs being lost at Hanford. It is joined in the request by Richland, the Port of Benton and Benton County.

About 10 percent of Hanford land, including the land requested by TRIDEC, is planned for industrial use. Most of the 586-square-mile nuclear reservation is

to be used for preservation or conservation as environmental cleanup is completed from the past production of weapons plutonium.

Among goals of the task force is to focus on pilot projects

HANFORD NEWS ONLINE

Find related stories at hanfordnews.com.

4 OCT 11

Lawsuit claims vice president knew about use of Hanford P-card

ANNETTE CARY

HERALD STAFF WRITER

The Department of Justice has filed a civil lawsuit against a Kennewick Industrial and Electrical Supply

vice president, seeking millions of dollars for his alleged part in fraud and kickback schemes for goods ordered for the Hanford nuclear reservation.

It's the latest lawsuit filed

related to fraudulent use at Hanford of federal credit cards — called purchase cards or P-cards — in a string of filings that began in spring 2010.

“This complaint sends a

clear message that we will aggressively pursue all persons responsible for fraud that runs up costs and frustrates the vital mission of cleanup at the Hanford nuclear facility,” said Michael

See **SUE** | Page B2

Sirens at Hanford 23 APR 11 **to sound for drill today**

Emergency sirens will be sounded between 8 and 11:30 a.m. today during an emergency drill at the Hanford nuclear reservation.

The drill will be held in the 300 Area one mile north of Richland, and people off the nuclear reservation may hear the sirens. Public address messages will be broadcast after the sirens sound to make clear the sirens are being used for a drill.

- Herald staff

30 OCT 11

Groundbreaking planned for Hanford Reach center

Officials for the Hanford Reach Interpretive Center will have a groundbreaking ceremony in the west end of

Columbia Park on Wednesday.

The event is from 4:30 to 6 p.m. and includes a meet-and-greet, blessing by the Confederated Tribes of the Umatilla Indian Reservation, symbolic turning of dirt and live music performances.

Parking is available at Bate-man Marina.

The groundbreaking is for the first phase of the interpretive center project.

The museum is intended to tell the story of Hanford's role in winning World War II and the Cold War, as well as the history, geology, flora and fauna of the region.

- Herald staff

Hanford tank farms lay off 244 workers

Total cutback at nuclear site since spring climbs to almost 2,000 jobs

ANNETTE CARY

HERALD STAFF WRITER

Hanford's tank farm contractor handed out layoff notices Monday, bringing to 244 the number of layoffs at the nuclear reservation linked to uncertainties in the budget for the fiscal year that began Saturday.

The 244 layoffs were fewer than previously had been approved at the tank farms, where 56 million gallons of radioactive waste are stored from the past production of plutonium for the nation's nuclear weapons program.

But it still puts the total cutback at Hanford since spring at 1,993 jobs. The year started with about 12,000 jobs at Hanford.

The tank farm contractor, Washington River Protection Solutions, had earlier approval from the Department of Energy to lay off up to 475 workers at the start of this fiscal year.

But contractor officials were waiting to get a better idea of what to expect in the 2012 budget before sending out layoff notices that ended up cutting about half that number.

Days before the start of the federal government's fiscal year, Congress approved a continuing resolution to allow the government to operate until today.

It is working on approval of a second continuing resolution that would allow the government to operate until Nov. 18, giving Congress more time to pass a budget.

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com.

DOE agreed in late fiscal 2010 to allow Hanford cleanup contractors to lay off up to 1,100 workers as it began to look likely that fiscal 2012 would start without a budget, putting contractors at risk of spending too much money before a potentially tight budget for the rest of the year was in place. Washington River Protection Solutions is the only contractor to take advantage of that offer.

Washington River Protection Solutions based the total of 244 jobs cut on guidance from DOE on what work it wanted accomplished at the tank farms under the continuing resolution, said contractor spokesman Jerry Holloway.

While Congress works to pass a budget, DOE has directed Washington River Protection Solutions to proceed under the continuing resolution with enough workers to support "near-term regulatory commitments in the

14 SEP 11

Atomic Man has lessons to teach after 35 years

Issues surrounding accident discussed at DOE conference

ANNETTE CARY

HERALD STAFF WRITER

Thirty-five years after Hanford's "Atomic Man" was sprayed with americium in the nuclear reservation's worst radioactive accident, the case still has lessons for workers at the Department of Energy's nuclear complex.

What went wrong and the successful response to the accident were discussed at a symposium Tuesday as part of a DOE national conference on safety that drew 1,200 people to Kennewick.

Harold McCluskey, 64, was one of two chemical operators working to restart operations to reclaim americium from waste at an annex of Hanford's Plutonium Finishing Plant on the night shift Aug. 29, 1976. Work had stopped for five months because of a worker strike.

The other operator saw brown smoke and heard a hissing sound in a glove box in what would come to be known as the McCluskey Room, said Dan Wodrich, who served on the Hanford contractor com-

mittee that investigated the accident.

McCluskey told the other operator to call a supervisor and then climbed a ladder and stuck his hands into the glove portal to check the vent valve in a column that held americium. It's going to explode, he called out, and started back down the ladder.

The overpressurized vessel exploded, hitting him on the right side of his face, his neck and shoulders with concentrated nitric acid, americium and debris that included glass, plastic and metal shards.

He was knocked to the floor and called out, "I can't see."

The second operator pulled him out of the room filled with a dark cloud of fumes. A radiation specialist, later joined by nurses, began to wipe him off with damp cloths. His co-workers knew he had a heart condition and were afraid to move him to a shower to decontaminate him.

An hour and a half later, McCluskey was in a plastic-lined ambulance on his way to the Emergency Decontamination and Treatment Facility on the grounds of Kadlec Hospital in Richland.

Several things had gone wrong in the McCluskey Room, said Paul Ruhter, a

HANFORD TANK FARMS

70 volunteer for layoffs

Move will ease pain of more anticipated layoffs in October

ANNETTE CARY

HERALD STAFF WRITER

Washington River Protection Solutions agreed to voluntary layoffs for all 70 workers who applied for them, the Hanford contractor announced Tuesday.

The layoffs include 44 nonunion

employees and 26 union employees.

They will ease some of the pain for the additional layoffs the tank farm contractor is anticipating. It is preparing to cut up to 475 jobs by Oct. 13 under a worst-case fiscal 2012 budget scenario.

The Department of Energy is allowing its environmental cleanup contractors to lay off up to 1,100 workers in the fiscal year that starts Oct. 1 to prepare for an uncer-

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tain federal budget. To date, only Washington River Protection Solutions has planned layoffs linked to the 2012 budget.

However, the possible 1,100 job cuts are in addition to up to 1,985 layoffs already announced this year, the majority of which will be Sept. 29. Most of them are linked to the end of most spending of federal economic stimulus money.

See **LAYOFFS** | Page A2

Lawsuit filed over Hanford subcontract

509714
Savage Logistics alleges bid rigging, other unfair practices

ANNETTE CARY

HERALD STAFF WRITER

A losing bidder for a Hanford subcontract has sued Washington Closure Hanford and two of its subcontractors in federal court, claiming bid rigging and other unfair practices.

As the result of false claims, the Department of Energy did not receive the best price for environmental cleanup work at Hanford, alleged Salina Savage and her firm, Savage Logistics of Richland, in a lawsuit filed in Eastern Washington Federal District Court.

HANFORD NEWS ONLINE

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Washington Closure, Federal Engineers and Constructors, and Phoenix Enterprises Northwest, all named in the lawsuit, have denied the allegations.

The Department of Justice declined to intervene in the lawsuit after apparently conducting an investigation, but has asked to receive copies of all filings in the case.

"It is significant that the U.S. government chose not to join the lawsuit," said Washington Closure in a statement. "We believe the case has no merit and expect the court will reach the same conclusion."

Jonetta Everano, a former Federal Engineers and Constructors (FE&C) employee

in Richland, formed Phoenix Enterprises in February 2009 with FE&C as a 49 percent owner. Four months later, she won her company's first job, a Washington Closure Hanford subcontract worth about \$4.8 million.

At the time of the procurement she had no separate address from Federal Engineers and Constructors and shared the same telephone number, only signing a sublease after the subcontract was awarded, the lawsuit alleges.

Savage claimed that FE&C and Washington Closure officials had sought to find a front company for FE&C to compete for certain Washington Closure work and alleged that constituted bid rigging.

15 SEP. 11

D'Agostino is newly responsible for cleanup at Hanford

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy undersecretary newly responsible for Hanford environmental cleanup has a bias for getting the job done, he said Wednesday after his first tour of the nuclear reservation.

That's the case whether it's starting operations at the Hanford vitrification plant or reusing unneeded Hanford land, said Thomas D'Agostino, the undersecretary of nuclear security.

He was in the Tri-Cities to speak at the 2011 Integrated Safety Management Champions Workshop in Kennewick, which drew 1,200 people from DOE projects across the nation. During his three-day visit he also toured Hanford and met with DOE Hanford leadership and staff and with community members.

D'Agostino became the undersecretary responsible for the Office of Environmental Management after Energy Secretary Steven Chu's



D'Agostino

HANFORD NEWS ONLINE

Find related stories at
www.hanfordnews.com

department reorganization two months ago.

Among the issues he inherited are the questions about Hanford's \$12.2 billion vitrification plant, including whether it can be finished on schedule and on budget, how much budget support Congress will give the plant and whether it will operate safely to treat all of Hanford's radioactive waste now held in underground tanks.

"I recognize there are technical challenges there," he told DOE Hanford employees at an all-staff meeting. There always are on such complex projects, he said.

But there comes a point where the biggest risk is leaving high-level radioactive waste longer in underground tanks, he said. Hanford has 56 million gallons of radioactive waste stored in underground tanks, many of which are known to have leaked in the past.

He is confident the vitrification plant is based on technology that's well understood and will work, he said. But a certain amount of flexibility will be needed as work moves forward, he said.

"My experience is we learn things as we do work," he said. "If you are rigid as you move

6 (SEP 77)

Reach Center might break ground this fall

Officials now waiting
for state approval

MICHELLE DUPLER

HERALD STAFF WRITER

The first dirt soon could be turned for construction of a local science and history museum nine years in development.

Officials involved with the Hanford Reach Interpretive Center tentatively have scheduled a groundbreaking ceremony for Oct. 5, conditioned on getting final

approval from the state Department of Transportation.

The groundbreaking would be for the first phase of the project, which involves extending water and sewer lines, building a driveway that eventually will become part of Columbia Park Trail, and getting the property in the west end of Columbia Park ready for the eventual construction of the museum itself.

The Richland Public Facilities District — the public

See **REACH** | Page B2

15 SEP 11

Interior secretary to visit B Reactor

Gregoire, Cantwell
plan to join Salazar,
Hastings for tour

ANNETTE CARY

HERALD STAFF WRITER

Interior Secretary Ken Salazar plans to visit Hanford's historic B Reactor on Sunday at Rep. Doc Hastings' invitation.

It's a chance for Salazar to see the reactor that is expected to become part of the national park system he oversees.

"Sec. Salazar and I discussed his visiting Central Washington in one of our first

conversations after I became chairman," said Hastings, R-Wash., in a statement.

Hastings, the chairman of the House Natural Resources Committee, is preparing to introduce legislation in the next few months to make B Reactor part of a



Salazar

Manhattan Project National Historical Park. His committee has jurisdiction over the National Park Service.

Gov. Chris Gregoire and Sen. Maria Cantwell, D-Wash., are expected to join Salazar

7007 11 First dampers for vit plant ready for testing, installation

HERALD STAFF

The Hanford vitrification plant has received the first of 32 large nuclear-quality dampers for its High Level Waste Facility, according to Department of Energy contractor Bechtel National.

The 1,350-pound dampers are part of the building's extensive filter system and will be essential to maintaining contamination boundaries during plant operations.

Twenty of the 32 stainless steel dampers will isolate contaminated air flow during filter system maintenance using remote-operated vertical sliding doors.

The doors will slide over 2-foot-diameter openings that connect the dampers to one of two massive HVAC ducts, which were installed earlier this year.

"These dampers are part of the High-Level Waste Facility's air-filtration system, which is essential to ... meeting strict air-emission requirements," said Joe St. Julian, area project manager for the facility. "They are therefore being manufactured and tested to highest nuclear safety and quality standards by an internationally recognized leader in specialty dampers."

The remaining 12 dampers will be used in other facility filtration systems.

As part of the quality-control measures, the dampers are being assembled and tested in a "clean room," which is accessed only through airtight doors and closely monitored for airborne contaminants. In addition, anyone entering the clean room must be dressed in head-to-toe protective clothing.

Many of the damper pieces were cut using a precision laser, and the dampers are now being assembled, tested and shipped in pairs.

"By manufacturing and delivering the dampers in pairs, we can begin to install them and progress more quickly than if we waited for all of them," said Gary Olsen, DOE area project manager for the facility. "This allows us to steadily move toward construction complete in 2016, commissioning in 2019 and full operations in 2022."

Each assembled damper must pass functional and leakage tests that ensure it will operate as designed for the 40 years the vitrification plant is planned to operate.

Each damper is estimated to open and close up to 500 times during plant operations, and a prototype damper was tested by opening and closing it more than 500 times. The damper was then disassembled, inspected and evaluated to confirm that all parts would meet or exceed the needed design life.

CREHST faces risk of closing

7 OCT 11
Federal support at Richland museum has been slashed

ANNETTE CARY

HERALD STAFF WRITER

Black shrouds were hung over Hanford exhibits at the CREHST museum in Richland on Thursday, hiding them from visitors.

That may be just the start of what visitors cannot see.

The entire museum is in danger of closing within a year because of a drastic cutback in federal money to the museum, said Ellen Low, museum executive director.

In the fiscal year just ended, CREHST received \$331,000 in Department of Energy money, but that has been cut in the fiscal year that started Oct. 1 to \$80,000. The museum's annual budget with the \$80,000 is \$375,000.

The \$80,000 leaves enough money to do about half the Hanford curating — preserving and conserving Hanford artifacts for the future — the museum did last year.

“
If we are not being paid
to display the Hanford story,
we are not able to show
the story.”

Ellen Low,
CREHST museum executive director

”
But it does not pay for display of Hanford exhibits, according to CREHST.

“If we are not being paid to display the Hanford story, we are not able to show the story,” Low said, explaining the reason for the shrouds.

However, Mission Support Alliance said that how the \$80,000 would be used by CREHST still is being negotiated. Mission Support Alliance has the Department of Energy contract that covers collection, care and display of Hanford artifacts, and subcontracts some of the work to CREHST.

Already CREHST has cut two full-time employees who were educated in conservation and other museum specialties and they will return later this month to their homes in Arizona and Wisconsin.

“They are a valuable resource that we are very sorry to lose,” Low said.

The museum also has reduced hours for its core staff to four-day weeks. It continues to employ five full-time and four part-time employees.

“Even at this we are in serious doubts about how long we can actually stay open with this lack of funding,” Low said.

The Department of Energy Hanford Richland Operations Office, which oversees curating and display of Hanford artifacts, is facing a reduced budget for the fiscal year just begun, said Colleen French, DOE Hanford government affairs program manager.

Although Congress has failed to pass a fiscal 2012 budget yet, the Richland Operations Office expects to receive about \$300 million less than that \$1.3 billion it needs to meet legal requirements for environmental cleanup.

The Hanford nuclear reservation was

CENTRAL HANFORD

Government makes first decision on cleanup of contaminated soil

ANNETTE CARY

HERALD STAFF WRITER

The federal government has made the first decision on how to clean up contaminated soil in the heart of Hanford, settling on a combination of methods planned to protect the environment.

The soil, contaminated with plutonium, is within the central 10 square miles of Hanford that will be permanently used for radioactive and hazardous waste disposal. Land use

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plans call for no one to ever live there and the area will be cleaned up only to industrial standards.

"This decision balances public sentiment for digging deeper with a science-based cleanup action that will protect human health and the environment," said Matt McCormick, manager of the Department of Energy Hanford Richland Opera-

tions Office, in a statement. "This decision was based on the anticipated future use of this area of the Hanford Site."

An initial proposal relied heavily on capping waste sites to prevent precipitation from driving contamination deeper underground toward ground water. That plan was modified to dig up more of the waste in response to concerns raised by the Hanford Advisory Board, the state

9 OCT 11 Champion for historic Hanford preservation dies

He lived in Tri-Cities for 65 years, was employed at the site during WWII

JACQUES VON LUNEN

HERALD STAFF WRITER

Larry Denton, a longtime advocate for historic preservation at Hanford, died Friday. He was 87.



Denton

nuclear reactor, which produced the plutonium for the world's first atomic

Denton was one of a dwindling number of former Hanford employees who worked on the site during World War II.

He played a part in preserving the B Reactor, the nation's first production-scale

explosion and for the atomic bomb dropped on Nagasaki, Japan.

More recently, he advocated for making the B Reactor part of a proposed Manhattan Project Historical Park.

Denton was born in Priest River, Idaho, and lived in the Tri-Cities for 65 years.

He was hitchhiking to Spokane from Priest River in 1941, when he heard about the attack on Pearl Harbor, Denton told the Herald last year.

He rushed back to his hometown to enlist, but was rejected for medical reasons.

After Hanford was picked as the site for plutonium production, Denton was one of tens of thousands of workers who came to the Washington desert to usher in the atomic age.

Denton started as a shipping clerk, but eventually worked at the reactors,

See **CHAMPION** | Page B2

Maintenance of hazardous capsules criticized by board

Largest complaint was quality, use of technical procedures

ANNETTE CARY

HERALD STAFF WRITER

The program that helps maintain safety of material that accounts for one-third of the radioactivity of Hanford waste needs improvement, according to the Defense Nuclear Facilities Safety Board.

Its staff raised concerns after a review of the maintenance program at the Waste Encapsulation and Storage Facility, or WESF. The Department of Energy has 60 days to respond.

WESF stores 1,335 containers filled with cesium and 601

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containers of strontium. In 1972, the two chemical elements, which generate substantial heat, were removed from Hanford's 177 underground tanks holding high-level radioactive waste from the past production of plutonium for the nation's nuclear weapons program.

The cesium and strontium capsules, which cast an eerie blue glow when the lights are turned off, are stored in a pool under water to shield workers from radiation.

"The large quantity of radioactive material stored at WESF makes it imperative that all structures, systems

Hanford stimulus spending

Editor's note: On Sunday, the Herald will take a closer look at what the end of spending on \$1.96 billion in stimulus money and federal budget issues mean to Tri-Citians and our economy with a daily series of stories called "Hanford Layoffs: The Ripple Effect."

ANNETTE CARY

HERALD STAFF WRITER

Not since environmental cleanup began at Hanford has the nuclear reservation had a period where it could point to as much work completed as in the last 30 months.

As the Department of Energy wraps up most spending of its \$1.96 billion in American Recovery and Reinvestment Act money, Hanford regulators

and the state of Oregon, which keeps a close eye on Hanford, are calling the program a success.

Within a day of receiving its first Recovery Act money in spring 2009, Department of Energy contractors were hiring to ramp up cleanup.

Two and half years later Hanford has torn down 67 buildings and structures, dug up 73 waste sites, drilled 303 wells for ground water treatment, nearly completed two new plants to treat contaminated ground water and pulled 130 plutonium-contaminated glove boxes out of one of Hanford's high risk plants, among other work accomplished with the additional money.

"(DOE) and its contractors demonstrated they can make considerable progress when they have sufficient

funds," said Ken Niles, nuclear safety division administrator for Oregon in a congratulatory letter to DOE's Hanford Richland Operations Office.

Hanford usually has about \$2 billion annually to spend on maintenance and environmental cleanup of the 586-square-mile nuclear reservation, where it produced most of the plutonium for the nation's nuclear weapons program during the Cold War and World War II.

Work to level the industrial complex and clean up the radioactive and chemical contamination the program left could take until 2060 and cost \$115 billion beyond what's already been spent, according to DOE's latest comprehensive cost and schedule report.

See **HANFORD** | Page A2

12 OCT 11

'Game-changing' large robotic arm removing waste

Until now, equipment couldn't retrieve all radioactive material

ANNETTE CARY

HERALD STAFF WRITER

A large robotic arm has begun retrieving radioactive waste from one of Hanford's underground tanks, raising hopes that the slow and difficult work to empty tanks will become more efficient.

"We believe this new system will be a game changer for us and allow us to move

more waste out of our tanks faster and at less cost," said Kent Smith, the tank retrieval manager for Department of Energy contractor Washington River Protection Solutions, in a statement.

The Mobile Arm Retrieval System, or MARS, already has changed how work is done at the Hanford tank farms, after Hanford workers cut the largest hole ever in a U.S. radioactive waste tank to install the system in December.

Workers must empty

Hanford layoffs through the years

A timeline showing the Tri-Cities' roller coaster layoff history:

1943: Hanford, White Bluffs and Richland are transformed from rural villages with a combined population of about 1,200 into a construction camp of 51,000 workers.

1946: Employment drops to a low of about 5,000 as construction slows after World War II.

1949: The arms race begins when the Soviet Union tests its first nuclear weapon.

1950-56: Four new reactors and two massive plutonium separation plants come on line at Hanford. About 6,500 construction jobs disappear at the end of the boom.

1960s: Hanford employment remains relatively stable through the decade. About 9,500 workers are running eight defense reactors and associated plants at Hanford at the peak of Cold War production.

1971-72: A thaw in Cold War relations brings a halt to plutonium production. Employment at Hanford drops to a low of 6,500 workers before the energy crisis starts to turn things around.

1970s: During the next decade, the federal government starts construction on the Fast Flux Test Facility. The Washington Public Power Supply System begins building three power reactors at Hanford.

1981: Construction jobs tops out at 13,550, then falls to 3,140 by 1984 as the power supply system abandons one reactor, mothballs a second and completes construction on a third.

1980s: A return to plutonium production at Hanford slows the downhill slide in the middle of the decade. Unemployment rates, which jumped to 14.2 percent in 1982, are down to 9.6 percent by 1987.

1988: In February, the Department of Energy announces an end to Hanford's defense mission. The jobless rate is expected to reach 24 percent in 1989.

1990s: Early in the decade, economic revival comes from an unexpected source as the federal government begins hiring for a 30-year Hanford cleanup program. Cleanup jobs peak in December 1994 at about 18,500.

1994-95: Efforts to reduce the cost of cleanup ultimately leads to 5,400 jobs being cut at Hanford.

2001: Bechtel National begins hiring up for construction of the Hanford vitrification plant, a project now estimated to cost \$12.2 billion by the time it is required to start operating in 2019.

2005: Bechtel National lays off 1,000 of the 3,800 workers at the vitrification plant in the spring as work slows at key buildings of the plant to allow engineering to advance further ahead of construction, in part because of concerns about earthquake safety. At the end of the year, Bechtel announces plans to lay off about 500 more employees to meet a reduced budget approved by Congress.

2009: The first of \$1.96 billion in American Recovery and Reinvestment Act money arrives at Hanford in the spring, and within a week workers are being hired. During the busiest quarter during the next two and a half years, the money is paying for the equivalent of 3,861 full-time workers.

2011: Hanford starts the year with 12,000 workers but nine months later about 2,000 positions have been cut, most because of the end of Recovery Act spending.

2012: The number of workers at Hanford will depend on the budget or continuing resolution passed by Congress. DOE has prepared for that by telling environmental cleanup contracts they can cut up to about 850 workers in addition to those cut in October 2011. In addition, about 210 jobs are expected to be cut by September 2012 as Hanford work along the Columbia River starts to ramp down.

- Herald staff

HANFORD

Research reactors set to go

300 Area facilities, tanks removal contract awarded to Phoenix Enterprises NW

ANNETTE CARY

HERALD STAFF WRITER

Work is ready to begin to remove two research reactors from the Hanford 300 Area just north of Richland.

A \$19 million subcontract has been awarded by Washington River Protection Solutions to Phoenix Enterprises NW of Richland to remove the reactors and a vault with two tanks used for hazardous liquid research wastes.

"This contract covers the last of the nastiest facilities in the 300 Area," said Tom Kisenwether, Washington Closure subcontract manager for the area, in a statement.

With the exception of the 324 Building, which had a leak of highly radioactive waste, the Phoenix work will complete the remaining higher risk decommissioning and demolition work in the 300 Area, he said.

Phoenix will remove the TRIGA Reactor in the 308-A Building, a test reactor operated in the 1960s and '70s as part of the fuels and materials research program for Hanford's Fast Flux Test Facility. The reactor will weigh about 250 tons when it is packaged for transport to the Environmental Restoration Disposal Facility (ERDF) in central Hanford.

The second reactor Phoenix will remove is the Plutonium Recycle Test Reactor, which weighs about 350 tons. It sat under the iconic white dome just north of Richland until the 80-foot tall containment dome was lifted off in January.

The 100-megawatt reactor was operated from 1960-69 to support the development of fuels for the commercial nuclear power industry. It was used to demonstrate the effectiveness of various plutonium oxides containing blends of plutonium, uranium and other metals.

A gantry crane will be used to lift the test reactor. It will be placed in a container and filled with grout, with the transport weight estimated at about 800 tons. It also will go to ERDF.

But the heaviest item Phoenix will

transport is the vault with two tanks at the 340 Building, which were used for temporary storage of highly radioactive liquid waste before it was shipped to the waste tank farms in central Hanford. The tanks have been emptied and filled with grout.

The vault will have more grout added for a total weight of about 1,700 tons and will be hauled to ERDF on a trailer designed for heavy loads.

The contract also includes digging up more than 22,000 tons of contaminated soil near the 340 Building and removing 12,626 tons of contaminated material at waste sites near two previously demolished buildings, the 321 and 3706 buildings.

Five teams bid on the work, and all were technically qualified, but Phoenix submitted the low bid, according to Washington Closure. Its team included several businesses with two from the Tri-Cities, Meier Enterprises of Kennewick and MetalFab Inc. of West Richland.

► *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

20 OCT 11
▶ **Editor's note:** Hanford started this year with 12,000 workers and nine months later about 2,000 positions have been cut. Herald reporters and photographers take a closer look at what this means to Tri-Citians and our economy with a daily series of stories that began Sunday.

**JOHN TRUMBO AND
JACQUES VON LUNEN**

HERALD STAFF WRITERS

While the Hanford layoffs are hard on those who have lost their jobs, Tri-City public agencies say they are well positioned to ride out the economic roller coaster.

No layoffs, service cuts or significant interruptions of planned projects are expected, so far, said city, county and port officials interviewed by the Herald.

**HANFORD LAYOFFS:
THE RIPPLE EFFECT**

TRICITYHERALD.COM/HANFORDLAYOFFS

But they are closely watching the economy and their spending.

Most were generally hopeful for the near future despite the end of a \$1.96 billion stimulus package that temporarily boosted nuclear cleanup jobs at Hanford.

Tough economic conditions in the state and nation helped local governments stay conservative in their budgeting for this year and next.

"Yes, there will be an impact," said Benton

County's administrator, David Sparks. But it won't be a hard hit, he said.

Benton, Franklin counties

Benton County's 2011-12 budget was put together without depending on the stimulus money but they could face cuts the following year if Hanford work continues to slow and people stop spending.

"It depends on how much our sales tax is hurt," Sparks said.

"Half of our sales tax comes from Hanford. We have to find out how much of the reduction in stimulus money is in people and how much is in projects. It makes a difference," Sparks said.

Franklin County officials still are putting together next year's budget. They may keep

2002911
Forklift operator didn't check for occupants before picking up portable toilet at Hanford

ANNETTE CARY

HERALD STAFF WRITER

A forklift operator learned the value of knocking first after he moved a Hanford portable toilet with a Teamster still in it.

On Oct. 5, a forklift operator near Hanford's D and DR reactors picked up the chemical toilet to move it to a new location, unaware that it was occupied, according to an occurrence report filed with the Department of Energy.

The driver lifted the outhouse 12 to 18 inches off the ground and backed it up about 15 feet across a gravel haul road. The door was against the loading rack of the forklift, trapping the Teamster inside.

The driver set the chemical toilet down to secure it to the loading rack, and when he got out of the forklift cab, he heard the Teamster inside. The report didn't indicate what the Teamster was saying.

The operator immediately backed up the forklift so the Teamster could open the door.

“

We used it as an opportunity to reinforce with employees the need to follow procedures, check and double check ... for safety hazards, and clear work areas ... before starting work.

Todd Nelson, spokesman,
Washington Closure
Hanford

”

Hanford pioneer dies at 97

HERALD STAFF

Dee McCullough, who saw world history made at Hanford's historic B Reactor, died Thursday in Richland.

McCullough was 97.

One of the honors of his life was telling the story of what happened when B Reactor, the world's first production scale reactor, went critical during World War II, to Energy Secretary Steven Chu, said historian and consultant Michele Gerber of Richland.

McCullough was stationed in the control room when Chu toured the reactor in August 2009, just as he was when the reactor went critical for the first time Sept. 27, 1944.

The reactor reached production levels but a short while later began to slowly and mysteriously shut itself down, only to restart later. Xenon 135 was absorbing too many neutrons, stopping the reaction, a problem that scientists and



Herald file

Retired Hanford employees Dee McCullough, right, and his brother William had front row seats at a ceremony in August 2008, at which B Reactor was named a National Historic Landmark.

engineers were able to overcome.

McCullough came to Richland in 1944 and started work at Hanford as an instrument supervisor. He was a member of the B Reactor Museum Association and was on hand in August 2008 to help lead

tours of the reactor the day it was named a National Historic Landmark.

He always was enthusiastic about sharing his knowledge of Hanford history, including in a History Channel documentary, and worked for historic preservation, Gerber said.

PLAYGROUND | Larger structures coming later

FROM PAGE B1

Bryant said the play equipment and structures are designed to be accessed from the ground without ramps or steps, or used from a height that can accommodate children in wheelchairs.

Park planners also thought about ways to incorporate play for children with autism or other types of disabilities.

The playground is designed to let children play in a way that evokes a variety of senses — whether it's motion in a contraption called a "sway fun glider" that lets children get on board and then rock the structure back and forth, or hearing with a sensory panel that lets children play with music.

"Even if they are sight-impaired, they can get the sensory experience," Bryant said.

The first phase involves installing several play structures, including the sway fun glider, sensory panel, elevated sand table, splash circuit water table, motion spring platform, spinner and an "oodle swing" — like a big tire swing that can hold several children at once.

Bryant expects most of the work for the first

called an Evos and the other a Weevos — designed for different age groups. The Weevos is for children ages 2 to 5, and the Evos for children 5 to 12, he said.

The cost for both phases is estimated at \$150,000.

Bryant said the city chose Claybell Park because of its relatively central location near the Richland-Kennewick border.

"We are looking at it as a destination playground area for the whole community," he said.

But planners nearly hit a snag with the location when proponents of Amon Basin noted the 9,000-square-foot playground would displace some old growth sagebrush.

Members of Tapteal Greenway Association and Friends of Amon Basin circulated an email Thursday urging nature lovers to attend a Parks and Recreation Commission meeting that night to ask the city to consider moving the playground to avoid disrupting the native plants.

The two groups have worked for several years to preserve the basin as natural open space.

Doug Strong, the city's Parks and Recreation director, told the Herald on Friday that his staff took another look at the master plan for the

Cold War nuclear workers to be honored Friday

ANNETTE CARY

HERALD STAFF WRITER

The Tri-Cities will celebrate a National Day of Remembrance on Friday for Cold War nuclear weapons workers at Hanford and other Department of Energy sites.

Cold War Patriots, a non-profit organization, has organized a celebration from 11 a.m. to 2 p.m. at the Richland Community Center, 500 Amon Park Drive, Richland.

The event will launch a new project to add to quilts honor-

ing Cold War nuclear and uranium workers. Supplies will be on hand to allow participants to sign fabric quilt squares with markers to honor workers.

Participants can commemorate themselves or other workers, including to remember those who have died. Workers and their relatives who cannot attend the Richland program may provide information for a square online at www.coldwar patriots.org, and a square will be created for them.

The squares will be assem-

bled into quilts that will tour the country to be displayed, including in the halls of Congress, according to Cold War Patriots.

The group wants to keep national attention on the estimated 700,000 workers on national nuclear weapons projects in 350 facilities between World War II and the end of the Cold War and the sacrifices they made, it said.

The program at the Richland celebration, which will start around noon, will include speeches by elected officials or

their representatives. But time also will be set aside to let Cold War workers speak.

At last year's ceremony they told stories both funny and touching, said Eric Jackson of Cold War Patriots. It also was a chance for retired Hanford workers to meet old friends, he said.

The CREHST museum in Richland will bring a display with photos, Jackson said.

Each year, the U.S. Senate designates Oct. 30 as a National Day of Remembrance to honor Cold War nuclear

workers, but because it falls on a Sunday this year the Tri-Cities observance will be held two days earlier.

"Many of these workers had inadequate information on the long-term health risks posed by their work," said Sen. Maria Cantwell, D-Wash., in a statement.

The Energy Employees Occupational Illness Compensation Program was created to compensate Hanford,

Pacific Northwest National Laboratory and other workers made ill by exposure to workplace radiation or toxic chemicals.

For more information on the compensation program, call the Hanford Resource Center at 946-3333 or 888-654-0014.

◆ *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at [hanford news.com](http://hanfordnews.com)*

Navy looks to Hanford for carrier nuke disposal



Courtesy U.S. Navy/Mass Communication Specialist 2nd Class Brooks B. Patton Jr.

An HH-60H Sea Hawk helicopter assigned to the Dragonslayers of Helicopter Anti-Submarine Squadron (HS) 11 flies in front of the aircraft carrier USS Enterprise on June 21, 2011, as it travels the Strait of Bab el Mandeb. The defueled reactor compartments of the USS Enterprise, the world's first nuclear-powered naval aircraft carrier, could come to the Hanford nuclear reservation in 2023 or 2027.

Disposal of nuclear reactor compartments would not start until about 2018

ANNETTE CARY

HERALD STAFF WRITER

The defueled reactor compartments of the USS Enterprise, the world's first nuclear-powered naval aircraft carrier, could be coming to the Hanford nuclear reservation.

The Navy has used a trench in central Hanford since 1986 to dispose of reactor compartments and other reactor components from 114 nuclear-powered ships. To date, that has included compartments from just submarines and cruisers.

But the Navy is proposing also adding compartments from the Enter-

prise's eight reactors to Trench 94 in Hanford's 200 East Area about seven miles from the Columbia River.

The Navy has prepared a draft environmental assessment that selects Hanford disposal as its preferred alternative and will accept public comment on it from Sunday through Nov. 30.

However, disposing of the Enterprise will be a long, slow process. The reactor compartment disposal work is not expected to start earlier than 2018, and shipments to Hanford would not be expected until about 2023 to 2027.

The Enterprise was commissioned in 1961 and has operated for almost 50 years. It served during the Cuban Missile Crisis, the Vietnam War and the Iraq War. It is the oldest operating

ship in the Navy and will reach the end of its useful life in 2012.

At 1,123 feet long, it can hold up to 90 aircraft, but normally carries fewer.

It is expected to enter dry dock at Newport News Shipbuilding in Virginia in 2013. Removal of nuclear fuel also would be done there by about 2017 or 2018, with used fuel sent to the

Idaho National Laboratory. Then the Enterprise would be towed to Bremerton.

The reactor compartments would be removed at the Puget Sound Naval Shipyard and Intermediate Maintenance Facility, with the rest of the ship recycled, under the proposal.

The Enterprise's eight reactors are

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t
work at Hanford, he created a video as he learned about the nuclear reservation.

t
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The 28-minute film includes interviews with former and current workers, regulators and Hanford managers and a tour of historic B Reactor.

21 OCT 11

Hanford documentary now available online

A Department of Energy documentary about Hanford now is available online.

The Area: A Journey through the Hanford Nuclear Reservation is posted at www.youtube.com/hanfordsite.

When recent college graduate Cameron Salony came to

27 Oct 11

Progress made in emptying tanks

Much work remains to meet 2014 deadline

ANNETTE CARY

HERALD STAFF WRITER

Hanford crews have begun work to remove radioactive waste from the bottom of another of Hanford's underground tanks, with a goal of having it emptied by the end of

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the calendar year.

Workers have not finished emptying one of Hanford's 149 leak-prone, single-shell tanks since spring 2007, but the Department of Energy faces a consent decree requirement to

BRIEFS

2 deer shot illegally on Hanford monument

Officials are looking for leads after two deer were shot and left to rot near a parking lot in the Ringold area of the Hanford Reach National Monument.

A hunter found one of the deer, a doe, Sunday and alerted the Washington State Patrol.

State Department of Fish and Wildlife initially investigated and also found a two-point buck nearby.

The deer appeared to have been shot several days before they were found, said Richie Bare, game warden for U.S. Fish and Wildlife.

The animals were shot with a high-powered rifle, even though the current hunting season allows only shotguns loaded with slugs for deer. In addition, only three-point or higher bucks and no does may be legally shot in the game management unit where the deer carcasses were found, Bare said.

Anyone with information is asked to call the Washington Department of Fish and Wildlife poaching hotline at 877-933-9847. Callers may remain anonymous.

22 Oct 11

Plant begins treating water

New facility adds 40 percent more treatment capacity

ANNETTE CARY

HERALD STAFF WRITER

A new \$24 million plant has begun removing toxic chromium from ground water near the horn of the Columbia River on the Hanford nuclear reservation.

With a water treatment capacity of 800 gallons per minute, the new pump and treat system is the largest one operating at Hanford. It will boost the capacity for treating contaminated ground water along the Columbia River by 40 percent, according to Department of Energy contractor CH2M Hill Plateau Remediation Co.

"Together with other systems already in operation along the river corridor, Ecology believes the new facility will bring the total treatment capacity to about where it needs to be to prevent toxic chemicals from entering the Columbia River," said Dib Goswami, lead hydrogeologist for the Washington State Department of Ecology's nuclear waste program.

It's a key part of the strategy of DOE and its regulators — the state of Washington and the Environmental Protec-

tion Agency — to stop chromium from entering the Columbia River by the end of 2012, Goswami said.

The form of chromium contaminating Hanford ground water can cause cancer in humans and is particularly toxic to fish and other aquatic life.

Sodium dichromate, a chemical used as a corrosion inhibitor, was added to river water used to cool Hanford's older nuclear reactors while they were operating to produce plutonium for the nation's nuclear weapons program. The ground water was contaminated with the bright yellow chemical by leaks in the chemical transfer systems and piping.

The new plant near Hanford's H Reactor will help tackle a plume that has spread between the D and DR reactors upstream and the H Reactor. At the first of the year, a similar plant began operating near the D and DR reactors.

The "pump and treat" technology used at the two plants has proved its worth in mopping up chromium near the river for more than a decade. But with major work done to dig up contaminated soil that can spread chromium to ground water, the treatment plants should be able to get ahead of the problem.

"The Department of Energy's goal is to restore ground water to its intended beneficial use, either drinking water standards or stricter aquatic standards,"

said John Morse, DOE senior technical adviser, in a statement.

The pump and treat technology pumps contaminated water out of the ground, uses a resin to treat the chromium and then returns cleaned water to the aquifer through injection wells.

The two new systems at the horn of the Columbia River are using a newer resin that will not require as much maintenance and monitoring as the resin used earlier in Hanford pump and treat plants, said Dyan Foss, CH2M Hill vice president of soil and ground water projects.

It does not need to be replaced as often, which saves money, and it has proven at the D and DR reactor treatment plant to retain 15 times more chromium.

Work on the newest plant near H Reactor was built and tested three months ahead of schedule, said Kent Dorr, CH2M Hill vice president of engineering, projects and construction.

The 17,500-square-foot plant uses 31 extraction wells and more than 61 miles of piping to bring ground water to the plant. It also has 15 injection wells. It has the capacity to treat up to 35 million gallons of contaminated water per month.

▶ *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

4 NOV 11

Former tank farm worker pleads guilty to conspiracy

ANNETTE CARY

HERALD STAFF WRITER

Timecard fraud was an accepted practice under former Hanford contractor CH2M Hill Hanford Group, court documents alleged in the case of a former Hanford tank farm worker who pleaded guilty Thursday to conspiracy to turn in false timecards.

Carl Schroeder, 43, of Richland, admitted to being paid at least \$50,000 for overtime claimed on his timecard but not worked, according to a plea agreement filed Thursday in Eastern Washington Federal District Court in Yakima. He waived indictment by a grand jury and pleaded guilty.

He has agreed not to appeal his sentence if the court imposes a prison term

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of one year or less and a fine of not more than \$50,000. He pleaded guilty to a felony that carries a maximum penalty of 10 years in prison and a fine of \$250,000.

When Schroeder started working at the Hanford tank farms as a radiological control technician in January 2002, he learned of the timecard fraud scheme, according to the plea agreement. The tank farms hold 56 million gallons of radiological waste left from plutonium weapons production in underground tanks.

An employee working a swing shift from 4:30 p.m. to 12:30 a.m. would leave when the job requiring overtime was completed, but claim a full eight hours of overtime pay.

The practice was so widespread that

Schroeder could see that none of his fellow radiological control technicians or other CH2M Hill hourly employees stayed for a full eight-hour overtime shift, according to the plea agreement.

The timecards claiming unworked overtime routinely were approved by CH2M Hill supervisors who had seen the hourly employees leaving well before the end of eight hours, according to the plea agreement. In fact, many of the supervisors approving the false timecards had claimed the full eight hours of overtime when they were hourly employees, according to the plea agreement.

Supervisors would say at the beginning of the job that when it was completed, workers could conduct "self study" or "go to that place and do that thing that we do," according to the plea agreement.

Schroeder and other employees took that as a cue that they could go home

HANFORD

Colleges offer help to laid off workers

CBC, WSU Tri-Cities offer worker retraining programs

JACQUES VON LUNEN

HERALD STAFF WRITER

Tri-City college campuses are offering help for workers who were laid off at Hanford.

Columbia Basin College in Pasco ramped up its worker retraining program with special orientations for former Hanford employees. And Wash-



ington State University Tri-Cities is creating a new program to turn workers from the site into teachers.

The changes come in response to announcements that about 2,000 Hanford workers have lost their jobs this

MORE INFORMATION

- ▶ CBC worker retraining program, 542-4446
- ▶ WSU College of Education, 372-7396.

spring and another 1,000 could be cut next year.

CBC, in collaboration with the state's Workforce Development System, offers help to laid-off workers who want to learn new skills, said Deborah Brown, CBC's director of worker retraining programs.

Workers can sign up with the CBC program once they receive state unemployment benefits, Brown said. They then are eligible to receive financial help toward any vocational program offered at the college.

The program pays the tuition and textbook costs for the worker's first quarter at CBC, Brown said.

"It helps them get started while they apply for financial aid and the dislocated worker program," she said.

HANFORD

Removal vessels arrive for vit plant

Titanium steel containers weigh 4,200 pounds, are 18 feet tall, 2.5 in diameter

HERALD NEWS SERVICES

Two decontamination vessels that are essential to safely removing canisters of glassified radioactive waste produced at the Hanford vitrification plant's High Level Waste Facility have been delivered to the project.

The titanium steel vessels weigh 4,200 pounds and measure 2.5 feet in diameter and 18 feet tall.

Inside each vessel, canisters of treated radioactive waste will be cleaned of any radioactive contamination with acid that will etch off a fine layer from the exterior of the canister before it leaves the building.

When the plant begins operating, the High Level Waste Facility will vitrify, or glassify, high level radioactive waste by mixing it with glass-forming materials and heating the mixture to 2,100 degrees in one of two 90-ton melters. The mixture then will be poured into a stainless steel canister and an overhead crane will move it from the melter area, through a triple set of protective shield doors and to a decontamination

vessel.

It then will be inserted into the vessel and decontaminated through "etching," a process that removes an almost sheer layer from the vessel's exterior with an acidic compound. This will be done using the vessel's complex coil-and-spray system.

The canister also will be rinsed with nitric acid and demineralized water before it is removed from the facility.

"The canister decontamination process is extremely thorough, using proven technology to ensure that risks to people and the environment are removed," said Joe St. Julian, Bechtel National area project man-

ager for the facility.

The process will take about 12 hours.

The decontamination vessels, which were manufactured by Titanium Fabrication Corp. of New Jersey, are scheduled to be installed next year.

The High Level Waste Facility is making good progress toward construction being completed in 2016, said Gary Olsen, Department of Energy area project manager for the facility. It's one of four major facilities at the vitrification plant, which is required to begin treating waste in 2019. Both low activity and high level radioactive waste will be treated.

FFTF's irradiated fuel treatment done

Idaho National Laboratory to save some for research

ANNETTE CARY

HERALD STAFF WRITER

Idaho National Laboratory has completed treating irradiated fuel from Hanford's Fast Flux Test Facility, except for some fuel that will be saved for research.

The fuel was shipped to Idaho because the national lab has experi-

ence treating fuel bonded with sodium. It had a similar reactor, the Experimental Breeder Reactor-II, another "fast" reactor. The Hanford and Idaho reactors used sodium for cooling.

Idaho National Laboratory's Materials and Fuels Complex was built next to the Experimental Breeder Reactor-II to safely handle and treat its spent fuel in an argon atmosphere to eliminate the risk of sodium reactions.

The FFTF fuel also needed to be handled in an inert atmosphere to prevent potential explosions if exposed to air and water.

HANFORD NEWS ONLINE

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FFTF's sodium-bonded fuel assemblies were shipped to Idaho from October 2007 through spring 2008 and stored at the Materials and Fuels Complex's Hot Fuel Examination Facility while engineers designed and built a way to disassemble the fuel assemblies.

Work began in September 2010 to treat the fuel. Uranium was extracted at the complex's Fuel Conditioning Facility using an electro-metallurgical

treatment process. Pieces of the rods were dissolved in a bath of molten chemical salts and subjected to an electric current. Uranium from the fuel would gather on a steel rod insert into the molten salt.

Extracted uranium 235 then was blended with uranium 238 and cast into low-enriched uranium ingots. No decision has been made on the future of the ingots. In addition, small amounts of other radioactive substances, such as americium and plutonium, were

See **FUEL** | Page 1

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Bechtel launches vit plant website

HERALD STAFF

RICHLAND — Bechtel National has developed a website to better explain its nuclear safety quality and culture to the public as it designs and builds Hanford's \$12.2 billion vitrification plant.

The site — www.hanfordvitplant.safety.com — shares all-employee messages, reports and other information to help workers build a plant that will operate safely.

"We want to use the new website to show the robustness of our culture by providing our external audiences with the same information and tools that we are and have been providing to our employees," Bechtel project director Frank Russo said in a news release.

The site also includes information on reviews conducted on the project's safety culture and testimonials from employees who have volunteered to speak about the project.

"We must protect the public with our design and during operations in the future," project engineer Heidi Schuette wrote in a statement posted on the website. "It's that understanding that then drives our decision making, behavior, diligence and integrity."

Hanford subcontractor, DOE being sued by former vit plant chief

Lawsuit asks that
man be reinstated
to leadership position

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy and Hanford subcontractor URS were sued Wednesday in federal court by former Hanford vitrification plant executive Walter Tamosaitis.

Tamosaitis has alleged since summer 2010 that he was removed from the \$12.2 billion project for raising concerns about the safe operation of the plant, which will process high-level radioactive waste for disposal starting in 2019.

Bechtel National, which holds the DOE contract for the project, denies that.

The lawsuit asks for no money from the federal government but asks that DOE do the right thing, said Tamosaitis' attorney, Jack Sheridan of Seattle.

It asks that Tamosaitis, the former research and technology manager at the vitrification plant, be reinstated to a leadership position.

It wants a federal judge to order DOE not to pressure employees or contractors to take positions not based on scientific principles. Tamosaitis

has alleged that money and deadlines trumped safety on some vit plant decisions.

The lawsuit asks that DOE be ordered to develop a plan to ensure DOE managers balance the need to meet deadlines with sound science and to develop



Tamosaitis

procedures to include in contracts to prevent employees from being pressured to take positions not based on scientific principles.

"Scientists and engineers must be free to state their professional positions without fear of retaliation, and without pressure to speak in one voice," the lawsuit said.

The lawsuit also asks that DOE be required to only put DOE employees in positions with administrative oversight, rather than hiring contractor employees to administer projects. At the vit plant, Dale Knudson, a Pacific Northwest National Laboratory employee on loan to DOE as allowed by federal law, is the federal project manager.

That creates a conflict of interest because a contractor employee may not place the public interest before profit

boxes of 20-02 pieces, 321.
7 NOV 11

Meeting set for Hanford public involvement plan

A meeting held via the internet is planned Wednesday to discuss proposed changes to the Hanford public involvement plan.

Email CRP2011@rl.gov to participate in the webinar being held from 6:30 to 8:30

p.m. by the Department of Energy, the Environmental Protection Agency and the Washington State Department of Ecology.

The public involvement plan for the Hanford nuclear reservation is being updated with changes, such as adding links for online information and updating the evaluation process.

Public meetings also will be in Seattle on Nov. 15 and Spokane on Nov. 16, but not in the Tri-Cities.

For more information, go to www.hanford.gov and click on the events calendar.

- Herald staff

HANFORD REACH INTERPRETIVE CENTER

Search planned for interim leader for center

Panel will search locally; concerns about operating strategy, jobs also raised

ANNETTE CARY

HERALD STAFF WRITER

The Richland Public Facilities District board plans to look locally for an interim director of The Hanford Reach Interpretive Center.

An interim chief executive could "settle everything down," said board

member Dan Boyd.

"I think we need someone in quickly — in weeks rather than months," said board member Rick Jansons.

Kimberly Camp, chief executive, is leaving the project at the end of December. A day after the board announced last month that she would be leaving, Joel Rogo, the board president and also the last original board member, also announced that he would be leaving as soon as a replacement for him is appointed.

Reach staff members also have con-

cerns and submitted a list of questions concerning their jobs to the board, which the board looked at Monday in a brief closed session.

In addition, Reach board representatives heard concerns about its proposed operating plan, which called for \$2.4 million a year, when they met recently with three Richland City Council members.

Camp argued that the board should be focusing on building an institution, not a building, and that could best be done by hiring someone with professional museum experience and quali-

fications as her replacement.

Rogo agreed, saying the board already had made the mistake of not bringing in a museum expert once. Camp was not hired until 2007, about five years after the start of the project to build the interpretive center.

But the majority of the board members were interested in seeing what talent could be found locally. Jansons said abilities should include leadership for fundraising, an excellent regional reputation to build partnerships in the community and business experience to evaluate rev-

enue and expenditures.

About \$26 million has been raised for The Reach, but more fundraising is needed to cover the \$40.5 million project and additional long-term operations costs. More money must be raised before construction on the building can begin, although some groundwork has begun.

In addition to agreeing to advertise locally for an interim director for an indefinite term, the board directed Camp to prepare a request for

See **LEADER** | Page B2

WASTE ISOLATION PILOT PLANT

Hanford official to lead DOE field office

Transuranic waste created at Hanford sent for disposal at WIPP in New Mexico

ANNETTE CARY

HERALD STAFF WRITER

Hanford official Joe Franco has been named to lead the Waste Isolation Pilot Plant in New Mexico for the Department of Energy.

Franco, the DOE assistant manager for the Hanford river corridor, will become manager for the DOE Carlsbad Field Office.

The office oversees the Waste Isolation Pilot Plant, or WIPP, the nation's repository for transuranic waste gen-

erated during the research and production of nuclear weapons. It's where Hanford's transuranic waste, typically debris contaminated with plutonium, is sent for disposal in rooms mined out of an ancient salt formation 2,150 feet below ground.



Franco

25 years of nuclear experience," Dave Huizenga, the acting assistant secretary for DOE environmental management, said in a statement.

Franco worked on the New Mexico project for what is now Washington TRU Solutions, the WIPP manage-

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Find related stories at www.hanfordnews.com.

ment and operating contractor, for 17 years.

He came to Hanford in 2006 and has been responsible for cleanup and restoration of 220 square miles near the Columbia River.

Under his leadership reactors were put into temporary storage, complex waste sites were cleaned up, preparations were made to transport K Basin radioactive sludge for treatment and the Hanford footprint requiring cleanup was substantially reduced, Matt McCormick, manager of the DOE Richland Operations Office, said in a

message to employees Thursday.

Franco said his experience at Hanford and WIPP will be helpful in his new assignment.

JD Dowell has been named acting assistant manager for the Hanford river corridor, pending approval for permanent appointment by DOE headquarters officials. Dowell also will continue to serve as the assistant manager for central Hanford.

"This will smooth the transition for our river corridor federal employees as they complete the very important river corridor work scope and move to completion of the critical central plateau work," McCormick said.

► Annette Cary: 582-1533; acary@tricityherald.com

Second vit plant official files whistleblower claim

Manager says she was discriminated against for talking about safety, technical operations at Hanford facility

ANNETTE CARY

HERALD STAFF WRITER

A second official at the Hanford vit-rification plant has filed a federal complaint, claiming she was discriminated against for being a whistleblower on issues related to safe nuclear operations of the plant.

Donna Busche, manager of environ-

Busche believes she was given a written reprimand a month ago because, among other actions, her testimony to the Defense Nuclear Facilities Safety Board a year ago was contrary to the position of the DOE chief of nuclear safety, her legal complaint stated. The written reprimand listed other reasons.

The DOE Office of General Counsel earlier considered defense board allegations of witness tampering at the October 2010 public hearing in Kennewick, concluding that neither DOE

nor contractor employees acted inappropriately. In contrast, the defense board concluded that a witness at the hearing, whom it did not name, was admonished by a DOE official for making statements that strayed from DOE's management policy.

During the hearing, notecards were routinely passed to witnesses, who were at a raised front table facing the defense board. But Shirley Olinger, the DOE assistant manager for the safety basis division, began censoring the notecards Busche was allowed to

receive from Busche's staff, the complaint stated.

After the first day of the hearing, Ines Triay, the DOE assistant secretary for environmental management, admonished Busche, the complaint stated. Triay was angry and said in front of about 50 employees that if Busche's intent was "to piss people off," she did a very good job, the complaint stated.

The next day, Busche was

See **CLAIM** | Page B2

HANFORD

Finishing plant demolition under way

CH2M Hill plans to remove annex structures first; all work to be done by new year

ANNETTE CARY

HERALD STAFF WRITER

Work has begun at Hanford to tear down what once was one of the nation's most secure complexes.

The Plutonium Finishing Plant's vault complex, which once stored plutonium for the nation's nuclear weapons program, is coming down.

About two-thirds of the nation's plutonium was produced at the Plutonium Finishing Plant, where liquid plutonium that had been processed from fuel irradiated at Hanford reactors was formed into metal buttons the size of hockey pucks.

Until the end of the Cold War, the buttons were shipped to other DOE sites to be fabricated into metal pieces for weapons.

But after the Cold War, 2,300 canisters of plutonium, each the size of a large coffee can, were left stored at the vault complex under heavy guard as the Plutonium Finishing Plant was

cleaned out. The weights of the cans varied, but some held nearly 10 pounds of plutonium.

Work has been under way for years to prepare for the demolition.

The last of the plutonium was shipped to Savannah River, S.C., in 2009 as part of a project to consolidate the nation's weapons grade materials at one site. Work then began to clean out the vault complex for demolition.

The vault complex included storage vaults built in 1971 where canisters holding plutonium were stored initially on free-standing pedestals. But as plutonium was stabilized and cleaned out

of the Plutonium Finishing Plant after the Cold War ended, storage capacity was increased by laying the canisters on their sides like wine bottles in what employees called "wine racks."

The vault complex also included an annex built in 1983, just six years before plutonium processing stopped, which housed nine glove boxes. The last of those glove boxes, which were used to assay and package plutonium, was removed early this year. Excess material also was stabilized in the glove boxes.

CH2M Hill Plateau Remediation Co.

TOYS FOR TOTS COLLECTION

Vit plant workers, Bechtel collect thousands of toys

Employees beat out last year's donation

HERALD STAFF

Employees at the Hanford vitrification plant and Bechtel National have ensured a happy Christmas for hundreds of needy children.

The 3,400 employees at the plant collected more than 4,000 toys, including bicycles and helmets, to donate Thursday to the Marine Corps Reserves' Toys for Tots campaign.

In addition, they donated

\$5,000. Bechtel, the contractor on the project, and URS, the principle subcontractor, added another \$5,000 to that to bring the donation to \$10,000.

"Again, this is the largest donation from a single employer, and on behalf of the Marines Corps Reserves, I thank you," said Capt. Christopher Johnson. It was his second year to pick up donations at the vit plant with the Marines from Bravo Company, 4th Tank Battalion.

Last year vit plant employees donated 3,500 toys, including 200 bicycles, and with their employers donated \$8,000.

"Once again, our employees have demonstrated their incredible generosity and made me proud to be a part of the vit plant project," said Ty Troutman, manager of construction.

Because employees topped last year's donation, vit plant senior managers dressed up as Santa and his elves and other holiday characters as the toys were loaded up Thursday morning by Marines.

Griggs/Ace Hardware of the Tri-Cities helped by filling bicycle orders and Vintners Logistics in Kennewick provided transportation for the bikes and toys.

Building technologies developed at vit plant

Workers employed ultrasound imaging to make sure piping welds meet nuclear standards

ANNETTE CARY

HERALD STAFF WRITER

It's taking more than hammers and cement mixers to build the Hanford vitrification plant. Workers also are using high-tech construction tools that rely on ultrasound and lasers.

Invention was a necessity.

Faced with the need to install more than 193 miles of piping at Hanford's vitrification plant, Bechtel National had to come up with new construction technologies to do the work more efficiently.

"Just the scale of the project has driven

it," said Ty Troutman, Bechtel manager of construction for the plant. "There was no technology that can get this done in the time frame we have. What's there won't work for us."

The massive \$12.2 billion plant must be ready in 2019 to turn much of 56 million gallons of radioactive waste left from the nation's nuclear weapons program into a stable glass form for disposal.

Workers needed more efficient ways to check welds to nuclear standards, plan complex piping installations and make sure piping modules would attach precisely to other piping within the plant.

The solutions they came up with are, in some cases, already being used on construction projects elsewhere.

That includes a new safer and more efficient way of checking welds to ensure they meet the high standards required

for a nuclear processing plant.

Thousands of welds are needed on the more than 1 million linear feet of pipe being assembled and installed in the plant. For piping that will carry radioactive waste, weld inspections are required to show the details of the weld all the way through.

Traditionally that has been done with an X-ray, which requires that work be disrupted to set up an exclusion zone to protect other workers in the area from radiation.

Ultrasonic imaging, which doesn't have the risk of radiation, has been used in the construction industry, but typically for steel structures like buildings. Until advances at the vitrification plant, there was no way to do a volumetric inspection of a pipe weld with ultrasound.



Courtesy Bechtel National

Employees at the Hanford vitrification plant make preparations to lift a piping module with 3,900 linear feet of pipe into the plant's Pretreatment Facility. Because of the extensive and complex piping on the project, Bechtel National has developed new construction technologies to make the work more efficient.

HANFORD

Record set in ground water treatment

100M gallons processed in November

ANNETTE CARY

HERALD STAFF WRITER

Hanford set a record for the most contaminated ground water treated in a month, cleaning 100 million gallons of water in November.

With the help of two new treatment plants along the Columbia River, enough water was cleaned to drinking water or stricter standards in

November to fill more than 150 Olympic-size swimming pools, according to CH2M Hill Plateau Remediation Co.

The Department of Energy's goal is to treat ground water near the Columbia River and treat or contain ground water in central Hanford to prevent it from reaching the river, said Briant Charboneau, DOE project director.

See **RECORD** | Page B2

Vit plant review questioned

Controversy continues to surround safety culture

ANNETTE CARY

HERALD STAFF WRITER

A recent independent review of the safety culture at the Hanford vitrification plant shows that the culture is flawed, said Peter Winokur, the chairman of the Defense Nuclear Facilities Safety Board.

That is contrary to the conclusion drawn by the panel that conducted the review.

Winokur's reaction was among recent developments in the intractable dispute about whether concerns about safe operation of the \$12.2 billion plant are being raised and addressed without retaliation. Developments include:

▶ Walter Tamosaitis testified before a Senate subcommittee on whistleblower issues, winning Congressional sympathy for his predicament and biting criticism of the message his treatment is sending to other federal and contractor workers.

▶ Bechtel National responded to a lawsuit filed by Tamosaitis with a motion for summary judgment. The motion said Tamosaitis has no basis for his claim that Bechtel

interfered to get him removed from the vitrification plant project because he raised safety issues.

▶ Energy Secretary Steven Chu issued a five-page memo to department heads across the nationwide DOE complex saying that safety culture issues that have arisen in a variety of forums underline the need for intensified effort.

See **PLANT** | Page A2

BRIEFS

Design for facility at vit plant completed

The final design detailing the structural concrete for the Pretreatment Facility at the Hanford vitrification plant has been completed.

The drawing represents the completion of the facility's concrete floors and results from more than 15,000 pages of calculations and 500 drawings. These calculations and drawings provide the details that enable crews to construct the massive concrete structure.

"Completing the structural concrete design for the Pretreatment Facility — the largest vit plant facility — is the culmination of more than 500 vit plant engineers' and designers' working over several years," said Tom Patterson, manager of engineering at the plant, in a Bechtel National news release. "It is an important milestone that enables us to fully support the vit plant's construction schedule."

The Pretreatment Facility structural concrete design includes calculations and drawings that are upheld to the highest nuclear safety and quality standards, the release said. Every inch of concrete design — wall or floor — underwent extensive review to ensure it met all regulations and requirements.

HAZARDOUS MATERIALS MANAGEMENT

Hanford tank farm project singled out for excellence

HERALD STAFF

A Hanford tank farm project to prepare to transfer high-level radioactive waste to the vitrification plant has been recognized with the Excellence in Hazardous Materials Management Award.

It was presented by the Eastern Washington Chapter of the Academy of Certified Hazardous Materials Managers.

Washington River Protection Solutions replaced the SY transfer lines, a project that required great care to minimize exposure of workers to high radiation levels, according to the award announcement.

Old contaminated lines were cut, cleaned of radioactive waste with a water lance, removed, then cemented for radiation protection and disposal. The regulator on the project, the state Department of Ecology, nominated Washington River Protection Solutions for the award.

Other awards included:

► Michelle Hendrickson, an engineer with the Department of Ecology, was named the Hazardous Materials Manager of the Year.

She supplies technical and engineering sup-

port for many Hanford projects and represents Washington state to ensure safety and regulatory compliance for new projects and operations, according to the award announcement.

► CH2M Hill Plateau Remediation Co., working with Commodore Advance Sciences and Impact Services, won the Department of Energy Office of River Protection Manager's Award for Exemplary Service.

The project identified a method to remove radioactive sodium metal from scrap metal coming out of sodium-cooled nuclear reactors. The approach may have applications at other sites in the U.S. and abroad with sodium-cooled nuclear reactors.

► CH2M Hill, Pacific Northwest National Laboratory and DOE's Richland Operations Office received the Hazardous Materials Identification and Control Research Award.

They demonstrated that gases could be used deep underground to dry up water that could carry pollutants deeper to the ground water.

► Roni Swan of East Tennessee Material and Energy Corp. received the chapter's Meritorious Achievements Award and Chuck Mulkey of Washington River Protection Solutions received the chapter's Outstanding Service Award.

HANFORD WHISTLEBLOWER

22 DEC 11

Senator asks who is paying defense bill?

ANNETTE CARY

HERALD STAFF WRITER

A U.S. senator is asking whether the federal government is paying the costs to defend Bechtel National against a claim filed by Hanford whistleblower Walter Tamosaitis.



McCaskill

Sen. Claire McCaskill questioned the legality of the government paying for the defense in a letter sent Wednesday to Thomas D'Agostino, Department of Energy

undersecretary for nuclear security.

Tamosaitis has filed a lawsuit in Benton County Superior Court accusing Bechtel of interfering to get him removed from his job as research and technology manager of the Hanford vitrification plant after he raised safety issues.

Bechtel and subcontractor URS, Tamosaitis' employer, deny that Tamosaitis was removed for raising safety issues. He was removed from the

Member wanted for Hanford Advisory Board

Applications are being accepted for an opening on the Hanford Advisory Board.

The opening is for a board member to represent the public. Requirements include attending meetings, learning about Hanford plans and activities and providing recommendations from the public's perspective.

Applications are due Jan. 13. They may be downloaded at www.hanford.gov/page.cfm/HABMembership.



HANFORD

Kickback, fraud indictments filed

Ex-tank farm worker faces conspiracy charge

ANNETTE CARY

HERALD STAFF WRITER

Former congressional candidate Shane Fast has been

indicted in federal court for allegedly paying \$40,000 in kickbacks to Hanford employees purchasing goods for the federal nuclear reservation.

In addition, his nephew has been indicted after being accused of participating in the alleged scheme.

And in an unrelated case, a former worker at the Hanford tank farms has been indicted for conspiracy to defraud the

government after being accused of claiming overtime he did not work. He is the second former Hanford tank farm worker known to be indicted for the alleged conspiracy.

See **INDICTMENTS** | Page A2

**HANFORD
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Contractors, small businesses team up

5 at Hanford spent almost \$750 million on subcontracts

ANNETTE CARY

HERALD STAFF WRITER

Hanford's five large contractors spent nearly \$750 million on subcontracts with small businesses in fiscal 2011, they reported.

"We view small businesses, especially in the local community, as our teaming partners," said Tess Klatt, small business manager for Washington River Protection Solutions, in a statement. "They provide much-

needed talent, skills and resources that help support our mission."

Spending by the large Department of Energy contractors at Hanford included:

► Washington Closure Hanford, which is cleaning up Hanford along the Columbia River, spent \$170 million, or more than 90 percent of its subcontracting dollars with small businesses. It awarded \$188 million total in subcontracts to 297 companies.

About \$119 million in total procure-

ments were made to companies in the Hanford region. Its contract with the Department of Energy requires that at least 65 percent of its procurements come from small businesses.

"Total procurements were down from the previous fiscal year by about \$21 million," said Rodney M. Harrison, Washington Closure procurement manager, in a statement. "That's due in large part to rescheduling of some work because of unexpected conditions encountered in the field and the work starting to wind down."

Washington Closure procurements

will continue to fluctuate and taper off during the next several years as cleanup of Hanford along the Columbia River is completed, he said.

Washington Closure also will not have American Recovery and Reinvestment Act money to spend this year. It awarded more than \$30 million in Recovery Act money to

See **CONTRACTORS** | Page B4

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15 DEC 11

Hanford Critical mass lab leveled

Building one of the most contaminated to be dealt with at site

ANNETTE CARY

HERALD STAFF WRITER

One of the most contaminated buildings at Hanford, the 209 East Critical Mass Laboratory, has been demolished.

The 8,979-square-foot building was used for more than two decades for research on plutonium and uranium solutions to identify controls for uncontrolled nuclear reactions called criticalities.

After research stopped in the central Hanford lab in 1983, most of the radioactive materials were removed and the tanks and pipelines were flushed. But work to clean out the building to prepare for demolition still took almost two years of work by CH2M Hill Plateau Remediation Co.

It is one of the most contaminated of the 118 buildings CH2M Hill has removed since its contract for central Hanford cleanup began in 2008, requiring extensive characterization of contamination and the development and testing of techniques for the building's complex contaminated structures.

Built in 1960 during the height of the Cold War, the lab was one of three buildings of its type in the nationwide DOE complex. Battelle used the lab at Hanford for experiments to test the criticality

Reach center gets final OK to move ahead

Richland can accept bids, award construction contract

MICHELLE DUPLER

HERALD STAFF WRITER

Outgoing CEO Kimberly Camp got to share one last piece of good news about the planned Hanford Reach Interpretive Center with the Richland Public Facilities District Board on Friday.

The project cleared its last hurdle before being able to start the first phase of construction in the west end of Columbia Park with an approval by the Washington State Department of Transportation issued Thursday.

The approval allows the city of Richland — which is managing the grant money for the first construction

phase — to advertise for bids and award a contract, said Camp, who is leaving the district this week after leading development of the museum project for more than four years.

“There are no barriers — none at all — to starting phase one construction,” Camp said with a wide grin. “I’m so happy.”

The facilities district had a ground breaking ceremony in early October

to celebrate the symbolic commencement of the first construction phase, which includes extending utilities to the site and building a driveway to the spot where the building eventually will go.

But the district and the city had to wait for official approval from the state and federal governments to hire a contractor and start turning actual dirt.

With the approval that came Thursday, the district is in a good position to meet a deadline in its sub-lease with Richland for the land in Columbia Park that requires the first phase to start by March 31.

In her parting comments to the board, Camp encouraged members to focus on fundraising as they hire a new CEO.

See **REACH** | Page B2

VIT PLANT

30 Dec 11

DOE plan commits to safety

Energy secretary
might visit to make
expectations clear

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy will look at better managing its Hanford vitrification plant contract to balance the demands of cost and schedule with a strong safety culture, according to a plan released this week.

In addition, Energy Secretary Steven Chu could visit Hanford to make clear his safety culture expectations,

the plan said.

DOE laid out the plan, which goes beyond Hanford to include other DOE sites, to implement Defense Nuclear Facilities Safety Board's June recommendations on improving safety culture at the vitrification plant. The plan also looked at underlying causes that led to the defense board's concern.

Safety culture, or worker and management attitudes toward safety, became an issue after Walter Tamosaitis, the former research and technology manager at the plant, alleged he was removed from

See **SAFETY** | Page A2

3 JAN 12

Work begins to empty another Hanford tank

Tank has not been emptied to regulatory standards since 2007

ANNETTE CARY

HERALD STAFF WRITER

Hanford workers have begun emptying another underground tank of radioactive waste at Hanford, making this the first time in more than

a decade that two tanks are being emptied simultaneously, according to Hanford officials.

Pumping on Tank C-112 began last week, helping end the year on a positive note, despite Hanford workers not completing waste retrieval for any tank in 2011. A tank has not been emptied to regulatory standards since spring 2007.

However, significant progress has been made to

See **TANK** | Page B2

11 JAN 12

154 construction workers laid off

Some layoffs are expected to be offset by hiring of engineers, nuclear safety workers

ANNETTE CARY

HERALD STAFF WRITER

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com

Layoff notices were distributed to 154 construction workers Tuesday at the Hanford vitrification plant.

The layoffs were because of the mix of skills that will be needed this year at the \$12.2 billion plant, which is being built to turn radioactive waste left from past weapons plutonium production into a stable glass form for disposal.

Some of the layoffs will be

offset with the hiring of more engineers and nuclear safety workers, said Suzanne Heaston, spokeswoman for Bechtel National. Bechtel must finish the design of the plant, which requires nonmanual workers, and also is working toward licensing the plant, which also requires nonmanual workers.

See **WORKERS** | Page A2

Whistleblower lawsuit dismissed

Second case against URS, Department of Energy not affected

ANNETTE CARY

HERALD STAFF WRITER

case should not go to trial because Tamosaitis could not show that Bechtel improperly



Tamosaitis

interfered with his job at Bechtel's prime subcontractor, URS.

Jack Sheridan, Tamosaitis' attorney, said he will appeal.

A lawsuit brought by Hanford whistleblower Walter Tamosaitis against Bechtel National was dismissed Tuesday.

Judge Craig Matheson of Benton County Superior Court dropped the case with prejudice, meaning it cannot be refiled.

Bechtel argued that the

The ruling does not affect a second case filed by Tamosaitis in U.S. District Court against URS and the Department of Energy.

See **LAWSUIT** | Page A2

DOE meets cleanup deadlines for 77 sites

More than 100 areas near former reactors still require work

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy has met legal deadlines to have 77 Hanford waste sites along the Columbia River cleaned up, it

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announced Wednesday.

The waste sites were near the D and H plutonium-production reactors near the horn of the Columbia River as it cuts through the Hanford nuclear reservation.

DOE had two Tri-Party Agreement deadlines to get

See **CLEANUP** | Page B2

MISSION SUPPORT ALLIANCE

Hanford contractor faces more layoffs

12 voluntary layoffs approved toward target of 50 job cuts

ANNETTE CARY

HERALD STAFF WRITER

Mission Support Alliance has approved 12 voluntary layoffs, leaving 38 involuntary layoffs required to reach its previously announced target of 50 jobs cut.

The Hanford contractor had hoped that most of the layoffs would be voluntary, but this is its third round of cuts in the past 12 months.

Mission Support Alliance, which pro-

vides support services across Hanford, announced in December that it would lay off up to 50 employees, including employees of its key subcontractors, by Feb. 2.

The Department of Energy had approved up to 100 layoffs at Mission Support Alliance in the fiscal year that began in October, but the contractor's immediate plans are for half that.

The layoffs were approved as part of a broader initiative to help Hanford contractors deal with budget uncertainties, allow more efficiencies in work and make sure they have the right mix of skills for work planned in 2012.

The majority of other layoffs at Hanford

in the past year, totaling more than 2,000, were linked to the end of federal economic stimulus money. Hanford received \$1.96 billion over about 30 months.

Mission Support Alliance laid off 125 workers in March and 276 workers in September. Although it did not receive economic stimulus money directly, it supported work of contractors that did add Recovery Act staff, including providing information technology service and training.

The Mission Support Alliance cuts now are targeted to specific union and

See **LAYOFFS** | Page B2

Vit plant workers bite their tongues

14 JAN 12
New assessment shows employees reluctant to raise safety, quality worries

ANNETTE CARY

HERALD STAFF WRITER

A significant number of federal and contractor staff on the Hanford vitrification plant project reported they were reluctant to raise safety or qual-

ity concerns, according to a new assessment of safety culture at the project released Friday.

The Department of Energy's Office of Health, Safety and Security, HSS, conducted the review as follow-up to an initial review released in October, and the follow-up included a stronger message calling for improvements.

The latest review by DOE's health and safety organization, which is independent of the DOE organization responsible for Hanford, found some

Bechtel National groups believed fear of retaliation inhibited identification of problems at the vitrification plant.

The plant is being built to turn radioactive waste left from plutonium weapons production into a stable glass form for disposal in 2019. Its safe operation could be jeopardized if design and construction work now do not meet high standards of quality, the new report stated.

"The willingness of employees to raise safety concerns without fear of

retaliation is an essential element of a healthy safety culture, and therefore significant management attention is needed to improve the safety culture at (the vitrification plant)," said a memo from HSS chief officer Glenn Podonsky that accompanied the new report.

In addition to concerns about safety culture, the report also raised concerns about the project's processes for managing safety issues.

There is no fear of retaliation

among DOE workers on the project, but "there is a definite unwillingness and uncertainty among employees about the ability to openly challenge management decisions," the report said. "There are definite perceptions that there is not an environment conducive to raising concerns or where management wants or willingly listens to concerns."

Most employees believe constructive criticism is not encouraged, the

See **BITE** | Page A2

Hanford budget steady; PNNL's might dip

National lab hopes it can manage most reductions through worker attrition

ANNETTE CARY
HERALD STAFF WRITER

Hanford can expect reasonably level funding for the foreseeable future, said Matt McCormick, man-

ager of the Department of Energy Richland Operations Office.

However, Pacific Northwest National Laboratory could face a possible decrease in federal money for its research programs in the near term, which could require some small-scale layoffs.

McCormick and Roger Snyder, manager of the DOE Pacific Northwest Site Office, discussed federal budget issues at the Tri-Cities

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Find related stories at www.hanfordnews.com.

Regional Economic Outlook forum Wednesday in Kennewick.

The general trend is down in the fiscal year that started in October for budgets covering the array of research programs that Pacific Northwest National Laboratory depends on for funding. The fiscal

2012 omnibus appropriation bill was approved in late December.

The DOE national lab in Richland may be able to manage staff reductions to a certain extent through attrition of employees, Snyder said.

But PNNL also has been working with DOE to create a work force restructuring plan based on the current budget and possible projections for the fiscal 2013 budget in case more reductions are needed. The plan is

close to being completed and approved, and will be released for public comment if it includes more than 100 staff reductions over 12 months.

In the past 12 months, PNNL eliminated about 70 jobs, about 40 percent of them through voluntary layoffs.

It now employs about 4,800 workers, including about 450 who work at

See **STEADY** | Page B2

HANFORD CLEANUP

14 JAN

Tank farms chief retiring

Leader credited with turning project in the right direction

ANNETTE CARY

HERALD STAFF WRITER

Chuck Spencer, who led work on two of the Department of Energy's prime contracts at Hanford during the past five years, announced Friday that he will retire Jan. 20.

He came to Hanford as president of Washington Closure Hanford, leading work to successfully turn around a project that had been plagued with a string of problems over 18 months.

In 2009, he took over leadership of one of Hanford's most challenging projects,

operation of the tank farms, where 56 million gallons of radioactive waste are stored in underground tanks.

"I will greatly miss both projects, but, alas, it's time for me to return to the East Coast to allow my wife and I to get back closer to family and aging parents," he said in a message to tank farm employees Friday.



Spencer

He has a new job lined up, but is not at liberty to discuss it yet, he said.

He will be replaced as president of Washington River Protection Solutions by Mike Johnson, who will serve as acting president while a search is conducted to permanently fill the position. Johnson came to Hanford in May to serve as

BRIEFS

24 JAN 72

Hanford contractor lays off 36 employees

Mission Support Alliance and its key subcontractors are laying off 36 Hanford employees after expecting to cut up to 50 jobs early this year.

The layoffs include 12 previously approved voluntary layoffs, plus 11 involuntary union workers and 13 involuntary nonunion workers. However, eight of the union employees have seniority to take other positions at Hanford, bumping the employees who now hold those jobs.

The layoffs will leave Mis-

sion Support Alliance, which provides support services across Hanford, at 1,695 employees.

This is its third round of layoffs in 12 months, with 125 positions cut in March and 276 positions cut in September. Those earlier cuts were part of about 2,000 layoffs among Hanford contractors sitewide in 2011.

The latest round of layoffs is to align staff with work Mission Support Alliance expects to do this year.

Draft reveals problems

Leaked report shows black cell issues, possible overpayments

ANNETTE CARY
HERALD STAFF WRITER

Quality assurance procedures were not always followed for vessels inside Hanford's vitrification plant black cells, where no inspections or maintenance can be done for 40 years because of high radiation lev-

els, according to a draft report of a Department of Energy Inspector General audit.

"The importance of ... black cell and hard-to-reach components cannot be overstated," the draft report said. "Premature failure of these components could potentially contaminate large portions of a multi-billion dollar facility and interrupt waste

processing for an unknown period of time."

In addition, DOE might have overpaid contractor Bechtel National for some work related to black cell tanks or vessels, the draft said. No record has been found to show that \$15 million was returned, it said.

The draft of the audit report was distributed to Bechtel and DOE for fact checking and then leaked to several media outlets,

See **DRAFT** | Page A2

A FORMERLY SECURE PERCH



Photo courtesy Washington Closure Hanford

The historic Hanford guard tower that stood over the Columbia River near N Reactor for a half-century is pulled to the ground Wednesday by a cable attached to a bulldozer on the ground. [See a photo gallery and video at tricityherald.com](http://tricityherald.com).

Guard tower demolished

Hanford structure watched over Columbia

ANNETTE CARY
HERALD STAFF WRITER

The historic Hanford guard tower that stood above the Columbia River for a half-century has been pulled to the ground.

"It's really an iconic symbol of Hanford plutonium produc-

tion," said Gary Snow, director of deactivation and demolition for Department of Energy contractor Washington Closure Hanford, as work to clean up the rubble that remained from the tower began Thursday.

Taking it down is part of environmental cleanup of the

area around Hanford's ninth plutonium-production reactor, N Reactor, which is legally required to be completed at the end of the year.

The 62-foot tower was bolted to the deck of a water-intake structure on the Columbia River that housed seven pumps, most of them used to provide cooling water from the river for N Reactor.

Guards would climb five

flights of steps to the guard shack wrapped with bullet-resistant steel plating and perched high above the river to watch for intruders onto the nuclear reservation during the Cold War.

On Wednesday, former Hanford guard Joe Rodriguez came out to the river to watch the tower get pulled down

See **TOWER** | Page A2

21 JAN 12
Clean energy park on Hanford site could start by 2022

HERALD STAFF

The first Department of Energy step toward manufacturing small modular nuclear reactors in the United States within a decade was announced Friday by DOE.

Small modular nuclear reactors are one possibility for a proposed clean energy park on unneeded and uncontaminated Hanford land near Energy Northwest.

DOE will establish cost-shared agreements with private industry to

support the design and licensing of small reactors, it announced Friday.

It has issued a draft Funding Opportunity Announcement to solicit input from industry in advance of a full Funding Opportunity Announcement. The full Funding Opportunity Announcement will help pay for up to two designs with the goal of deploying these reactors by 2022.

The move demonstrates the Obama administration's commitment to advancing U.S. manufacturing leadership in low-carbon, next generation

energy technologies and restarting the nation's nuclear industry, according to DOE.

"America's choice is clear. We can either develop the next generation of clean energy technologies, which will help create thousands of new jobs and export opportunities here in America, or we can wait for other countries to take the lead," said Energy Secretary Steven Chu, in a statement.

"The funding opportunity announced today is a significant step forward in designing, manufacturing, and exporting U.S. small modular reactors, advancing our competitive edge in the global clean energy race," he said.

Small modular reactors, approximately one-third the size of current nuclear plants, have compact designs that are expected to offer a host of safety, siting, construction and economic benefits, according to DOE.

They could be made in factories and transported to sites where they would be ready to "plug and play" upon arrival, reducing capital costs and construction times.

The small size also makes them suitable for small electric grids and for locations that cannot support large reactors, providing utilities with the flexibility to scale production as demand changes.

Board raises issue about corrosion

ANNETTE CARY

HERALD STAFF WRITER

Hanford vitrification plant testing has not shown that components that will be difficult to replace can last the required 40 years the plant is designed to operate, according to the Defense Nuclear Facilities Safety Board.

Whether vessels and piping for high-level radioactive waste in the plant will corrode is an issue raised by DOE scientist Donald Alexander in an unresolved Differing Professional Opinion in May. The defense board also has been evaluating wear issues for the past nine months.

The defense board sent a letter to DOE on Friday asking for a briefing within 45 days to provide confidence that the vitrification plant will operate safely and reliably for 40 years.

It noted that DOE, with

contractor Bechtel National, is developing a course of action to address wear design issues.

"However, the current pace of the contractor's efforts to close the issues does not support timely resolution," said a defense board staff report that accompanied the letter.

Some of the vessels in question are scheduled to be installed at the vitrification plant in August and modification will become progressively more difficult and costly after the vessels are closed and installed, the report said.

The \$12.2 billion vitrification plant is being built to turn radioactive waste left from past weapons production of plutonium at Hanford into a stable glass form for disposal.

Much of the piping and

See **CORROSION** | Page B2

Panel urges handling Hanford waste

Storage sites recommended
as national repository sought

ANNETTE CARY

HERALD STAFF WRITER

The possibility of disposing of Hanford's high-level radioactive waste while a solution continues to be worked out for spent commercial nuclear fuel was raised Thursday at a Senate hearing.

Sen. Maria Cantwell, D-Wash., questioned leaders of the Blue Ribbon Commission on America's Nuclear Future on

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its findings at a hearing before the Committee on Energy and Natural Resources. On Wednesday, Rep. Jay Inslee, D-Wash., a candidate for governor, questioned commission leaders at a hearing before the House Subcommittee on Environment and Economy.

The commission issued its final recommendation last week, calling for the nation to look for a location "by consensus" where a new national repository for high-level defense waste and used com-

mercial fuel will be welcome. It also called for the development of storage sites to be used in the meantime.

The commission was formed after the Obama administration moved to shut down work on the Yucca Mountain, Nev., national repository, after about \$15 billion had been spent to develop it.

One reason the panel turned to storage was to take care of government defense waste, said commission co-chairman Brent Scowcroft at the Senate hearing. Hanford has about 90 percent of the nation's high-level radioactive defense

See **HANFORD** | Page B2

24 JAN 12

Access to natural gas could cut Hanford vit plant expenses

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is proceeding with an environmental study of building a natural gas pipeline that would travel under the Columbia River to the center of the Hanford nuclear reservation.

Cascade Natural Gas Corp. has been awarded a task order worth up to \$5 million to provide technical expertise and other support to DOE to prepare the legally required study, called an environmental impact statement. Cascade

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Find related stories at www.hanfordnews.com

also would potentially provide the natural gas as the licensed supplier in the Hanford area.

The project could help meet DOE goals of reducing fuel costs, greenhouse gas emissions and dependence on foreign fuel sources, according to a notice in the Federal Register on Monday.

DOE is interested in using natural gas as the primary fuel source for the Hanford vitrification plant and to replace the use of diesel fuel at the 242-A Evaporator. The vitrification plant will turn radioactive waste from past weapons

See **STUDY** | Page A2

BRIEFS

Former Fluor Hanford president dies at 73

Keith Thomson, a former president of Fluor Hanford, died Thursday at his home in Rancho Mirage, Calif. He was 73 and had been battling cancer.

Thomson, a British native, moved to the United States in 1964 to work for Bechtel National. He joined Fluor Corp. in 1991, holding several international and U.S. assignments before coming to Hanford in spring 2001.

He retired from his position as Fluor Hanford president in

28 JAN 12
February 2003. During his tenure at Hanford, almost half of the K Basins' 2,300 tons of spent nuclear fuel were moved to a safer location and significant amounts of plutonium were neutralized at the Plutonium Finishing Plant.

In November 2003, Thomson married former Rep. Jennifer Dunn, R-Wash. She died in 2007.

A celebration of Thomson's life is expected to be held in San Francisco in February or March.

Ex-Fluor Hanford buyer agrees to repay \$5,500

Another former purchaser for Fluor Hanford has reached

a settlement agreement over allegations of accepting kickbacks.

Patricia Sparks agreed to pay the federal government \$5,500. She is the third former Fluor Hanford purchaser to agree to payments to resolve civil liability, according to documents from the U.S. Attorney's Office for the Eastern District of Washington.

Sparks accepted tickets from Shane Fast, owner of Fast Pipe and Supply in Pasco, to a Seattle Mariners game, according to the U.S. Attorney's Office. She also accepted a \$100 gift card to Outback Steakhouse in December

2006 from Fast, it said.

The gifts were kickbacks for obtaining or rewarding favorable treatment from a Fluor Hanford employee, the U.S. Attorney's Office alleged.

Sparks did not admit to the allegations.

During December 2006, she made purchases from Fast Pipe totaling \$529. In May 2006, she made purchases totaling \$1,720 and in May 2007 she made purchases totaling \$7,525. The purchases were made on her Hanford purchase card, with the Department of Energy paying for them.

- Herald staff

28 JAN 12

Mission Support Alliance attains DOE's highest level of excellence for programs

ANNETTE CARY

HERALD STAFF WRITER

Mission Support Alliance will be flying the Department of Energy safety star flag after being awarded Star status in DOE's Voluntary Protection Program.

The Star status, DOE's highest level of excellence in employee safety and health programs, covers the Hanford contractor's mission support services group. It provides services across Han-

ford, including utilities, training and information technology.

"I think of MSA as our top performer in safety," said Matt McCormick, manager of the DOE Hanford Richland Operations Office, at a Richland ceremony to present the award.

The nuclear reservation looks to MSA to be a leader in safety because of its responsibility to implement safety standards across the site, its sitewide training programs and its support to all the contractors in day-to-day work, he said.

"Safety isn't something that holds up productivity," said Frank Armijo, MSA president. "It's something that makes sure we can get work done."

It's critical that workers not relax

their vigilance on safety now but continue to focus on it every day, he said.

"Receiving VPP Star status exemplifies the collaborative working environment we have within MSA's management and work force," said Rocky Simmons, an MSA Hanford Atomic Metal Trades Council safety representative.

The Voluntary Protection Program recognizes contractors and workers who have implemented effective safety and health management systems and maintain workplace injury and illness rates well below the national Bureau of Labor averages for their industries.

DOE uses VPP as a tool for promoting excellence in safety to prevent fatalities, injuries and illnesses by focusing

on hazard prevention and control, worksite analysis and training, management commitment and worker involvement.

The Star status awarded Friday does not cover the HAMMER training center or MSA's safeguards and security organization.

However, the HAMMER training center has had Star status since 2002, and it recently was renewed.

The safeguards and security organization, which includes the Hanford Patrol and Hanford fire service, has received Merit status and is working toward Star status.

◆ *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

2 FEB 12

Fluor Federal receives workplace safety award

Fluor Federal Services of Richland recently was presented with the Association of Washington Business 2012 Better Workplace Award in Olympia.

It was one of seven Washington companies honored for safety, job training and benefits programs and the only company with more than 250 employees honored for workplace safety.

Gov. Chris Gregoire gave the award to Frank Blowe, Fluor Federal's labor relations manager, and Steve Maki, building and trades craft safety representative.

Fluor Federal Services, an operating unit of Fluor Corp., has 600 employees, the majority of whom support environmental cleanup work at the Hanford nuclear reservation.

In September 2011, employees earned their fourth Star award in the Department of Energy's Voluntary Protection Program.

BRIEFS

Vit plant's concrete walls near 100 feet

Crews at the Hanford vitrification plant have finished installing the Pretreatment Facility's fifth elevation of concrete walls.

The walls now stand about 97 feet tall.

To place the latest walls, crews used a specialized concrete pumping truck with an extendable arm that reaches about 200 feet vertically or horizontally.

The Pretreatment Facility, the largest of the vit plant's four major buildings, will have six elevated concrete sections and more than 113,000 cubic yard of concrete. Work on the sixth and final elevation has begun, and only four small wall sections remain before all concrete walls are complete.

When complete, the building's walls will stand 109 feet high. Steel columns and roof trusses will extend beyond the walls to an overall height of 120 feet.

The vitrification plant is required to begin operating in 2019 to treat radioactive waste now stored in underground tanks at Hanford. The waste is left from the past production of plutonium for the nation's nuclear weapons program.

The Pretreatment Facility will divide waste into high level and low activity radioactive waste, which will be separately turned into glass for disposal

HANFORD CLEANUP

\$115B not enough to finish job, board says

Advisory panel sends letter to DOE saying estimate isn't enough

ANNETTE CARY

HERALD STAFF WRITER

Do not expect that the \$115 billion estimated to be needed to complete environmental cleanup work at Hanford will be adequate to finish the job, according to the Hanford Advisory Board.

The board sent a letter to the Department of Energy and its regulators Friday saying that the estimate does not include cleanup work the board expects may be needed and also does not include fully developed cost estimates for some work.

The \$115 billion estimate was the conclusion of the 2011 Hanford Lifecycle Scope, Schedule and Cost Report — a new requirement of the legally binding Tri-Party Agreement, after DOE negotiated with Washington state and the Environmental Protection Agency to extend

VIT PLANT SURVEY

Workers positive on plant

Bechtel says employees report strong safety, quality culture

ANNETTE CARY

HERALD STAFF WRITER

The Hanford vitrification plant employees reported positive views of the project's nuclear safety and quality culture in a new survey, according to Bechtel National.

It sent a lengthy memo to employees Thursday evening outlining the results of a survey by an independent review team

assembled to fulfill Department of Energy commitments to the Defense Nuclear Facilities Safety Board.

The employee survey is one source of information the Independent Safety and Quality Culture Assessment Team is using. It also announced earlier that it planned interviews with employees and a review of other project information, including other recent evaluations by external experts.

The independent review was planned after a defense board investigation concluded in June that the technical safety culture at the plant was in need of

“prompt, major improvement.”

However, the survey found that the average overall score for nonmanual responses was 4.04 out of 5, and the overall average score for construction employees was 3.56.

The report said both scores are considered high, said Bechtel project director Frank Russo in the employee message. The report was not available to the Herald by Thursday evening.

About 80 percent of the work force answered the survey, which had questions

State poised to cut money to groups

Heart of America Northwest among targets

ANNETTE CARY

HERALD STAFF WRITER

The Washington State Department of Ecology is proposing eliminating most grants for public participation for Hanford interest groups as the state faces budget cuts.

Public participation grants for Hanford-related use already had been awarded to four agencies to be spent over two years starting July 1, 2011.

They included \$160,000 to Heart of America Northwest and its research center; \$120,000 to Washington Physicians for Social Responsibility; \$90,000 to Columbia Riverkeeper and \$90,000 to Hanford Challenge. None are based in the Mid-Columbia.

If the state decides it does not have the money to continue the grants, it still expects to be able to reimburse money

MARVE HYMAN



Marve Hyman of Kennewick served in the Army, 1954-56 in the 525th Engr. Co. in Europe. Upon discharge he worked on the design of oil refining units and then in environmental engineering consulting until hired by Bechtel in 1993. This career was in California. In 1994, Bechtel sent Marve to Hanford for a two-week task on environmental remediation. Marve has been in the Tri-Cities ever since. He remarks, "It's been a long two weeks but I love the Tri-Cities." Marve finds working at Hanford has been the most formidable challenge an environmental engineer could tackle.

Experts say economy strong despite roller coaster of employment at Hanford

16 OCT 11

Editor's note: Hanford started this year with 12,000 workers and nine months later about 2,000 positions have been cut. Herald reporters and photographers take a closer look at what this means to Tri-Citians and our economy with a daily series of stories that begins today.

ANNETTE CARY

HERALD STAFF WRITER

The day after the last of almost 2,000 workers were told they were losing their jobs at Hanford, Twigs Bistro and Martini Bar opened at the Columbia Center mall in Kennewick.

Business has been excellent, said general manager Will Willingham. Customers have been filling its 267 seats, with waits of up to 30 minutes on some nights.

Bob's Burgers and Brew has drawn so many diners since opening in Kennewick less than a year ago, that it's preparing to open a second restaurant in Richland.

And Tim Bush Motor Co. recently bought a Yakima BMW franchise and started selling the cars in Richland.

Despite almost 2,000 layoffs so far and up to another 1,060 possible by fall at Hanford, plenty of money continues to be spent in the Tri-Cities.

Businesses are showing confidence that as painful as the layoffs are for the affected workers, the community will rebound from any economic dip.

It has been the story of the Tri-Cities since World War II, when 50,000 workers arrived



at the newly created Hanford nuclear reservation to produce the plutonium that helped defeat Japan and end the war.

Since then Hanford has been a roller coaster of employment, with the number of jobs rising and falling through the decades.

Most recently, a \$1.96 billion infusion of American Recovery and Reinvestment Act money for Hanford environmental cleanup swelled employment at the nuclear reservation during two and a half years.

With Recovery Act spending near its peak at the start of 2011, about 12,000 workers were employed at Hanford, which doesn't count for about 4,500 workers who work for the Department of Energy's Pacific Northwest National Laboratory in Richland.

Layoffs include new and experienced workers

Since this past spring, almost 2,000 Hanford workers have lost their jobs, most of those within the past month, as work paid with economic stimulus money is finished. Although the end of Recovery Act spending drove the layoffs, it wasn't just the new hires who lost their jobs.

For union workers, it was last in, first out.

But for nonunion workers, contractors looked at the positions they needed next.

used a rating and ranking process if necessary to help determine which workers to keep.

At CH2M Hill Plateau Remediation Co., which received \$1.3 billion of stimulus money, 22 percent of workers under 40 were laid off and 16 percent of those over 40 were laid off.

That reflects an average worker age of 51 at CH2M Hill, which corresponds to the age of environmental cleanup workers across the nuclear reservation.

About 15 percent of the

layoffs sitewide were voluntary — likely including many workers who eased into retirement with the bonus of up to 20 weeks of severance pay.

“
The worst thing that can happen is people start thinking negatively and we bring (a poor economy) down on ourselves.”

Gary Petersen,
TRIDEC vice president

”

House bill would open Rattlesnake Mountain

Hastings' measure would direct federal officials to provide access to summit

**ROB HOTAKAINEN
AND ANNETTE CARY**

HERALD STAFF WRITERS

WASHINGTON — The summit of Rattlesnake Mountain would be open to the public under a bill that passed the House Natural Resources Com-



Hastings

mittee on Thursday.

The 3,600-foot summit is the highest point in the Mid-Columbia, but it has been closed to the public since the federal government took it over through eminent domain in 1943 as

part of the Hanford nuclear reservation for weapons plutonium production.

The mountain, which was not con-

taminated by Hanford production, was made part of the Hanford Reach National Monument in 2000, but remains closed to the public.

The bill, which passed on a unanimous vote, is sponsored by Republican Rep. Doc Hastings of Pasco, the committee's chairman.

"The lands of the monument and the entire Hanford site belong to all of the American people," he said.

The bill directs the Department of Interior to provide the public with motorized, non-motorized and pedes-

trian access to the mountain's summit.

If passed by Congress, Hastings said, it would ensure public access for educational, recreational, historical, scientific, cultural and other purposes.

"At 3,600 feet, Rattlesnake Mountain is the highest point and provides unparalleled views for miles around the monument, the Hanford site, and the Columbia River," said Hastings. "The public should expect that if they can visit the summit of Mount Rainier, then they cer-

tainly should be allowed to the summit of Rattlesnake Mountain."

Last month, Hastings said the U.S. Fish and Wildlife Service could not be trusted to ensure access to the summit.

The agency is working on public access to the mountain, but it has taken longer than planned, as discussions continue with tribes that consider the mountain sacred, James Kurth, chief of the National Wildlife

See **RATTLESNAKE** | Page B2

6 FEB 12

Plan developed to clean up highly radioactive spill

ANNETTE CARY

HERALD STAFF WRITER

HANFORD NEWS ONLINEFind related stories at
www.hanfordnews.com

Hanford officials have settled on a plan to clean up what may be the most highly radioactive spill at the nuclear reservation.

It depends on calling back into service the 47-year-old, oversized hot cell where the spill occurred to protect workers from the radioactive cesium and strontium that leaked through the hot cell to the soil below.

Radioactivity in the contaminated soil, which is about 1,000 feet from the Columbia River, has been measured at 8,900 rad per hour. Direct exposure for a few minutes would be fatal, according to Washington Closure.

Washington Closure Hanford has issued a notice telling companies that it plans to request bids in April for a major project that will call for an intensive design effort. While many of Washington Closure's bid awards go to small companies, this bid request will have no restrictions as the Hanford contractor looks for a company with the experience to handle a complex assignment.

The winning subcontractor will be required to design remotely operated equipment to be installed inside the hot cell. Using the equipment, it must take out the hot cell's floor, dig up the contaminated soil beneath it and transfer the contaminated soil to nearby hot cells to be grouted in place.

"DOE and their contractors developed this plan using both out-of-the-box creative thinking as well as the methodical, object evaluation of the alternatives," said Larry Gadbois, a scientist for the Environmental Protection Agency, a regulator on the project. "It provides a safe process for workers at the site and safe handling of the packaged waste."

The spill is beneath the 324 Building, which already was a complicated and hazardous demolition project because of its large hot cells contaminated from research with high levels

BRIEFS

9 FEB 17

DOE pipeline study set tonight in Pasco

The Department of Energy will take comments about a planned environmental study for a proposed natural gas pipeline at a meeting today. The meeting will be from 7 to 9 p.m. at the Pasco Red Lion, 2525 20th Ave., with an open house at 6 p.m.

DOE is considering running the pipeline from north of the Pasco airport under the Columbia River to Hanford just north of Richland. The natural gas would be used to replace diesel fuel that other-

HANFORD

10 FEB 12

Concerns heard at hearing about natural gas line

Taxpayer savings possible, but safety questions asked

ANNETTE CARY

HERALD STAFF WRITER

A proposed natural gas pipeline under the Columbia River to central Hanford could save taxpayer money and reduce greenhouse gases.

But there also were concerns about safety, spreading Hanford contamination and affects on wildlife raised at a Department of Energy meeting Thursday night in Pasco to take comments on what should be considered in a proposed environmental study.

About 80 people attended.

The approximately 30-mile pipeline would connect to an existing pipeline near the Pasco airport, then possibly cross under the Columbia River just north of Richland and travel northwest to central Hanford.

It would go into the ground several hundred feet away from the riverbanks and be 50 to 100 feet below the lowest depth of the river bottom.

During an informal question and

See **GAS** | Page A2

16 FEB 12

Judge tells former Hanford worker he doesn't believe him

ANNETTE CARY

HERALD STAFF WRITER

A former Hanford manager was sentenced to three years and 10 months in prison after a federal judge questioned his truthfulness Wednesday.

Paul Kempf, former operations manager of the Hanford 222-S Laboratory, admitted in a plea agreement that he used a federal credit card issued for government purchases to embezzle \$487,000 from September 2000 through September 2005.

But then he told the court in a sentencing docu-

ment filed later in the Eastern Washington District U.S. Court that there was no evidence to suggest the \$487,000 worth of products in question charged to his P-card had not been delivered to Hanford.

"I don't believe you," said Judge Robert Whaley in Richland.

Kempf is the last of seven defendants accused in spring 2010 of diverting government money with Hanford credit cards to be sentenced, and he received the harshest sentence.

He is accused of using his federal credit card — called a purchase card or P-card — to make purchases from his wife's home business that never were delivered.

Obama budget drops money for vit plant

2013 funding proposed for Hanford stays almost flat

ANNETTE CARY

HERALD STAFF WRITER

The Obama administration is requesting a largely flat budget of \$2.2 billion for the Hanford nuclear reservation in fiscal 2013.

However, money for the vitrification plant would be reduced from current spending, another signal that a dead-

line of starting up the plant by 2019 to treat radioactive waste for disposal may not be met.

INSIDE

Government still growing, despite cuts.

| A4

dropped by about \$60 million. About 40 percent of the total in the administration's budget request would go to Hanford.

Monday's announcement of the

Overall, Hanford fared well, considering the total budget request for Department of Energy environmental cleanup across the nation

administration's budget request for Hanford in the next fiscal year is an early step in the budget process. Congress now will consider the proposal and set appropriation amounts.

The biggest proposed change between spending during the current year and fiscal 2013 is at the vitrification plant, formally called the Waste Treatment Plant. Its budget would drop back to \$690 million, down from \$740 million this year.

"The decrease reflects the project's opportunity to resolve technical issues in pretreatment," according to the

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budget request document.

As construction continues on the \$12.2 billion vitrification plant, work also continues to resolve technical questions, particularly in the Pretreatment Facility. They include whether waste will be well mixed in the plant to prevent a criticality or buildup of flammable gases and to determine whether piping and vessels that will

hold high level radioactive waste will corrode before waste treatment is completed.

Progress would be maintained under the budget request toward finishing other vit plant buildings, including the Low Activity Waste Facility, the Analytical Laboratory, the High Level Waste Facility and support facilities, according to the budget request document.

The plant was planned on a steady budget of \$690 million a year. But then

See **BUDGET** | Page A2

HANFORD

Board split on vitrification plant safety

Key issue was if workers can freely raise security concerns without fear of retaliation

ANNETTE CARY

HERALD STAFF WRITER

The Hanford Advisory Board may have ended up more confused than ever after trying to get to the bottom of what it will take to operate the Hanford vitrification plant safely.

After being unable to reach agreement on what to say to the Department of Energy and its regulators on the issue during committee meetings, it took the unusual step of holding a "sounding board" to let all 31 members plus their alternates have a say at its recent full board meeting in Richland.

HANFORD NEWS ONLINE

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The board heard DOE officials describe the systems in place to ensure that safety concerns are taken seriously and what improvements are planned. But then it also heard from current and former Hanford workers who showed up for the public comment period to say the system is broken.

"So what are we supposed to think?" asked Ken Niles, who represents the state of Oregon on the board, at the end of the meeting. "It's very hard for us to understand where the rubber meets the road."

Although the discussion was wide ranging, the key issue was whether workers who have concerns about technical issues at the vitrification plant that could affect the safe operations of the plant can freely raise those issues without fear of retaliation.

The issue has been contentious since 2010 when Walter Tamosaitis, the former research and technology manager for the plant, alleged he was dismissed from the project for raising concerns about design

8 FEB 12

New price tag projected at \$112 billion

Costs dropped \$3B
because of fulfilled
work, report says

ANNETTE CARY

HERALD STAFF WRITER

The new price tag for completing the remainder of Hanford nuclear reservation cleanup, plus some post-cleanup oversight, is \$112 billion.

That is down \$3 billion from last year, according to projections in the annual Hanford Lifecycle Scope,

Schedule and Cost Report.

The drop primarily is because of work accomplished last year using Department of Energy annual budget money and the final year's spending of Hanford's federal economic stimulus money.

However, last year's estimate of \$115 billion was criticized by some as unrealistically low.

The report estimating the cost of the remaining Hanford cleanup through 2065, plus 25 years of post-cleanup

28 FEB 12

Hanford policy would have saved money

Workers who were let go in South Carolina received better deal

ANNETTE CARY

HERALD STAFF WRITER

Nuclear site employees laid off in South Carolina after the end of Recovery Act spending got a better deal than Hanford workers, according to an audit report of the Department of Energy Office of Inspector General released Monday.

"The department needs to ensure that similarly situated workers are treated with rea-

sonable consistency," the report said.

It concluded that DOE could have saved \$7.7 million paid to workers at the Savannah River, S.C., site by using the same policy as the one used at Hanford, where about 2,000 workers lost their jobs.

Savannah River Nuclear Solution workers received 60 days' pay rather than advance notice of termination, in addition to severance pay and other health and outplacement benefits.

At Hanford, most workers or their unions were given 60 days' notice — the amount required by the Worker Adjust-

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ment and Retraining Notification Act, or WARN Act — plus severance pay and other health and outplacement benefits.

"In terms of work product, as a result of the Hanford policy, the department will receive 60 days of additional environmental remediation services," the report said.

Savannah River justified providing extra pay instead of notification because of security risks associated with high hazard work. That has been its practice since 1993.

Unlike Hanford, Savannah River does nuclear weapons work, but workers who were laid off there were doing environmental cleanup work similar to that done at Hanford. Hanford is contaminated from World War II and Cold War production of weapons plutonium.

Savannah River officials conducted no analysis of whether the pay for 60 days' work at Savannah River was needed and DOE Headquarters provided no guidance on the issue, the report stated.

"These payments were not specifically required by the WARN Act, and in our

HANFORD

Plant schedule may be at risk, Chu confirms

Says before Senate panel that he's confident
DOE has best team overseeing vit plant

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu acknowledged there is a risk the Hanford vitrification plant might not be operating as scheduled in 2019, under questioning Thursday by Sen. Maria Cantwell, D-Wash.

But he said he had confidence DOE had the best possible management team in place to oversee work on the plant.

Chu testified before the Senate Energy and Natural Resources Committee on the Obama administration's budget request for the Department of Energy in fiscal 2013, which reduces vitrification plant funding to \$690 million.

That's the amount in the original budget plan for the \$12.2 billion plant, which called for steady funding for

See **PLANT** | Page A2

20 FEB 12

DOE asks whistleblower lawsuit to be dismissed

Department says
it no longer employs
vit plant ex-manager

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is asking that a Hanford whistleblower lawsuit filed against it be dismissed.

Walter Tamosaitis, the former manager of research and technology at the Hanford vit-rification plant, filed a lawsuit in Eastern Washington District U.S. Court in November.

He has alleged since summer 2010 that he was removed from the project for raising technical concerns that could affect the safe operation of the plant, which will process high-level

radioactive waste for disposal. His employer, URS, says that is not why he was re-assigned and that the change had been planned for some time because Tamosaitis' assigned work was coming to an end.

DOE has asked that the lawsuit, which names DOE and URS as defendants, be dismissed because DOE does not employ Tamosaitis and the law does not authorize the relief Tamosaitis is requesting in the lawsuit. DOE has contracted with Bechtel National to build the plant and URS is Bechtel's prime subcontractor.

"DOE is dedicated to continual efforts at improving nuclear safety and nuclear safety culture at (the vit plant) and all its facilities," the Department of

40 FEB 12

Hanford history topic of Thursday lecture

Historian Michele Gerber will discuss the history of Hanford nuclear reservation operations Thursday as part of the lecture series offered by the Hanford Reach Interpretive Center.

Her talk also will cover questions of secrecy and openness and current environmental cleanup activities.

It will be at 12:30 p.m. at 1766 Fowler St., Suite B, in Richland.

- Herald staff

27 FEB 12
Upcoming project is one of most hazardous cleanup assignments in area near the Columbia River

ANNETTE CARY

HERALD STAFF WRITER

Washington Closure Hanford has settled on a plan for one of its most hazardous environmental cleanup assignments — retrieving radioactive waste dropped down long pipes buried vertically in the ground.

The Department of Energy contractor is proposing a keep-it-simple approach for the underground pipes at the 618-10 Burial Ground. It would use mostly commercially available equipment and technology to treat the waste underground — breaking it up and in some cases grouting it — before it's brought to the surface and packaged for disposal.

"It's doable, and it's safe," said Larry Gadbois, scientist with the Environmental Protection Agency, the regulator on the project.

 Online
video
tricityherald.com

Work already has begun to dig up waste at the 618-10 Burial Ground, which with the slightly newer 618-11 Burial Ground, has been expected to have some of the most hazardous materials in the burial grounds near the Columbia River.

So far, workers have been digging up trenches, finding hundreds of bottles of laboratory waste and drums of radioactive waste, before tackling the nearby vertical pipe units in the burial ground.

From 1954 to 1963, some of the worst of the

See **SIMPLE** | Page A2

DOE releases another part of 'Hanford Story'

9 MARCH
The Department of Energy has released its fifth chapter of *The Hanford Story* video series, covering potential future uses of the nuclear reservation as environmental cleanup is completed in stages.

The series, posted on YouTube, was created to provide information about Hanford in short videos that the public can readily understand.

The latest chapter, which is about eight minutes long, looks at plans for Hanford as the 586-square-mile nuclear reservation shrinks to less than 10 square miles at its center that will continue to be required for nuclear waste activities and disposal.

The video envisions land where visitors can fish, kayak and hike, as they already do in the portion of Hanford never used for nuclear weapons production, and the tribes could practice cultural traditions. The site's history would be showcased, from the buildings left by settlers when land was appropriated by the federal government during World War II to the historic B Reactor.

A limited amount of land also would be set aside for industrial development, including an energy park near Richland.

The video can be watched at bit.ly/zWHojZ. It also will be shown by the Hanford Site Speakers Bureau. To contact the bureau, call 376-3419.

COMPUTING

Hanford workers leap on the cloud

Move expected to save federal government \$12M during 4 years

ANNETTE CARY

HERALD STAFF WRITER

Hanford computer users are migrating to the cloud, with most making the switch by summer.

During the next four years that is expected to save the federal government about \$12 million, according to the Department of Energy. It also will give workers secure access to computerized information, even if their assignments take them to remote areas of the nuclear reservation.

"We've been working really hard to make sure the cloud is a secure network," said DOE spokesman Cameron Hardy.

With cloud computing, information is no longer stored or processed on personal computers and users no longer require direct connections to hardware to access information.

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to hardware to access information.

In this case, the Hanford Federal Cloud has been created to save and consolidate information — including video, data and voice services — at one centralized location.

— at one centralized location.

"Thin clients," or small computer desktop components can be used to communicate with a centralized server, replacing traditional central processing units, or CPUs. Workers also can access information with smart phones and laptops.

"HFCloud computing allows the government to save money, work more efficiently and maintain better security for its data," said Frank Armijo, Mission Support Alliance president, in a statement.

Mission Support Alliance began rolling out the new technology last year and now the 650 federal and contracted support staff who use computers at Hanford's Richland Operations Office and Office of River Protection are in the Hanford Federal Cloud.

By summer, employees of most, if not all, Hanford cleanup contractors will transition to the cloud, Hardy said.

"Cloud computing coupled with the thin-client technology will significantly reduce the cost of refreshing or replacing 9,000 computers deployed across the Hanford Network," said Gene Higgins, Richland Operations Office infrastructure program manager, in a statement.

RICHLAND PUBLIC FACILITIES DISTRICT BOARD

Reach center may be built in 2 pieces

Board calls special meeting to discuss how to proceed during hard economic times

MICHELLE DUPLER

HERALD STAFF WRITER

The Richland Public Facilities District Board now is considering building the Hanford Reach Interpretive Center in two pieces to avoid further delay while project leaders

continue raising money.

The board called a special meeting Wednesday to start talks about how to proceed with the project given the challenges of fundraising in the current economic climate.

Interpretive center CEO Lisa Toomey and board member Nick Ceto recently met with architects Jones & Jones in Seattle to talk about what options the building design allows so that construction can start with the money the facilities district already has in the bank.

HANFORD NEWS ONLINE

Find related stories at www.hanfordnews.com.

Toomey summarized some of the project's history for the board, including how much money has been spent so far.

Of the \$25 million raised, about \$13 million was spent from the time the project was conceived in 2002 until the end of 2011, she said.

About \$7.6 million was spent on the Columbia Point south site that was abandoned in 2009 after project leaders learned they couldn't clear a set of federal permitting hurdles.

That money includes not only permitting costs and work at the site, but the cost of designing the building and exhibits, Toomey said.

About \$2.9 million has been spent on facilities district operations, including the cost of staff and office space.

The district spent \$1.6 million devel-

oping the current site in the west end of Columbia Park, and another \$850,000 on operations related to that site, Toomey said.

The district now has \$12 million available for construction, with \$3 million of that committed toward the first phase of construction involving installation of utility systems and construction of a driveway.

The district broke ground on the first phase in October, and is working

See **CENTER** | Page A2

802 George Washington Way,
Richland.

Participants will have the opportunity to talk with managers and technical experts, and learn about the \$12.2 billion effort to build a plant to treat radioactive waste left from the past production of weapons plutonium at the Hanford nuclear reservation. The plant is scheduled to begin operating in 2019.

This is the second vit plant open house planned by the Department of Energy and its contractor, Bechtel National. The 2011 open house drew several hundred people.

- Herald staff

10 MAR 2012

Hanford vit plant project open house Wednesday

The Hanford vitrification plant project has set an open house from 5 to 7 p.m. Wednesday at the Red Lion Hotel,

BRIEFS

2 MAR 12

Hanford workers exposed to isotope, tests show

Lab results received so far show that Hanford workers exposed to tritium last month had very low levels of the radioactive isotope.

Workers were removing an exit sign at the 326 Building, which dates to 1953, when tritium capsules broke. Tritium commonly was used in illuminated signs of that era. The sign had been covered with a newer sign and workers didn't realize the capsules were there, according to Washington Closure Hanford.

"We are looking into ways to improve our processes," said Washington Closure spokesman Mark McKenna.

Bioassays were collected from everyone in the eight-person crew as a precaution. Ten other workers in the area also requested bioassays.

In the seven bioassays of crew members completed, less than 1 millirem of radiation exposure was detected.

Hastings reproaches Obama in radio address

President Obama has not lived up to his campaign promise to address rising gas prices, said Rep. Doc Hastings, R-Wash., in a recorded

10 MAR 12

Nuclear forensics taught at HAMMER

Scientists, detection experts from across the globe attend conference on fledgling field

ANNETTE CARY
HERALD STAFF WRITER

Scientists and experts in nuclear detection gathered near Richland during the past two weeks to learn the latest methodologies in the fledgling field of nuclear

forensics. That is the science of studying nuclear material to trace it to its source or gather other information in a criminal investigation.

The need for the first-of-a-kind training is more than theoretical.

The International Atomic Energy Agency, or IAEA, has confirmed 399 cases of smuggled, stolen and other criminal possession of nuclear materials since 1993. That includes 16 incidents involving weapons-usable enriched uranium or plutonium.

With the use of nuclear forensics, information can be developed to prosecute cases and also to discover the vulnerabilities in security that allowed material to fall into criminal hands.

Developing the field of nuclear forensics also can serve as a deterrent, discouraging criminal activity as it becomes known that seized nuclear material can be traced back to a place or a person, said David Smith, IAEA senior nuclear security officer.

See **NUCLEAR** | Page B2

HANFORD CLEANUP

13 MAR 12

Warning leads to safeguards for asbestos

13 MAR 12

Heavy equipment won't be used to demolish buildings where substance remains in place

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy and its regulators have agreed to restrict the use of heavy equipment to demolish buildings that still have asbestos out of concern for worker health.

The agreement, signed Monday, comes after the Environmental Protection Agency inspector general issued an

early-warning report in December, saying that removal of asbestos in alternative ways at Hanford and elsewhere potentially threatened health and safety.

Hanford contractors have conducted no demolition of buildings with asbestos in alternative ways since then, in part because none had been

See **ASBESTOS** | Page A2

DOE plans steel cocoon for reactor

Worker safety reason
for building enclosure

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy plans to try a new way to "cocoon" its next defunct Hanford reactor, putting up a

steel building around it.

DOE already has made significant progress toward putting eight of Hanford's plutonium production reactors into temporary storage to let radiation decay to more manageable levels over 75 years. The ninth reactor, B Reactor, will be saved as a museum.

To cocoon the C, D, DR, F

and H reactors, DOE tore down reactor structures to the radioactive shield walls around radioactive cores, sealed any openings and reroofed them before welding shut the doors. Work on a similar cocoon almost is complete at N Reactor.

But now DOE is planning to try building an enclosure

around the K East Reactor, the next reactor scheduled to be cocooned.

Worker safety is the main reason to switch to the new plan, said Tom Teynor, DOE project director.

The K East Reactor is larger than some of the earlier reactors that were built along the Columbia River as

part of the nation's nuclear weapons program.

Piping and other penetrations are 80 to 100 feet off the ground, a high elevation for workers who would have had to put in concrete forms and pour grout to seal them. The openings still will be sealed

See **REACTOR** | Page B2

14 MAR 12

Settlement reached for 2 Fluor purchasers

7 known settlements
have been made
for alleged kickbacks

ANNETTE CARY

HERALD STAFF WRITER

Two more purchasers for former contractor Fluor Hanford have reached settlements for allegedly accepting kickbacks.

That brings the known number of settlements with the U.S. Attorney's Office for Eastern Washington to seven, all for allegedly accepting gifts from Fast Pipe and Supply.

Most recently Michael Stone agreed to pay \$13,360 and Rocky Simmons will pay \$11,000. Stone does not admit the allegations and Simmons denies them but both accepted the settlement.

Stone and Simmons were employed by Fluor Hanford as material coordinators from January 1989 to October 2008, when its contract expired.

Stone is accused of accepting two tickets to a Seattle Mariners game worth \$30 in May 2006 from Shane Fast, owner of Fast Pipe and Supply and a former congressional candidate.

B REACTOR

10 MAR 12

DOE signs off on children visiting

ANNETTE CARY

HERALD STAFF WRITER

School children will be allowed inside Hanford's historic B Reactor for the first time this year.

The Department of Energy announced Friday that the age limit for visiting B Reactor has been dropped from 18 to 12.

That will allow teens to visit with their families, and middle school and

high school classes to tour the reactor.

Registration for this year's tours, which will include more of the reactor areas than last year, opens March 20, with registrations accepted by phone or on the internet. More information

also will be available then on how schools can arrange a class tour.

"The B Reactor National Historic Landmark stands as a testament to

See **CHILDREN** | Page A2

UW professors to talk Hanford book today

Two University of Washington professors will be at Columbia Basin College today to discuss their book about Hanford and the Tri-Cities.

John Findlay and Bruce Hevly wrote about nuclear production, community building, politics and environmental sensibilities in *Atomic Frontier Days — Hanford and the American West*.

The talk will be at 1 p.m. in Room L-102 at CBC's Pasco campus.

- Herald staff

Fluor *8 MAR 12* purchasers agree to settlement

Pair were accused
of taking kickbacks

ANNETTE CARY

HERALD STAFF WRITER

Two more purchasers for former Hanford contractor Fluor Hanford have reached settlement agreements for allegedly accepting kickbacks.

Both accepted gifts from Fast Pipe and Supply Inc. owned by Shane Fast, according to the U.S. Attorney's Office for the Eastern District of Washington. Fast, who has been indicted, called the investigation of the gifts he gave "a witch hunt."

John Williams has agreed to pay the federal government \$12,797, and Patricia Hall has agreed to pay the federal government \$15,280. Williams does not admit the contentions of the U.S. Attorney's Office, and Hall denies them.

They are the fourth and fifth former Fluor Hanford material coordinators known to reach settlements on kickback allegations for incidents before Fluor's contract expired.

Williams accepted a \$100 gift

HANFORD

Crane slows 'pencil tank' removal

Progress to remove contaminated waste still being made after device malfunctioned in '11

ANNETTE CARY

HERALD STAFF WRITER

Progress is being made on the complex and difficult task of removing "pencil tanks" from Hanford's Plutonium Finishing Plant, despite problems with a crane that's more

than 40 years old.

The project has taken skill and ingenuity on the part of the workers, who at one point brought in a remote-controlled hobby helicopter to help repair the crane.

Work began in early 2011 to remove 196 pencil tanks and

the racks that hold them inside an enclosed, six-story, canyon-like room in the plant's Plutonium Reclamation Facility. It is one of the most challenging projects attempted at the Plutonium Finishing Plant, which the Department of Energy has called Hanford's highest hazard facility.

The skinny tanks, which range from 3 feet to 22 feet long, were shaped to prevent

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an uncontrolled nuclear reaction of plutonium. They were used during the height of the Cold War to increase the production of plutonium for the nation's nuclear weapons program by recovering plutonium from scrap material that otherwise would have been waste.

The tanks hang in about 41 steel racks, called strong backs, mostly in groups of four along the walls of the canyon.

CH2M Hill Plateau Remediation Co. considered different ways to remove the highly contaminated tanks for disposal, including performing the work robotically. But it settled on using the facility's

See **CRANE** | Page B2

Acting president named head of tank farms

Michael Johnson has 40 years in industry

ANNETTE CARY

HERALD STAFF WRITER

Michael Johnson has been named president and project manager for Washington River Protection Solutions, the Hanford tank farm contractor.

He has been serving as acting president since Chuck Spencer retired from WRPS in January and took a job as chief operating officer for Babcock & Wilcox Technical Services Group in Charlotte, N.C.

Johnson came to Hanford in May as project operations manager for WRPS, moving from his position as executive

director of waste and effluent disposition at the Sellafield Facility nuclear site in the United Kingdom, where he led a work force of 2,100 people.

As head of the Hanford tank farms, he plans to build on the strong foundation Spencer left and improve efficiency, he said.

"In this tough economy, we owe to the taxpayers value for their money," he said.

The Hanford tank farms hold 56 million gallons of radioactive waste in 170 underground tanks. The waste is left from chemical processing of irradiated fuel to remove plutonium for the nation's nuclear weapons program.

Work is under way to empty waste from leak-prone



Johnson

single-shell tanks to newer double shell tanks, with a legal requirement to have all 16 tanks in the group called C Tank Farm emptied

to regulatory standards by 2014.

He is working to get tanks emptied more quickly, in part by having work done in many tanks at once and setting up a scheduling technique to gain efficiency, he said. Waste retrieval or preparation for retrieval is under way on 10 tanks now of the total 142 single shell tanks that still contain waste.

Washington River Protec-

tion Solutions has developed new technologies to empty the enclosed, underground tanks of high-level radioactive waste, including the Mobile Arm Retrieval System, or MARS, and is not done looking for faster and less expensive ways to empty tanks, he said.

"Until they are all emptied, there are always going to be areas to improve," he said.

A team from the Savannah River nuclear site in South Carolina, where Johnson used to work, is consulting on additional ideas for Hanford tanks as Washington River Protection Solutions continues to look for new technologies or different ways to apply technologies.

Hanford is the fourth

nuclear site where Johnson has worked with tank farms, including Sellafield, Savannah River and the Idaho Cleanup Project.

But Hanford's tank waste has a variety of forms from the variety of different chemical processes used at the nuclear reservation that makes its tanks a challenge, Johnson said.

In addition, Idaho and Savannah River had more infrastructure, such as power, transfer piping and ventilation systems, already in place to support emptying tanks.

He has been pleased with the quality of workers at Hanford and will be encouraging the 1,380 tank farm workers to

15 MAR 12

Murray questions Chu

Energy secretary evasive on singling out, resolving vit plant technical issues

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu hedged at a Senate hearing Wednesday on how confident he is that technical issues at the Hanford vitrification plant have all been identified and can be resolved.

More will be known about how well the plant's waste mixing system will work, a key technical issue at the \$12.2 billion plant, when more testing is completed, Chu told Sen. Patty Murray, D-Wash., at a hearing of the Energy and Water Development Appropriations Subcommittee.

Murray used her time at the



Murray



Chu

fiscal 2013 budget request hearing to raise not only vit plant technical issues, but also to ask whether DOE could be sure it will meet deadlines under a new court-enforced consent decree.

"You are quite right to be concerned," Chu said.

Her questions came as DOE Hanford officials have asked vit

plant contractor Bechtel National to propose a new baseline, or cost and schedule plan, for the project. The proposal, due in August, would need to be approved by the deputy secretary of energy to change the project's cost and schedule.

The last time a new baseline for the project was set was 2006, when a comprehensive look at the cost and schedule concluded that the \$5.5 billion estimate for the plant in

See **CHU** | Page A2

Official pushes scaled-back Reach project

Executive director says first phase only can be half of proposed facility

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center project in Columbia Park must be scaled back because of "changing dynamics," said Lisa Toomey, newly

hired executive director for the Reach.

With the center having only \$9 million in hand, Toomey told the Tri-Cities Regional Public Facilities District board Wednesday that the first phase of the project only can be half of the proposed 61,000-square-foot facility.

But she noted that the downsizing means \$3 million to \$6 million more needs to be raised to get it built.

Toomey called the change "dra-

matic" and "more realistic" than the original proposal that was submitted to the regional board.

The revised plan for the Reach center asks for \$14.5 million from the regional board.

The revised approach is one of four proposals the regional public facilities district board is considering as it decides on seeking voter approval on a sales tax increase in Pasco, Richland and Kennewick.

The 0.033 percent tax increase, if

approved, would finance construction on one or more regional projects.

Toomey, who was hired two months ago to replace Kimberly Camp, said her first assignments were to rebuild relationships, cut costs and move the project forward.

The Reach project broke ground last fall by preparing the site and installing utilities.

Phasing the Reach project with the first building being only 25,000-square-feet also would reduce by half

the need for support revenue and require fewer employees, Toomey explained.

Fred Raab, a member of the regional board and the Richland Public Facilities District Board, said once the first building is done, with mostly educational exhibits, they expect about 25,000 visits annually and revenue of about \$800,000.

Half the income would be gate

See **REACH** | Page B2

BRIEFS

19 MAR 12

B Reactor registration for tours start tonight

Online registration for tours of Hanford's historic B Reactor starts at 1 minute past midnight tonight.

Go to www.hanford.gov and click on "Hanford Tours" under the "Quick Links."

Registration also will be taken by telephone and in person at the B Reactor Tour Headquarters starting Tuesday. The office is open from 8 a.m. to 4 p.m. Mondays through Thursdays. Call 376-1647. The address is 2000 Logston Blvd., Richland.

A limited number of walk-

ons also will be accepted for the approximately 5,000 bus tour seats being offered this year. The free tours are offered at 8 and 11:15 a.m. selected weekdays and Saturdays from April 2 to Sept. 22.

The free tours are open to children 12 and older for the first time this year if they are accompanied by a parent or guardian. Participants do not have to be U.S. citizens.

Openings for cancellations for B Reactor or Hanford tours will be posted at www.hanford.gov.

16 MAR 12 More needed to stay on track

\$2.8B needed to keep pace;
\$2.2B requested, with cuts
possible from mandates

ANNETTE CARY

HERALD STAFF WRITER

Almost \$2.8 billion would be required in fiscal 2014 to keep environmental cleanup on pace at the Hanford nuclear reservation, according to the first look at the budget released Thursday.

That's up from about \$2.2 billion in both the current Hanford budget and also the Obama administration's

request for next year's Hanford budget.

However, big questions remain, including the effects of possible sequestration triggered by the failure of a special congressional deficit committee to reach agreement and a proposal to create a new cost and schedule for the Hanford vitrification plant based on lower spending.

As sequestration stands now, \$1.2 trillion would be held back from federal spending to use for deficit reduction during a decade. It is set to cut defense spending, which could include defense cleanup programs like Hanford, 10 percent starting three months into fiscal 2013.

"DOE has done no scenarios or analy-

ses for any sequestration," said Stacy Charboneau, deputy manager of the Department of Energy Hanford Office of River Protection, at a public meeting to discuss the fiscal 2014 Hanford budget proposal Thursday in Richland.

However, she personally believes that those deep cuts will be so unacceptable that Congress will not let them happen, she said.

The budget proposal that Hanford officials will submit to DOE Headquarters that meets legal obligations for environmental cleanup for the nuclear reservation would include \$1.5 billion for the Office of River Protection, including \$890 million for the vitrification plant and the rest for the tank farms.

However, DOE is looking at creating a new baseline, or cost and schedule plan, for the vitrification plant that would drop spending back to \$690 million a year for the vitrification plant.

If that new plan is adopted, a new baseline also would have to be created for the tank farms, where 56 million gallons of waste are stored until much of it can be treated for disposal at the vitrification plant.

The \$1.5 billion also includes money for work on improvements to the Effluent Treatment Facility to treat secondary radioactive waste created as the vitrification plant operates and for

See **TRACK** | Page A2

24 MAR 12

DOE says URS muddied investigation

Contractor requested manager observe interview with employee

ANNETTE CARY

HERALD STAFF WRITER

The director of a Department of Energy investigative office said Hanford vitrification plant subcontractor URS appeared to interfere in an investigation of potential nuclear safety noncompliance.

URS requested that vit plant senior manager Donna Busche, who has raised concerns, not be interviewed until her manager was available to observe the discussion, according to a memo from John Boulden III, director of the Office of Enforcement and Oversight for the Office of Health, Safety and Security.

Busche, the manager of environmental and nuclear safety at the plant, filed an employee concern this month with the DOE Office of Health, Safety and Security, or HSS. The \$12.2 billion plant is being built to treat up to 56 million gal-

lons of radioactive waste left from the past production of weapons plutonium.

The HSS office earlier conducted a nuclear safety investigation to assess whether employees on the project were free to raise concerns — particularly technical issues that might affect the future safe operation of the plant — without fear of retaliation.

After an initial nuclear safety investigation, concerns were raised that some employees did not feel free to speak their minds in the safety culture investigation, in part because they were

escorted to interviews by management. A follow-up investigation was conducted.

In the incident this month, Busche said in her employees concern filing that she heard a senior vice president for business assurance at URS headquarters was “calling in a favor.”

The senior vice president asked investigators not to interview Busche or view presentations by her while her supervisor was not available, according to the document.

See **MUDDIED** | Page A2

HANFORD

Officials try out REACH

Interpretive Center is seeking to reintroduce itself to people, reconnect them to its roots

MICHELLE DUPLER

HERALD STAFF WRITER

After a tumultuous couple of years, supporters of the Hanford Reach Interpretive Center are hoping to “reintroduce” the project to the Tri-City community as they work toward construction of

the regional museum.

But they also are hoping to reconnect people to the project’s roots and remind the community what the project was supposed to be about — a celebration of the Hanford Reach National Monument.

“The project is 10 years old. If I go back and read recent stories about it, they have nothing to do with the naming of the national monument and the reason it was named a monument and the incredible beauty,” said Lisa Toomey, the new executive director leading the project. “It’s an awe-inspiring part of the river. There’s no

discussion of the Reach itself.”

The Richland Public Facilities District — the public agency overseeing development of the museum — is working on several education and outreach projects designed to drum up enthusiasm for the interpretive center, particularly among the students that likely will represent a large portion of the center’s annual visitors.

The initiative also is intended to help the community and students connect to the Hanford Reach National Monument and its history.

20 MAR 12

Defense board plans hearing on vit plant

Thursday meeting in Kennewick to discuss fixing technical issues

ANNETTE CARY

HERALD STAFF WRITER

The Hanford vitrification plant will be the focus of a public hearing of the Defense Nuclear Facilities Safety Board on Thursday in Kennewick.

It's the second time the Washington, D.C., board has visited the Hanford area to take a close look at vitrification plant issues.

An afternoon session will

focus on plans to resolve technical issues at the \$12.2 billion plant planned to treat much of the 56 million gallons of radioactive waste stored in underground tanks at Hanford. The waste is left from the past production of weapons plutonium.

Unresolved technical issues include keeping high-level radioactive waste adequately mixed in vessels in the plant. Inadequate mixing could lead to a buildup of flammable gases or a small risk of a criticality.

The board also will hear testimony about the rate of

See **VIT PLANT** | Page B2

Safety culture at vit plant called key

Technical issues linger because of it, defense board says

ANNETTE CARY

HERALD STAFF WRITER

Strengthening the safety culture at Hanford's vitrification plant is the key to resolving technical issues concerning the safe operation of the plant, said Peter Winokur, chairman of the

Defense Nuclear Facilities Safety Board.

The board held a public hearing Thursday in Kennewick to assess progress on resolving technical issues at the \$12.2 billion plant under construction and progress on strengthening the plant's safety culture.

The plant is more than half built and the design is 85 percent complete, but questions remain about whether it will operate safely and efficiently.

On Thursday, Hanford officials said the safety basis for part of the plant would be reconstituted, or partially redone.

The safety basis looks at a broad range of accidents, upsets or other events that could possibly occur as the

plant operates and finds ways to prevent them or reduce consequences to protect the safety of staff and the public and allow the plant to go back online.

It effectively serves as a license to operate.

"Clearly, this effort will be made more difficult by the number of unresolved technical issues, the project is addressing that impact safety and the

need for controls," said Steven Stokes, the board's lead for the Nuclear Facilities Design and Infrastructure Group. "Reconstituting the safety basis is a significant development and a major undertaking, particularly at this stage of the (vitrification plant) project."

It has the potential to be "very costly and difficult to implement," he said.

See **KEY** | Page A2

Audit finds DOE budgeting method OK

Report says more extensive budget reductions could put legal deadlines at risk

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy's method to plan for declining budgets at its environmental cleanup sites, including Hanford, is fine for relatively modest funding changes, according to a new audit report.

The audit by the DOE Office of Inspector General was released Tuesday.

However, even though the annual budget planning process is adequate for budget decreases of about 5 percent, more extensive reductions could put legal deadlines at risk, it said.

"Given the current widespread calls for dramatic reductions in federal spending, it is possible that the process currently in place that is based on site needs and requirements may lead to an increase in missed regulatory and agreement milestones as budget allocations are further reduced across the complex," it said.

In that case, DOE might need to turn to a nationwide triage system for cleaning up environmental contamina-

tion to concentrate on high risk work, according to the new audit. A DOE Office of Inspector General report released in November proposed the nationwide triage system.

Now DOE requires Hanford and other sites to use individually a priority list based on seven risk factors and also consider legal cleanup agreements, such as Hanford's Tri-Party Agreement.

The risk factors start with work needed to maintain sites in a safe condition. Then they focus on tank waste, spent nuclear fuel, weapons-grade nuclear material, stored low-level radioactive waste or transuranic

waste, soil and ground water cleanup, and tearing down or otherwise decommissioning unneeded buildings.

However, officials at individual sites do have authority to make some changes to budgets at the project level. That could be because of unforeseen problems, technology advancements, contractor changes, staffing changes or changes in higher-level priorities, the audit report said.

The report made no formal recommendation to DOE's Office of Environmental Management.

► *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

REACTOR

23 MAR 12

Delta High School students first youths to visit historic site

TY BEAVER

HERALD STAFF WRITER

As the school bus of 33 Delta High School students drove away from Hanford's B Reactor, guide Russ Fabre asked the teens to describe their visit to the nuclear facility.

"Amazing."

"Intimidating."

"Incredible."

Thursday's field trip was the first time anyone under 18 was allowed on the federal property since it was developed for plutonium production in the 1940s.

The students had a good time and enjoyed being with their friends as they toured an important part of American history, but they also realized the relevance of their visit.

"We are impacting history today," said Oleg Tyshchuk, a 14-year-old freshman.

Earlier this month, the U.S. Department of Energy authorized visits to B Reactor by people as young as 12, coming about three years after the first opening the nuclear facility to limited guided tours.

Fabre, project support manager for Mission Support Alliance, a subcontractor charged with maintaining B Reactor, said relaxing the age restriction was a year in the making and is part of a larger effort to turn the area into a national park.


**Online
video**
tricityherald.com

Radiation exposure reported at Hanford

Some workers breathed in radioactive contamination; levels well below limits

ANNETTE CARY

HERALD STAFF WRITER

Several Hanford workers breathed in radioactive contamination at the Hanford nuclear reservation's Plutonium Finishing Plant, according to newly completed laboratory tests.

The Defense Nuclear Facilities Safety Board reported the February

event in the latest weekly staff report it has released, calling it a "significant contamination event."

The reports also stated that workers responded appropriately when the potential danger was discovered. The Department of Energy has called the Plutonium Finishing Plant Hanford's highest hazard facility.

Newly completed analyses of bioassays for 17 employees show that one worker had internal contamination with radiation roughly comparable to the radiation from one chest X-ray, said Terry Vaughn, vice president of safety, health, security and quality for

CH2M Hill Plateau Remediation Co.

That worker had a radiation dose of 15 millirem.

The Department of Energy limit for radiation exposure is 5,000 millirem per year, and CH2M Hill sets its administrative level at 500 millirem per year.

Another worker had a dose of 6 millirem, and two others had 2 millirem. In addition, five workers had doses of less than 0.5 millirem, and all others were negative.

"We're not happy about this," Vaughn said. "However, these doses are very low, well below regulatory limits or in-house administrative limits."

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Work is planned and executed to try to control radiological work to prevent internal or skin contamination, he said.

Last month's incident happened in a room that was checked and found free of any loose contamination, Vaughn said.

Workers entered wearing two sets of protective clothing but no respirators to prepare for the removal of contaminated piping, according to the

defense board staff report. However, a radiological controls technician discovered contamination and directed the work team to evacuate.

During the evacuation, significant contamination was found on the protective clothing of one worker, the report stated. Nasal smears were taken, and one smear tested positive.

It was a textbook response by the radiological controls technician, Vaughn said.

"DOE agrees with the DNFSB that the contractor and its employees

Energy chief to visit in June

Secretary Chu plans meetings to discuss vit plant safety issues

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu plans to visit Hanford in June to hold a town hall and other meetings to discuss safety issues with vitrification plant workers.

No date has been set, but the visit is being planned, said Matthew Moury, a Department of Energy deputy assistant secretary, during a presentation to the House Nuclear Cleanup Caucus on Tuesday in Wash-

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ington, D.C. He discussed safety, including nuclear safety culture and technical issues that could affect safe operations of the vitrification plant.

This was the first time a caucus briefing has been organized to focus specifically on safety, but it seemed appropriate based on issues at Hanford, said Rep. Doc Hastings, R-Wash. He organizes the briefings each spring to educate congressional leaders and their staff about environmental cleanup at DOE sites, including Hanford.

Employees have been paid \$1.5M since they were hired in 2007

MICHELLE DUPLER

HERALD STAFF WRITER

More than a decade ago, a group of Tri-Citians looked at the ruggedly beautiful environment of the newly designated Hanford Reach National Monument and saw an opportunity to tell the story of the Tri-Cities to the world.

They envisioned a Hanford Reach Interpretive Center that could be the jewel of the region, a world-class building that would draw visitors from throughout the Northwest — and perhaps beyond.

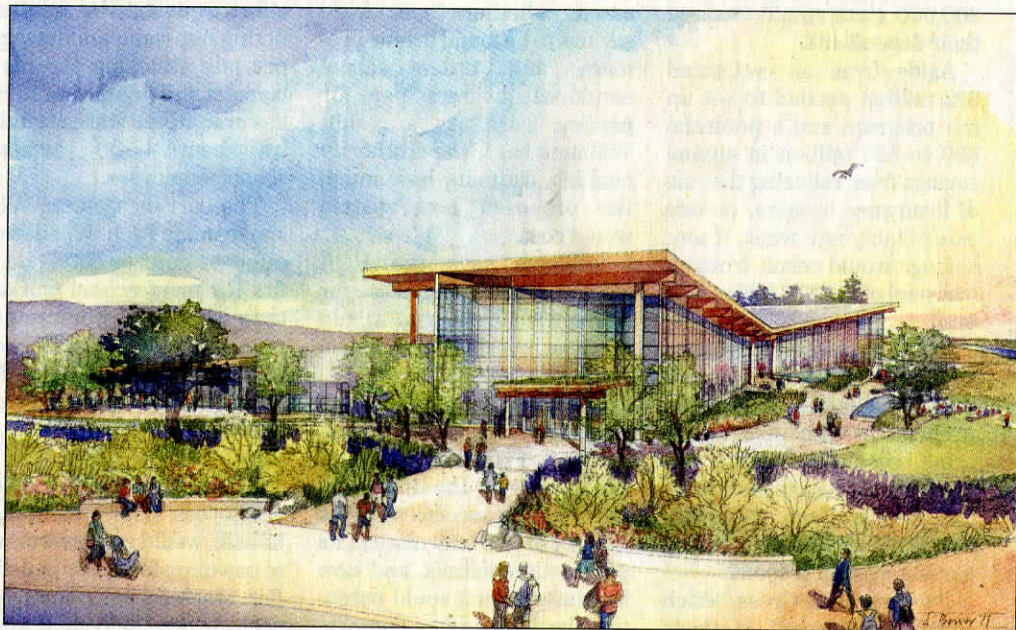
“It had to be big enough to have a steady number of people coming in — big enough to attract attention regionwide,” said Burton Vaughan, an original board member for the interpretive center project. “We wanted to draw people from Seattle or Boise.”

Numerous groups came together and shared their enthusiasm. They hired an architect, project manager and exhibit designers. They raised \$25 million toward the estimated \$40 million center.

HOW THE COSTS STACK UP (2002-11)

- ▶ Architect: \$5 million
- ▶ Operations: \$2.3 million
- ▶ Fundraising: \$2.1 million
- ▶ Exhibit design: \$1.7 million
- ▶ Utilities, site work: \$1.4 million
- ▶ Project management: \$725,000
- ▶ Other: \$600,000
- ▶ **Total: \$13.8M**

— Herald research



This artist's drawing of the Hanford Reach Interpretive Center shows what the full 61,000-square-foot building would have looked like. New plans call for constructing just the front portion.

Courtesy Richland Public Facilities District

Ten years later, \$13.8 million has been spent and a museum has yet to be built.

Documents obtained by the Herald through the state public records act show \$5 million was spent on architectural fees, \$1.7 million for exhibit design and \$725,000 for a project management contract until employees started being hired in late 2007. Since then, Reach center employees have been paid \$1.5 million.

Another \$2.1 million was spent in the early years on fundraising.

The bulk of the money — about \$10.5 million — was spent on the first choice for the project at Columbia Point south. The rest has

been spent since the project had to move to Columbia Park west.

As the project hit obstacles and fundraising stalled, a deep recession hit.

Now some people are looking back and saying in retrospect that the vision was too grand and too expensive, and questioning what should happen next.

Vision too grand?

Richland City Councilman Phillip Lemley, who has publicly questioned the project's viability, said he's concerned the city will end up

2 plead guilty to falsifying time sheets

4 former tank farm workers have entered guilty pleas to fraud

ANNETTE CARY

HERALD STAFF WRITER

Two more former Hanford tank farm employees have admitted to falsifying timecards to show more overtime than they actually worked.

That brings the total of former tank farm workers pleading guilty to timecard fraud to four.

Most recently, Lee Roberts and Joel Glen Radford pleaded guilty in Eastern Washington District U.S. Court to conspiracy to defraud the government. Their wages were paid with money from the Department of Energy.

A judge could require them to return the excess pay and sentence them to prison.

During the years that CH2M Hill Hanford Group had the tank farm contract, it was accepted practice by employ-

ees working the 4:30 p.m. to 12:30 a.m. shift to leave when the work justifying overtime was completed but claim the full eight-hour shift on their timecards, according to court documents. CH2M Hill's written policy required the actual time worked to be recorded.

The extra hours claimed were seen by employees as a perk for hourly workers, and supervisors approved the timecards knowing that fewer hours than claimed had been worked, according to court documents.

Roberts and Radford worked as radiological control technicians at the tank farms, where 56 million gallons of radioactive waste from the past weapons production of plutonium is stored in underground tanks. Radford also worked at times as a lead radiological control technician.

Roberts transferred to the tank farms in September 2007 to participate in the timecard scheme, according to his plea

RAPID RESPONSE

4 APR 12

Grant to benefit Hanford workers who were laid off

Large portion of
money to go toward
retraining programs

ANNETTE CARY

HERALD STAFF WRITER

The Department of Labor has awarded a \$1.3 million National Emergency Grant to help laid-off Hanford workers find jobs.

The largest portion of the money will be used for retraining former Hanford workers who lost their jobs as federal economic stimulus spending at the nuclear reservation came to an end.

"This grant will serve as a

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safety net for workers and their families during these challenging economic times," Sen. Patty Murray, D-Wash., said in a statement. Murray and Sen. Maria Cantwell, D-Wash., sent a letter to Hilda Solis, the secretary of labor, in February, requesting consideration of a state application for the grant.

The money will help an estimated 400 former Hanford workers seeking jobs, giving them intensive employment-related assistance, including

See **GRANT** | Page A2

Workers have dug up contaminated soil 85 feet deep near Hanford's former C Reactor to remove chromium contamination. The dig sites are so deep that mining engineers helped plan the tiered sides of the holes with safety benches about every 20 feet and roads to the bottom.



Photo courtesy Washington Closure Hanford

Hanford workers dig deep

Project aims to clean up soil that was contaminated with chromium that had spilled

ANNETTE CARY

HERALD STAFF WRITER

Workers have dug so deeply into contaminated soil near Hanford's former C Reactor that they have stopped just shy of ground water.

The deep dig is a new approach to contaminant cleanup in the area along the Columbia River, where it's more common to dig up soil to about 15 feet

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deep and occasionally as deep as about 35 feet.

But the dig sites where hexavalent chromium was spilled near C Reactor go down 85 feet, which is about one foot above ground water, and they cover the area of about 15 football fields.

They will be backfilled with clean soil, but in the meantime they look like pit mines. Their tiered sides, with safety benches about every 20 feet to catch loose rocks and service ramps to get equipment to the bottom of the holes,

were designed with the help of mining engineers.

The goal was to clean up soil contaminated with hexavalent chromium before more of the chromium could be spread to the ground water beneath it and then travel to the Columbia River less than one mile away.

"It's a much better alternative than pump and treat," the system Hanford uses to pump up and clean contaminated ground water, said Cameron Hardy, Department of Energy spokesman. It should be less expensive than removing chromium contamination from ground water with a long-

See **DEEP** | Page A2

HANFORD

Group raises concerns about boxes

Watchdog Heart of America points to concrete containers leaking radiological waste

ANNETTE CARY

HERALD STAFF WRITER

A draft new hazardous waste permit to be released this spring has put the spotlight on an 80,000-pound, reinforced concrete box of waste being stored at Hanford.

Heart of America Northwest, a Hanford watchdog group, said that and other waste is being improperly stored at Hanford and that a preview draft of the new state permit fails to do enough to ensure waste is removed and treated on a reasonable schedule. The new permit will cover storage, treatment and disposal of dangerous waste at Hanford.

The poster child for the dispute is one of dozens of boxes stored outdoors on gravel at the Central Waste Complex at Hanford.

In 1970, Congress said transuranic wastes, typically debris contaminated with plutonium at Hanford, must be sent to a national repository. But until the Waste Isolation Pilot Plant in New Mexico opened, the waste Hanford workers thought might be characterized as transuranic was buried in drums and large boxes for later retrieval.

That includes the concrete box at issue, which was dug up in 2008 and has been stored outside at the Central Waste Complex since 2009.

The Washington State Department of Ecology and the Department of Energy have agreed to focus work on higher risks at Hanford, which has left it and similar boxes in temporary storage. However, the boxes are surveyed weekly.

In December, the survey found some radiological contamination on the outside of one of the boxes and a fixative was applied. But in early February radiological contamination also was

See **BOXES** | Page B2

4 APR 12

Hanford site contractor to back Reach

MICHELLE DUPLER

HERALD STAFF WRITER

Frank Armijo told the Richland City Council on Tuesday that he's had questions about the proposed Hanford Reach Interpretive Center but now is ready to back the project.

The Mission Support Alliance president told the council that although the Hanford contractor has supported the project in theory, it has been hesitant thus far about committing any money.

But Armijo hinted that's about to change as he joined Lisa Toomey, the new executive director for the interpretive center project, in a report to the council Tuesday.

"We have been involved on the sidelines," he said. "We

weren't sure of the site. We weren't sure where the money was going and if the project was going to be successful. With the change the last few months and the new leadership, later this month we plan to announce a pretty significant financial investment."

Armijo's support was a show of confidence for the Richland Public Facilities District and a project that has been on shaky ground in the public's eyes as council members publicly have questioned whether the proposed museum is viable and fundraising had stalled for the estimated \$40 million cost for the 61,000-square-foot building.

But the district's board members and staff in recent

5 APR 12

Almost 200 are laid off at vit plant

Almost 550 workers
have lost their jobs
in the past 5 months

ANNETTE CARY

HERALD STAFF WRITER

Almost 200 construction workers have been laid off recently at the Hanford vitrification plant.

That brings the number of construction workers laid off to about 550 in the past five months.

While there has been some hiring of nonconstruction

workers, including engineers and nuclear safety workers, the total employment on the project is now at about 2,725 workers.

That's down from about 3,000 in late January and a typical range of earlier of 3,200 to 3,400 workers, including construction and nonmanual workers.

The most recent round of layoffs was conducted with notices sent at the end of the last work week to 198 construction workers in a variety of crafts. They mostly are related to the Pretreatment

CLEANUP WORK

5 APR 12 Large Hanford building comes down

Extra work required because glove boxes at facility had plutonium contamination

ANNETTE CARY

HERALD STAFF WRITER

From start to finish, the decontamination and demolition of Hanford's 308 Building just north of Richland may have required the most work of any building yet at Hanford in the area along the Columbia River.

But Wednesday, Washington Closure

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Hanford announced the building had been reduced to rubble.

The building was one of the larger ones along the Columbia River at 71,000 square feet. But it wasn't the demolition with heavy equipment that was difficult, but what had to be addressed inside that made the project a challenge.

The building housed 52 glove boxes where workers would look through windows and reach into ports with

attached gloves to do work with radioactive materials. Most glove boxes were 8 to 12 feet long and weighed about 1,200 pounds.

In addition, the glove boxes and exhaust system were heavily contaminated with plutonium.

"It's flighty," and contamination can spread easily, said Gary Snow, director of Washington Closure's decontamination and demolition organization.

The building, called the Plutonium Fabrication Pilot Plant and later the Fuels Development Laboratory, was

See **BUILDING** | Page B2

BRIEFS

6 APR 12

Oregon protesters bare breasts for Hanford

PORTLAND — Occupy Portland went topless Thursday in downtown Portland to draw attention to its planned Hanford rally in Richland on April 15, Willamette Week reported.

The publication posted a picture on its website showing the back of a shirtless woman wearing a gas mask as she faced a Metropolitan Area Express light rail train.

It also said the bare-

chested activists, a group of eight women and three men, had painted multicolored radiation symbols on their bodies.

The Herald was unable to reach Miriam German, who has acted as the spokeswoman for the Hanford rally.

The rally, "Hanford: America's Fukushima," is planned for noon to 5 p.m. in the John Dam Plaza in Richland.

Hanford contractor CEO addresses layoff rumors

CH2M Hill Plateau Remediation Co. addressed rumors of potential layoffs Thursday with a memo to employees

from Chief Executive Officer John Lehew.

The Hanford contractor is in the early stages of evaluating staffing and has no specific information now, the memo stated.

The current work force is aligned with the budget available for the fiscal year, it stated.

But as the remaining economic stimulus spending work that carried over to this year is completed and other work is performed, the contractor is evaluating various staffing scenarios to meet the Department of Energy's 2015

vision, the memo stated. The 2015 vision includes completing most environmental cleanup along the Columbia River, knocking down the Plutonium Finishing Plant and implementing remaining ground water cleanup actions.

"We are also assessing our skill mix needs to align our staff and skills to reflect work scope planned in future years," the memo stated.

CH2M Hill plans an all-hands meeting later this month at which Lehew will address concerns.

- Herald staff

DOE optimistic that eighth tank emptied

If so, it would be first tank cleared in 5 years; agency evaluating residual waste

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy believes it may have finished removing radioactive waste from an underground tank at Hanford, which would make it the first tank emptied in five years.

However, DOE is continuing to evaluate the residual waste left in the tank before notifying the Washington State Department of Ecology, the regulator on the project.

Hanford has 149 single-shell tanks, some dating back to World War II, that have held waste left from past processing of irradiated fuel to remove plutonium for the nation's weapons program.

It has removed waste down to regulatory standards in seven of them, and Tank C-108 would be the eighth. Tank C-108 also is one of 16 tanks that

a court-enforced consent decree requires to be emptied by fall 2014.

Although it's been five years since a tank has been declared empty, significant amounts of waste have been removed from underground tanks. Almost 2 million gallons of radioactive waste have been retrieved since 2002 from single-shell tanks and transferred to newer, double-shell tanks to await treatment.

Among the challenges of emptying



the tanks is the different consistencies of waste, which range from the density of peanut butter to gravel to low-strength concrete.

Many of the tanks have required more than one technology to remove the waste.

That was the case for Tank C-108.

A modified sluicing system was used in the tank more than four years ago when it had about 66,000 gallons of solid waste. Pumpable liquids already have been removed from all single-shell tanks.

Modified sluicing, which lowers two

high-pressure nozzles into a tank to spray liquid on waste and move it toward a central pump, was able to remove all but 6,800 gallons of waste in a hard layer at the bottom of Tank C-108.

To remove as much of that layer as possible, contractor Washington River Protection Solutions turned to a chemical dissolution system.

Work began in October to soak the remaining waste in water, which helped remove water-soluble salts. In

13 APR 12

Local reaction mixed about Oregon group's agenda, goals

ANNETTE CARY

HERALD STAFF WRITER

Occupy Portland plans to occupy John Dam Plaza in Richland for five hours Sunday afternoon, hoping to raise awareness about what the group calls the environmental tragedy of Hanford.

The group has been getting the word out in Portland, most recently by a topless rally downtown, and will have up to three chartered buses available for people wanting a ride to Richland, said Miriam German, spokeswoman for the Hanford rally. In addition, the Squadron 13 antiwar bus from Eugene is expected to make the drive to Richland.

Occupy Portland has lined up a list of speakers that starts with Dr. Helen Caldicott, an activist opposing nuclear

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power and weapons, who cofounded Physicians for Social Responsibility, according to her website.

Occupy Tri-Cities members may or may not support the rally — depending on who you ask.

Jason Caryl of Pasco had a letter to the editor published in the Tri-City Herald last month saying that Occupy Tri-Cities as a group does not support the rally, which is focused mainly on “anti-nuke rhetoric.”

Occupy Tri-Cities is concentrating on other issues, including removing big money from politics, ending corporate personhood, promotion of buying local, and green and sustainable technologies, the letter said.

However, a message from Occupy Tri-Cities Facebook page to the Herald said the letter had not been approved by the

group's general assembly and does not speak for everyone in the group.

The Eastern Washington Section of the American Nuclear Society also has issues with the rally, based on information Occupy Portland has released. Those who live near Hanford are as familiar with issues of government waste as Occupy Portland, said Gerald Woodcock, speaking on behalf of the society.

“Where we part company is in their characterization of, and fears about, Hanford and its operations,” he said. “Nothing in Hanford's operating history or present activities poses the slightest threat to anyone in Portland.”

The Occupy Hanford rally is planned to focus on three broad themes, each tied to Hanford, German said.

Many of the invited speakers come from peace groups, and the rally will oppose nuclear weapons. While the work at Hanford now is focused on

10 APR 12

More vit plant layoffs coming

Bechtel National plans 200-300 more cuts by end of 2012

ANNETTE CARY

HERALD STAFF WRITER

Bechtel National will begin sending out a new round of layoff notices late this month as it cuts another 200 to 300 positions at the Hanford vitrification plant by the end of the year.

The layoffs are for nonconstruction workers, after Bechtel sent out layoff notices to 198 construction workers at the end of March, bringing total layoffs of construction workers to about 550 during a five-months period. Bechtel plans no more layoffs of construction workers this year.

Bechtel is doing some belt

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tightening at the vitrification plant, which includes reducing overtime, reviewing purchases and reviewing subcontracts, which also could lead to some job losses at some subcontractors on the project.

It is aligning its work force with current vitrification plant project priorities and resulting work plans, it said in a statement last week. The \$12.2 billion plant is being built to treat up to 56 million gallons of radioactive waste left from past weapons plutonium production.

The nonconstruction positions that will be cut provide technical, construction and other support to the project, said Suzanne Heaston,

DOE seeks vit plant project director

Current one finishes in May

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is looking for a new federal project director for Hanford's vitrification plant.

It does not plan to renew a loaned executive agreement that has Dale Knutson of Pacific Northwest National Laboratory serving as federal project director for the Hanford vitrification plant.

Knutson, while remaining a PNNL employee, has served as DOE project director since May 2010. The agreement expires next month.

"The department is going through a deliberative process to identify the potential candidates for this position," Scott Samuelson, manager of the DOE



Knutson



Samuelson

Hanford Office of River Protection, said in a memo to employees Tuesday.

Samuelson praised Knutson, saying he established a strong project team and successfully transitioned the project focus from design and construction to construction and commissioning.

Knutson also worked with a DOE and contractor team to start extensive testing and analytical programs to resolve key technical issues, Samuelson said.

"We appreciate Dale's service in this role and wish him the best in his future

endeavors," Samuelson said in the memo.

Shortly before Knutson was named project director, DOE changed the reporting structure for the position, giving the project director a direct line to officials at DOE headquarters, apparently catching Congress by surprise.

Rep. Doc Hastings, R-Wash., inserted language into the National Defense Authorization Act for Fiscal Year 2012 saying DOE must notify Congress of any changes to the Office of River Protection responsibility or reporting structure.

In February DOE clarified that Samuelson is accountable for all aspects of Office of River Protection work, which includes the vit plant.

Knutson oversaw difficult years at the vitrification plant, with the Defense Nuclear Facility Safety Board advising more work to resolve technical issues

that could affect the future safe operation of the plant and an improved nuclear safety culture to encourage employees to raise technical concerns that could affect safe operations.

Knutson also was pulled into the periphery of whistleblower lawsuits. Plaintiff Walter Tamosaitis, the former research and technology manager for the plant, maintained that a deal had been created to return Tamosaitis to work at the plant but that Knutson participated in overturning that decision after hearing that Tamosaitis was a whistleblower.

Knutson indicated in a legal proceeding that he did not tell Bechtel or its subcontractor to take any specific action with Tamosaitis.

◆ *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

13 APR 12

CH2M Hill planning up to 400 job cuts

Layoffs at contractor to be done in late June and late September

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy's central Hanford contractor plans to cut up to 400 positions between now and late September, CH2M Hill Plateau Remediation Co. told workers Thursday afternoon.

The layoffs will come in two phases with the first reduction in late June and the second

in late September, said CH2M Hill President John Lehw in a memo to employees. Now CH2M Hill and its main subcontractors employ 1,807 people.

Layoffs will include union and nonunion employees. They also will include workers who are employed directly by CH2M Hill and those employed by the 11 subcontractors who

See **JOB CUTS** | Page A2

Reach budget cut means 2 job losses

New executive director says outside marketing, public relations, marketing axed

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center will see two positions eliminated and the operations budget cut by 28 percent for the remainder of the year.

The Richland Public Facilities Dis-

trict Board voted at its meeting Monday to accept the recommendations of Lisa Toomey, executive director of the interpretive center and the facilities district.

Toomey said the layoffs and across-the-board expense cuts will reduce costs for this year by 35 percent and bring a 58 percent savings for 2013.

She said the move is important to bring the budget "back in line" and to show the public the interpretive center is committed to moving ahead with the multimillion-dollar project at Columbia Park.

A communications position and a grant writer position are being cut. Toomey, who was under orders to find ways to reduce expenses, told the facilities district board that she had looked at every other possible way, including salary cuts. She had hoped to not have layoffs.

The final decision came after Toomey considered what the essential job skills were and which employees could best meet the needs.

"The staff has been pretty stand-up about this. They want the project to succeed. The staff stood up and made

the sacrifices," said Toomey, who was hired 90 days ago to replace Kimberly Camp, the former chief executive officer for The Reach.

The cost-cutting strategy, which will remove \$283,000 from the 2012 operational expenses, also eliminates all outside consulting for marketing, public relations and fundraising, Toomey said.

"We're going to do this ourselves. The intent is to manage the project internally," Toomey said.

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Officials say alternatives to treat low-activity waste need to be considered

19 APR 12

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is not ready to commit to expanding the Hanford vitrification plant to treat all 56 million gallons of radioactive tank

waste, upsetting its regulators at the state of Washington.

DOE will not choose a preferred method for treating all Hanford tank waste in a massive environmental study about to be completed, officials said.

“To say that we are exceedingly disappointed is an understatement,” said Suzanne Dahl, tank treatment section manager for the state Department of Ecology.

The state believes that the data in

the draft Tank Closure and Waste Management Environmental Impact Statement released in late 2009 make a clear environmental protection case for expanding Hanford’s vitrification plant by adding a second Low Activity Waste Facility. The final version of the massive study, which has been in the works for eight years, is expected in June.

“We do not think it is forthright and genuine to put the second LAW (Low Activity Waste Facility) as the pre-

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ferred alternative,” said Stacy Charboneau, deputy manager for the DOE Hanford Office of River Protection. “We feel very much at DOE that as good stewards of taxpayer money, we need to look at alternatives.”

Those alternatives could be less expensive or treat the waste more quickly, she said.

The \$12.2 billion vitrification plant under construction originally was planned as the first of two plants to treat 56 million gallons of radioactive waste held in underground tanks. The waste is left from the past production of weapons plutonium.

But in 2003, the plant’s design was changed to treat all of the high-level radioactive waste, which will be sent to a deep geological repository, and

See **VIT PLANT** | Page A2

PLUTONIUM FINISHING PLANT

Vault complex torn down

Facility once was among most secure sites in the U.S.

ANNETTE CARY

HERALD STAFF WRITER

What once was one of the most secure complexes in the nation has been torn down.

The plutonium vault complex, where plutonium for the nation's nuclear weapons program once was stored at Hanford's Plutonium Finishing Plant, has been demolished, the Department of

Energy announced Tuesday.

Built in 1971, the vault complex held the top-secret stores of plutonium in metal canisters until they were shipped off Hanford for fabrication for use in weapons.

At Hanford, uranium fuel was irradiated at one of nine production reactors, the plutonium was separated from the fuel at huge processing buildings and then the Plutonium Finishing Plant would turn the plutonium liquids into metal buttons the size of hockey pucks. The plant produced about two-thirds of the nation's plutonium during the Cold War.

At the end of the Cold War, 2,300 canisters of plutonium, each the size of a large coffee can, were left stored at the vault complex under heavy guard as the Plutonium Finishing Plant was cleaned up. The weights of the cans varied, but some held almost 10 pounds of plutonium.

The vaults originally used free-standing pedestals to store the plutonium. But as the plant was stabilized and cleaned out after plutonium production ended at Hanford, storage capacity was increased

See **VAULT** | Page B2

18 APR 12

Reach center to get \$1 million donation

Mission Support Alliance, Lockheed Martin plan to give cash, in-kind services to project

JOHN TRUMBO

HERALD STAFF WRITER

Mission Support Alliance and Lockheed Martin will donate \$1 million in cash and in-kind services to the Hanford Reach Interpretive Center project.

Frank Armijo, president of Mission Support Alliance, announced the donation Tuesday morning at the MSA headquarters in Richland.

The contribution, which includes \$500,000 in cash, fills "a critical role at a critical time by this valuable partner," said George Garlick, local entrepreneur

and philanthropist, in introducing Armijo.

Fred Raab, president of the Richland Public Facilities District Board, said MSA's generosity will help further the project to build a world-class 61,000-square-foot facility at the west end of Columbia Park and will be a catalyst to inspire other businesses and individuals to get behind the project.

"The Hanford Reach Interpretive Center will be a cultural cornerstone to celebrate the history and the people who

CH2M Hill contract to be extended

Extension valued at \$2.2B
for 5 years of environmental
cleanup work at Hanford

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy notified CH2M Hill Plateau Remediation Co. on Wednesday that it plans to extend its contract for five years.

The contract extension is valued at

about \$2.2 billion.

"We determined CH2M Hill remains the best value to the government on the basis of price and other factors," said Matt McCormick, manager of the DOE Hanford Richland Operations Office, in a statement. "Extending the contract ensures continuity in cleanup as we finish major projects over the next five years."

CH2M Hill won the contract to perform central Hanford cleanup in 2008 after a competitive bid process.

Then the contract was valued at

about \$4.5 billion over 10 years, including the base period and an option to extend the contract for another five years. The contract ended up being worth more because of \$1.3 billion in economic stimulus money that DOE used for environmental cleanup performed by CH2M Hill.

"We are very happy with the announcement and that DOE has the confidence in us to continue the great work we have achieved in protecting the Columbia River and cleaning up the Hanford site," said John Lehew, CH2M

Hill president. "We look forward to maintaining our momentum in safely achieving the DOE's 2015 Vision and beyond."

CH2M Hill has about 1,800 employees and is responsible for demolishing facilities once used in plutonium production, cleaning up contaminated soil, managing solid radioactive waste and monitoring and cleaning up contaminated ground water. Hanford is contaminated from the past production of weapons plutonium during World War II and the Cold War.

In considering the contract extension, DOE looked at factors such as CH2M Hill's performance on meeting cost and schedule goals, how well it has performed work and the extra work it took on as part of federal economic stimulus spending under the Recovery Act, said DOE spokesman Cameron Hardy.

"It was a huge challenge to take on Recovery Act work and double the work force in the first year of the

See **CONTRACT** | Page A2

17 APR 2012

Hanford seismic analysis planned

Last full assessment
of site was in 1996

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is taking a new look at earthquake hazard at Hanford, conducting an assessment that will update the last comprehensive one conducted in 1996.

Federal regulations require assessments for natural hazards, such as earthquakes, at sites such as the Hanford nuclear reservation to be updated

B Reactor just a start to park idea

Early draft of Senate legislation would create historical site

ANNETTE CARY

HERALD STAFF WRITER

More than Hanford's historic B Reactor could be part of the Hanford unit of a new Manhattan Project National Historical Park, according to an early draft of proposed Senate legislation to create the park.

The park potentially could include Hanford's T Plant, which chemically processed the irradiated fuel from B Reactor, and the remains of settlements in the area before the federal government con-

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fiscated what now is Hanford during World War II.

The draft was previewed Friday at a conference of the Energy Communities Alliance on the proposed Manhattan Project National Historical Park, which would include historic facilities at Department of Energy sites at Hanford; Oak Ridge, Tenn.; and Los Alamos, N.M.

During World War II, as the United States raced to build an atomic bomb, 670 square miles of desert was picked as the Hanford nuclear reservation, where the nation would produce plutonium for the

25 APR 12

Senate aims to raise Hanford budget

In House chamber, lawmakers propose less cleanup money

ANNETTE CARY

HERALD STAFF WRITER

The Senate is proposing increasing the Hanford budget for next year from the amount requested by the Obama administration, but the House is proposing a reduced budget.

The early Senate version of the budget proposes a \$12 million increase and the early House version proposes a \$27 million cut focused on the tank farms and the Plutonium Finishing Plant.

The report included with the House version also suggests that some legal agreements for environmental cleanup with states across the nation may not be realistic and will need to be renegotiated. The Senate report is not available yet.

Subcommittees for the Senate and House Appropriations committees have completed initial markups of the administration's budget request for fiscal 2013, which was close to the \$2.2 billion being spent this year at Hanford. Markup totals

for Hanford do not include security and safety costs, which are included elsewhere in the budget.

Hearings on the respective proposed budgets will be heard by the full House Appropriations Committee today and by the full Senate Appropriations Committee on Thursday.

INSIDE

Senate bill would start search for waste storage site. | **B1**

River Protection, which includes \$690 million for the vitrification plant and \$482 million for the tank farms.

“But it increases the money for the remainder of Hanford work, which is under the DOE Hanford Richland Operations Office, from the administration's request of \$963 million to \$975 million. The additional \$12.1 million would go to central Hanford cleanup.

“At a time when there are fewer resources available for so many of our nation's priorities, I know that we can never allow Hanford cleanup to slip through the cracks in the budgeting process,” Sen. Patty Murray, D-Wash., said

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in a statement. “This isn't some luxury we can simply cut when times get tough. The federal government has a moral and legal obligation to fund the Hanford cleanup.”

Hanford is contaminated from World War II and Cold War production of plutonium for the nation's nuclear weapons program.

“I am hopeful that the House of Representatives joins the Senate in funding Hanford at the level the Tri-Cities community needs and deserves,” Murray said.

The House version of the budget cuts tank farm spending by \$17 million to \$465 million. That's \$2 million beneath the amount needed to comply with a court-enforced consent decree negotiated by DOE and its regulators, including the state of Washington.

It also cuts Richland Operations Office spending by \$10 million to \$953 million. The cut targets the Plutonium Finishing Plant, which the appropriation report said is behind schedule, trending over budget and

Hanford target of protest

Activists bring anti-nuclear message to 'the belly of the beast'

ANNETTE CARY

HERALD STAFF WRITER

Occupy Portland spent a mostly mellow afternoon in Richland's John Dam Plaza on Sunday.

About 150 attended, hearing messages in opposition to nuclear war, nuclear energy and nuclear waste.

Speakers repeatedly reminded the crowd that they were there because Richland is next to the most radiologically contaminated site in the Western Hemisphere, the Hanford nuclear reservation where weapons plutonium was produced during World War II and the Cold War.

"It's the belly of the beast," activist Dr. Helen Caldicott said.

But the sun shone, children and dogs played, peo-



Dr. Helen Caldicott, right, a physician and anti-nuclear activist, shares a laugh backstage Sunday with activist Dorli Rainey, center, who was made famous in Joshua Trujillo's photograph of her after she was pepper-sprayed at an Occupy Seattle event in November. The two women were among the speakers at the rally.

ple danced to the music of Portland bands, tribal members beat drums and good

food was eaten.

Along George Washington Way, demonstrators in anti-

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contamination suits waved signs at passing traffic.

"Go home you damn hippies," yelled one person from a passing pickup.

But another man stopped in the center lane to have a shouted conversation across two lanes of traffic with the demonstrators.

He tests water at Hanford, and environmental cleanup progress is being made there, he said. He thanked the demonstrators for caring, but said they needed to get their facts straight.

The rally was part theater. One woman in a flowing

House finds \$8M more for tank farms

Proposed budget still below Senate's \$482M draft bill

ANNETTE CARY

HERALD STAFF WRITER

The House Appropriations Committee has found \$8 million more for the latest version of its Hanford tank farms budget for next year.

The committee also removed criticism of Hanford's Plutonium Finishing Plant from the report accompanying

the appropriations bill.

That puts the House version of the Hanford budget for the tank farms at \$473 million, which is \$6 million above the amount estimated to be needed to do work required by a court-enforced consent decree.

It also brings it closer to the Senate version of the Hanford budget, as marked up by a Senate Appropria-

tions Subcommittee on Tuesday. That Senate version includes \$482 million for the tank farms, matching the Obama administration's request for Congress.

Although lower, the Republican-controlled House number still is about \$28 million more than the current budget for the tank farms.

Unchanged in the House budget after it moved from subcommittee to full committee is a cut of \$10 million from the administration's request of

INSIDE

Senate moves to delay postal service closures, including Pasco's. | B4

\$963 million for cleanup under the Department of Energy Hanford Richland Operations Office.

The Democratically controlled Senate subcommittee version of the budget includes \$12 million more for that work than the administration's request.

The Richland Operations Office is responsible for all work at Hanford, except for the tank farms, where 56 million gallons of radioactive waste are held in underground tanks, and the \$12.2 billion vitrification plant is being built to treat the waste. Hanford formerly created plutonium for the nation's nuclear weapons program.

Among the Richland Operations Office responsibilities is cleanup of the

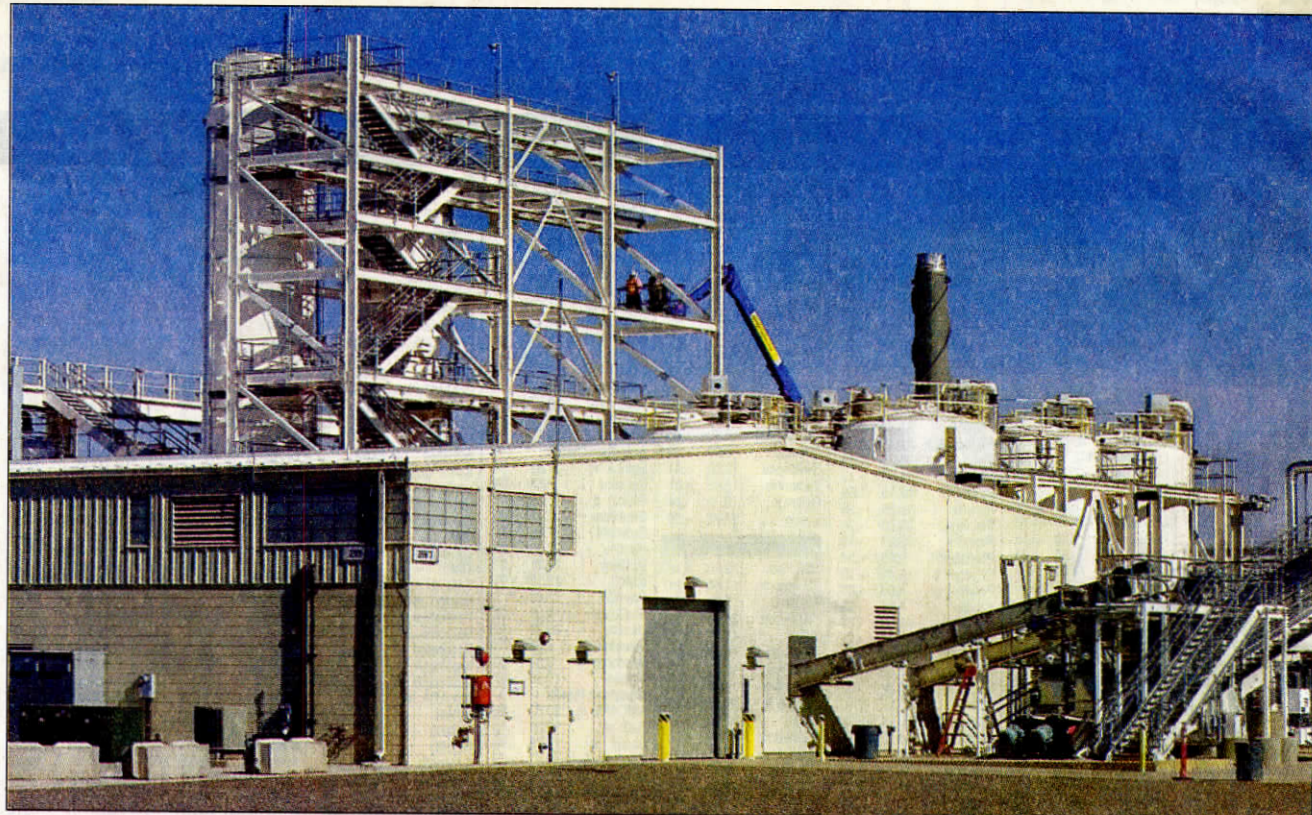


Photo courtesy Department of Energy

The 200 West Ground Water Treatment Facility on the Hanford nuclear reservation is the Department of Energy's first weapons complex project to achieve LEED Certification for sustainable design.

Treatment plant recognized

It's the first DOE site doing cleanup to earn Gold honor

ANNETTE CARY

HERALD STAFF WRITER

Hanford's sophisticated new ground water treatment plant has been awarded the gold for going green.

It's the first plant in the Department of Energy's complex of defense sites undergoing environmental cleanup to be awarded Leadership for Energy and Environmental Design, or LEED, Gold Certification.

The certification recognizes sustainable design, and gold certification is the second-highest benchmark set by the U.S. Green Building Council for high-performance green buildings.

The 200 West Ground Water Treatment Facility was completed in 2011 and is expected to begin operating this summer. It's planned to remove 95 percent of the contaminants in ground water beneath about five square miles in central Hanford over 25 years.

"Achieving LEED certification required diligence on the part of the entire project team because the focus is on energy use and recycling goals for both construction and operation," said Kent Dorr, CH2M Hill Plateau Remediation

Co. vice president, in a statement.

DOE and CH2M Hill worked together to meet requirements for LEED Gold Certification, using 420 tons of recycled concrete to build the plant. About half of the steel used also was recycled.

Recycling was emphasized during construction, with 42 tons of metal and nine tons of paper and cardboard recycled. More than 75 percent of construction waste was diverted from landfills.

When the plant begins operating, translucent panels on the building's exterior will reduce the need for interior lighting.

The building's efficient design is expected to result in an energy cost savings of more than 70 percent over the life of the facility, according to CH2M Hill.

"Designing and constructing a high-performance green process facility is a long-term commitment to sustainability for the Hanford site," Dorr said.

It also shows DOE's commitment to restoring the environment at Hanford, said J.D. Dowell, DOE assistant manager for cleanup near the Columbia River and in central Hanford.

"This facility is also one of the largest ground water treatment systems of its kind throughout the DOE complex for both radiological and nonradiological contaminants," Dowell said in a statement. "It will help protect Hanford's ground water and prevent the move-

ment of contamination toward the Columbia River."

The new plant will replace a temporary plant that now pumps 400 gallons of water a minute out of the ground and treats it to remove carbon tetrachloride only.

The new plant is expected to pump up to 2,000 to 2,500 gallons of water a minute and operate 24 hours a day. When the water is cleaned to drinking water standards, it will be reinjected into the ground in key places to contain contamination and push it toward the wells that pump out the water.

Over the lifetime of the plant, it is expected to treat 25 billion gallons of ground water and remove 77,000 to 110,000 pounds of carbon tetrachloride.

It also will remove radioactive technetium 99 and iodine 129, plus chromium, trichloroethene and nitrates.

The ground water in central Hanford is contaminated from past production of weapons plutonium at the nuclear reservation. Liquids contaminated with chemicals and radioactive elements were discharged to soil disposal sites during World War II and the Cold War. Leaks from large underground storage tanks also contributed to contamination.

► Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com

15 MAY 12
Two species grow only in Hanford Reach are closed to public

ANNETTE CARY

HERALD STAFF WRITER

U.S. Fish and Wildlife proposed Endangered Species Act protection Monday for two plant species that grow only in the area of the Hanford Reach National Monument.

Both species grow in narrow bands along bluffs above the Columbia River.

The Umtanum desert buckwheat grows on the McGee Ranch portion of the monument, which is southwest of the Vernita Bridge on the Columbia River. That area of the monument continues to be managed by the Depart-

ment of Energy and is closed to the public.

The second species, the White Bluffs bladderpod, grows on the other side of the Columbia River on its namesake bluffs. That portion of the monument is managed by Fish and Wildlife and is open to the public.

“Each of these plants is found on only

See **PLANT** | Page B2

13 MAY 12 Window is small to establish national park at B Reactor

Draft legislation requires written management plan, which could take years

ANNETTE CARY

HERALD STAFF WRITER

Sooner is better to establish a Manhattan Project National Historical Park because ideal conditions won't last long, say supporters of Hanford's B Reactor, which would be included in the park.

They're hoping to convince the Senate Natural Resources Committee to follow the lead of Rep. Doc Hastings, R-Wash., with proposed legislation.

Draft Senate legislation requires a management plan to be written for a new Manhattan Project site, which could take several years, and then supporters would have to return to Congress to convince it to authorize the national park.

The draft House legislation from Hastings would establish the park immediately and then would give the National Park Service a two-year

deadline to complete a management plan.

Delays could jeopardize formation of the new national park.

The timing is ideal now because of the bipartisan and interested leadership of the key Congressional committees needed to approve the plan, said Pam Larsen, executive director of the Hanford Communities, a coalition of Hanford-area local governments.

Hastings, a Republican from Pasco, chairs the House National Resources Committee and Jeff Bingaman, a Democrat from New Mexico, chairs

the Senate Natural Resources Committee. Historic sites in Washington state, New Mexico and Tennessee would be included in the new multi-site national park.

However, Bingaman plans to retire at the end of his term and it's unknown if the next chairman of the Senate committee will support the national park proposal.

In addition, a change in the White House could mean a change of leadership in the National Park Service. Ken Salazar, Secretary of the Interior, has supported the proposal, and the

Department of Energy has agreed to partner with the park service.

The proposed park would tell the story of the race to develop an atomic bomb during World War II, amid fears Germany also was developing a bomb.

At Hanford, B Reactor was built in little more than a year, producing plutonium for the bomb dropped on Nagasaki, Japan, which helped end the war. It also ushered in the Atomic Age.

Including B Reactor in a national

Hastings worries about key DOE jobs

Federal project director for vit plant, DOE assistant secretary spots remain open

ANNETTE CARY

HERALD STAFF WRITER

Letting the key Department of Energy headquarters position responsible for overseeing Hanford cleanup remain vacant since July 15 is unacceptable, said Rep. Doc Hastings, R-Wash., in a letter to President Obama this week.

He also made his wishes clear in a separate letter to DOE on another key position that soon will be vacant, the federal project director for the Hanford vitrification plant.

Ines Triay, the last DOE assistant secretary of environmental management, resigned from the position in July. It's the top position for DOE environmental cleanup with responsibility for an approximately \$5 billion annual budget.

David Huizenga was named to fill in

as acting assistant secretary, but that expired after 210 days, the maximum time allowed by law. He's now serving as senior adviser for environmental management.

"It's unacceptable that after nearly a year this administration has failed to even nominate a new leader for this program," Hastings said in the letter. "I request that an assistant secretary be nominated without further delay."

No explanation has been given for the delay in nominating someone.

Naming Huizenga a senior adviser does not provide the DOE environmental cleanup program with any level of certainty or sense of continuity, Hastings said. It also does not provide Huizenga with the authority and accountability needed to meet challenges in the DOE cleanup program, he said.

"I believe that having an assistant secretary in place would help strengthen the environmental management program and put the federal government in a better position to meet its legal cleanup obligations," Hastings said.

In a letter to Huizenga, Hastings advised DOE headquarters to work closely with the DOE Hanford Office of River Protection manager to select a new federal project director.

Dale Knutson has been on loan from Pacific Northwest National Laboratory since May 2010 to fill the position, but DOE does not plan to renew the contract when it expires at the end of the month. It plans to put a federal employee in the position.

"I am hopeful that in determining the types of candidates to consider the department will seek to do everything possible to ensure continuity in this key position," he said.

Hastings told Huizenga he is concerned that not having a federal project director in place as Bechtel National prepares a proposed new cost and schedule for the \$12.2 billion vitrification plant would harm or delay the process.

Hastings also reminded DOE that he inserted language into the National Defense Authorization Act for Fiscal Year 2012 saying DOE must notify Con-

gress of any changes to the Office of River Protection responsibility or reporting structure.

The law is clear that the Office of River Protection manager, now Scott Samuelson, is in charge of the vitrification plant and reports directly to the assistant secretary for environmental management, Hastings said.

"Attempts to circumvent this law have resulted in confusion and uncertainty that are ultimately detrimental" to the vitrification plant project, he said.

Shortly before Knutson was named project director, DOE changed the reporting structure for the position, giving the project director a direct line to officials at DOE headquarters, apparently catching Congress by surprise. The reporting structure was clarified three months ago to indicate that the manager of the Office of River Protection is responsible for the vit plant.

► *Annette Cary: 582-1533; acary@tricityherald.com; more Hanford news at hanfordnews.com*

80,000 expected for Hanford expo

Health event scheduled for Tuesday, Wednesday

ANNETTE CARY

HERALD STAFF WRITER

A crowd approaching 80,000 is expected for the popular Hanford Health and Safety Expo on Tuesday and Wednesday at TRAC in Pasco.

Last year 77,000 people attended the event as measured by clicks through the turnstile, and each year it tends to draw more people.

The free event from 7 a.m. to 7 p.m.

each day attracts a core group of Hanford workers, but its many hands-on activities also draw families and day-care and school groups.

Some popular exhibits will be back, including the distracted driving car of the Hanford Patrol. Software simulates distractions such as talking on a cell phone.

More than 200 other booths will feature a mix of health-related information, products and activities, including a safety hazard golf course.

Classes will include a session at 11:30 a.m. both days to familiarize people with the operation of an automated external defibrillator for sudden heart

problems; personal safety at noon both days; cardiopulmonary resuscitation at 1:30 p.m. both days; and safe driving at 3 p.m. both days.

Children can test their bike skills at a bicycle rodeo from 3:30 to 5:30 p.m. both days. Bikes will be available. In addition, a limited number of bike helmets will be fitted and given away.

Kennewick Cycle and Fitness also has refurbished 24 bikes that will be given away.

The forklift rodeo for Hanford contractor employees is back this year. Competition will be in the TRAC pavilion starting at 8:30 a.m. Wednesday and concluding with a closing cere-

mony at 2:30 p.m. The top eight drivers will advance to a regional competition.

A vehicle accident demonstration, which shows what happens after an accident, will be at 10 a.m., 2 p.m. and 5:30 p.m. each day.

The cast this year will include the Hanford Fire Department and its extraction equipment, wrecked cars from Casaday Towing, area law enforcement officers, the Benton and Franklin county coroners, Hillcrest Memorial and the MedStar helicopter.

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HANFORD WHISTLEBLOWER LAWSUIT

4 MAY 12

DOE wants dismissal from case

ANNETTE CARY

HERALD STAFF WRITER

Judge Lonny Suko heard the Department of Energy argue to be dismissed from a lawsuit brought by a Hanford whistleblower Thursday, but he declined to rule immediately.

However, the Eastern Washington District U.S. judge indicated how he plans to rule on two of three other motions discussed in Yakima within a lawsuit

brought by Walter Tamosaitis, the former manager of research and technology at the Hanford vitrification plant.

Tamosaitis, a Richland resident, has sued his employer, URS Energy and Construction; its parent company, URS Corp.; and DOE, claiming he was removed from work at the \$12.2 billion vitrification plant project because he raised safety concerns.

See **DOE** | Page A2

BRIEFS

Bechtel receives better hearing award

The Columbia Basin Hearing and Balance Center is presenting Bechtel Corp. with a Better Hearing Partner Award.

Bechtel, which is building the Hanford vitrification plant, has gone beyond minimum requirements for hearing loss prevention. It was recognized for excellence by the National Hearing Conservation Association earlier this year.

Noise-induced hearing loss almost is always preventable, yet it accounts for a least a third of hearing impairments in the United States, according to Columbia Basin Hear-

Vit plant reaches safety milestone after 1.5 years

Employees and subcontractors at the Hanford vitrification plant have worked 11 million hours without an injury that caused a lost day of work.

About 2,750 construction workers, engineers and other professionals work on the project, including 600 people who work at the project's 65-acre construction site.

They worked more than a year and a half to reach the milestone.

"Each day our site employees face hazards associated with heavy construction, such as operating large cranes and equipment, transporting materials and working at heights," said Frank Russo, Bechtel National project director, in a statement.

Last massive door delivered to vit plant

The last massive door designed to act as a radiation shield has been delivered to the Hanford vitrification plant.

It weighs 102 tons and will be installed in the High Level Waste Facility, where high level radioactive waste left from weapons plutonium production will be turned into a stable glass form for disposal.

"Receipt of the last of the shield doors represents a significant milestone in progress on the project, and they are an integral part of the plant's safety infrastructure," said Joe St. Julian, Bechtel National area project manager. Bechtel is designing and building the vit plant.

The plant has more than 100 nuclear-quality shield doors, ranging from three to 119 tons. They will provide radiation protection and maintain contamination boundaries during plant operations.

The recently delivered shield door is made of carbon steel and measures more than 15 feet wide, 36 feet tall and 7 inches thick. It will be installed in the area of the High Level Waste Facility that holds the melters.

- Herald staff

9 MAY 12
**WSU set
to receive
\$2M in
DOE cash**

Grants linked to work
on nuclear research
in tandem with PNNL

ANNETTE CARY

HERALD STAFF WRITER

Washington State University Pullman has been awarded almost \$2 million in Department of Energy grants to help advance nuclear research while educating the next generation of leaders in America's nuclear industry.

Pacific Northwest National Laboratory in Richland will work with WSU on research paid for with some of the grant money and will play a role in five other university-led projects that also received some of the \$47 million in grants announced Tuesday.

WSU will receive two research and development awards for a total of \$1.8 million to improve understanding of the molecular level processes and interactions during separation processes for advanced fuel cycles.

The understanding of these interactions will be used to develop more robust and streamlined separation processes for advanced fuel cycles.

Researchers also will conduct experiments to understand the mechanisms responsible for the corrosion of nuclear waste forms in realistic chemical environments.

PNNL's experimental testing and mathematical modeling capabilities will be needed in the separation of radiochemical species during waste processing and high level radioactive waste form qualification.

WSU also will receive \$234,553 for nuclear energy research equipment.

PNNL also has teamed with the University of Notre Dame, Georgia Institute of Technology, Northwestern University, Boston University and Alfred University.

"We must invest in the next generation of American scientists and engineers in order to fulfill our commitment to restarting America's nuclear industry and making sure that America stays competitive in the 21st century," said Energy Secretary Steven Chu in a statement.

"These investments in Washington will help train and educate our future energy leaders, while developing the innovations we need to create new jobs and export opportunities for American-made nuclear technologies," he said.

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HANFORD

Asbestos levels tested OK

Workers raised concerns in January about steam lines, demolished building debris

ANNETTE CARY

HERALD STAFF WRITER

Sampling to check for asbestos has been completed at Hanford with none detected at levels believed to affect worker health, according to the Department of Energy.

"The data reviewed for this evaluation ... indicate there is little in the way of occupational asbestos exposure risk to the workers on the site due to the activities associated with demolition of facilities," said a report released Tuesday.

However, that does not mean concerns

were unfounded, said a message sent to all Hanford employees Tuesday by Matt McCormick, manager of the DOE Hanford Richland Operations Office.

"We all have a right to raise concerns and to have those concerns addressed," he said in the message.

Multiple Hanford workers started asking questions in January about asbestos risks.

They were concerned about outdoor steam lines with asbestos-containing insulation that could be disturbed by the weather or nearby work. They also questioned whether buildings that had been demolished to ground-level might have left asbestos-containing material that could be broken into pieces by walking or driving through it.

In other cases, asbestos-materials in deteriorating buildings that have yet to

be demolished could pose a risk, they said.

Part of the concern came from an Environmental Protection Agency inspector general report on whether Hanford contractors should be allowed to mechanically remove cement asbestos board, or transite, siding.

The transite siding is considered non-fragile because it doesn't easily crumble into a powder that can be breathed in. Breathing in fine fibers of asbestos can cause cancer and other lung diseases, sometimes decades after exposure, according to the U.S. Centers for Disease control and Prevention.

However, the EPA inspector general questioned whether there was a risk of the siding becoming crumbled, pulverized



Photos by Richard Dickin | rdickin@tricityherald.com

Top: A spray truck keeping down the dust casts a rainbow over a track hoe Monday in the area near N Reactor at the Hanford nuclear reservation. Washington Closure Hanford is close to knocking out the structures on the banks of the Columbia River that supported operations of the reactor. This includes the water intake facility that was topped with a guard tower and a second water intake facility up river. **Above:** A herd of elk grazes Monday near the school at the old Hanford town site on the nuclear reservation. The old town was taken over by the government in the early 1940s under its eminent domain authority. The government ordered about 1,500 residents of Hanford, White Bluffs and nearby settlements to leave and also closed the area to the Wanapum band and regional tribes. Work is under way elsewhere at Hanford to clean up contamination from past production of nuclear weapons. [See a photo gallery at tricityherald.com.](#)

8 MAY 12 Boaters to see more natural shoreline near N Reactor

ANNETTE CARY

HERALD STAFF WRITER

Boaters downstream from the Ver-nita Bridge on the Columbia River this summer will see a shoreline that's starting to look like it did decades ago.

Washington Closure Hanford is completing the removal of two concrete water intake structures that extended over the river, one of which was topped by a 62-foot-high guard tower. It also is taking out a water outflow structure between the two.

"Those water intakes were some of the biggest structures along the river," said Gary Snow, director of deactivation

and demolition for Department of Energy contractor Washington Closure.

N Reactor operated from 1963-87 as the only reactor in the nation that produced plutonium for the nation's nuclear weapons program and steam for electricity.

It was the ninth and newest production reactor built at the Hanford nuclear reservation

along the Columbia River.

The reactor once was surrounded with dozens of buildings and other facilities to support the reactor, including the concrete structures built over the Columbia River.

They had rebar-reinforced concrete walls that were two to four feet thick. At the structure topped by a guard tower, six intake pumps provided 105,000 gallons of water each per minute to cool the reactor.

To allow the three structures to be demolished, rock was pushed into the river to build two manmade benches to serve as a platform for work and to help protect the river.

A 300-foot-long bench was built by the downstream water intake structure and a 500-foot-long bench was built in front of the upstream intake structure and also the outflow structure.

Photo gallery
tricityherald.com

16 MAY 12

Council worried about Hanford worker safety

HAMTC concerned
precautions could
be eroded under bill

ANNETTE CARY

HERALD STAFF WRITER

Hard-won safety protections for Hanford workers could be lost under a bill the U.S. House may consider today, according to the Hanford Atomic Metal Trades Council.

However, Rep. Doc Hastings, R-Wash., disagrees that the bill would affect Hanford.

The fiscal 2013 Defense Authorization Act would substitute Occupational Safety and Health Administration safety standards for Department of Energy stan-

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dards in DOE's nuclear weapons complex, according to fact sheets developed by national organized labor groups.

Some DOE standards are stricter than OSHA standards, including the beryllium standard. DOE's standard is 10 times as protective as OSHA's.

The bill would transfer health and safety responsibilities from DOE's Office of Health, Safety and Security to the quasi-independent National Nuclear Security Administration. The ability to impose fines for violations would be lost, according to

HANFORD

Richland firm gets subcontract

Will do construction for sludge retrieval from K West Basin

ANNETTE CARY

HERALD STAFF WRITER

Federal Engineers and Constructors of Richland has been awarded a \$10.8 million subcontract for a construction upgrade to prepare for sludge retrieval from the Hanford K West Basin.

FE&C will modify an annex attached to the K West Basin for Department of Energy contractor CH2M Hill Plateau Remediation Co., which is responsible for removing the sludge from the basin and treating it.

Radioactive sludge will be pumped from underwater, engineered containers in the K West Basin into the modified

annex, where it will go into casks. The casks will be loaded onto a trailer there to be taken to central Hanford.

Hanford produced plutonium for the nation's nuclear weapons program through the Cold War, but irradiated fuel was orphaned when chemical processing to separate out the plutonium from the fuel stopped at Hanford.

The unprocessed irradiated fuel from N Reactor was stored underwater in the K East and West Basins, with the water providing shielding from radiation. In the years before it was removed, it deteriorated and mixed with dirt, sand and debris to form a highly radioactive

sludge at the bottom of the basins.

The sludge has been vacuumed up and consolidated in underwater containers at the K West Basin, which is 400 yards from the Columbia River. But the sludge is planned to be moved to T Plant in central Hanford to allow environmental cleanup near the Columbia River to be completed by 2015.

The K West Annex now is a framed steel structure on a concrete foundation with metal siding and is not suitable for working with radioactive waste. But it's in an ideal location for the work.

FE&C will expand it with a reinforced concrete structure to 53 feet long and 26 feet wide. It also must be 35 feet high. A roll up door that is 14 feet wide and 16 feet high will be required to accommo-

date equipment and the trailer on which the cask will be loaded.

The annex will need to meet nuclear safety standards, including shielded ducts for the slurry transfer lines that are robust enough to shield workers from radiation.

The new portion of the annex will need to be seismically isolated from the existing annex, plus have protections in place to prevent a fire from spreading because of the high hazard nature of the work with the sludge.

The modified annex also will need heating, ventilation and air conditioning to allow work year round.

The work by FE&C is expected to take about a year.

See **SUBCONTRACT** | Page B7

Hanford vit plant receives new trolley

31 MAY
12

The Hanford vitrification plant recently received a specially designed trolley to be used to change out the High-Level Waste Facility melter.

The 100-ton melter is central to the vitrification process and are designed for a five-year lifespan then must be removed and replaced. The carbon steel trolley, also known as a "bogie," weighs 26 tons and measures 17-by-17-feet wide yet stands two feet tall.

The vitrification plant is being built to treat up to 56 million gallons of radioactive waste left from the past production of weapons plutonium at Hanford.

The trolley can hold 360 tons so it can hold the spent melter, any residual glass and the 250-ton protective steel container that houses the melter and is used for radiation shielding.

The trolley was manufactured by S.A. Technology in Loveland, Colo.

22 May 12

Murray pushes Hanford cleanup

Letter urges committee to remember cleanup at defense sites vital

ANNETTE CARY

HERALD STAFF WRITER

As the Senate Armed Services Committee is set to mark up the fiscal 2013 National Defense Authorization Act, Sen. Patty Murray, D-Wash., is emphasizing the importance of environmental cleanup.

She was the lead signer on a letter with eight other senators urging the Senate Armed Services Committee leadership to remember the nation's responsibility toward cleanup at Hanford and other defense sites.

The National Defense Autho-

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rization Act sets defense budget priorities, and environmental cleanup poses a tempting account to raid in a bill that deals

primarily with the active military.

Fiscal 2013 could be a particularly difficult year because of the looming possibility of sequestration triggered



Murray

by the failure of a special congressional deficit committee to reach agreement.

HANFORD

Some river cleanup to be delayed

Contractor points to money, additional contamination

ANNETTE CARY

HERALD STAFF WRITER

Some of the most complex and high radioactivity environmental cleanup work along the Columbia River at Hanford will be delayed.

Money is tight at Hanford and additional contamination has been found at other sites along the Columbia River that will require more work to clean up in the meantime.

Workers at Department of Energy contractor Washington Closure Hanford were told hours before the start of a four-day weekend Thursday of the change in plans for the 618-10 and 618-11 Burial Grounds and the high-level radioactive waste beneath the 324 Building.

"Because these areas hold some of the highest-hazard materials we've encountered at Hanford, this has caused us to pause and re-evaluate

our sequencing of work over the next couple of years," said Carol Johnson, president of Washington Closure, in a memo to employees.

The Environmental Protection Agency, which is the regulator for the 618-10 and 618-11 Burial Grounds, is disappointed in the slowdown, said Dennis Faulk, EPA Hanford program manager.

"But there are not the resources to go around," he said.

"There are other slowdowns that we are going to see," he said. "There is

just not the money to do all the work we want to do. It's the reality given the national budget limitations."

Washington Closure remains committed to DOE's 2015 Vision, which calls for most environmental cleanup along the Columbia River to be completed in 2015, said Mark McKenna, Washington Closure spokesman. Washington Closure's contract is planned to end in 2015 as cleanup near the river is completed.

But as Washington Closure has found new and more extensive con-

tamination near former plutonium production reactors along the river, it will keep crews working there to clean up the additional contamination, Johnson said.

"This resequencing of work will allow completion of the increased work scope, maintain our work efficiencies and continue to maximize cleanup efforts to reduce the risks to the Columbia River," she said in the memo.

Near the former C Reactor, crews

25 MAY 12

All Hanford workers to take safety survey

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is conducting a sitewide employee survey at Hanford to measure employee perceptions of the organizational climate, particularly the attributes of a safety culture and safety conscious work environment.

EurekaFacts has been hired to conduct a comprehensive survey of all Hanford federal, contractor and subcontractor employees.

The survey partly is in response to concerns raised about the Hanford vitrifica-

tion plant and resulting assessments that have shown the importance of establishing and maintaining an environment of trust and continuous improvement, according to DOE.

But in addition, DOE added safety culture attributes within its Integrated Safety Management System Guidance in October, which established new guidelines for federal and contractor employees.

"As part of these efforts, DOE is working to further its knowledge and awareness of safety culture at the Hanford

See **SAFETY** | Page B6

Modular reactor proposed

Letter from Gregoire
says it could provide
power to vit plant

ANNETTE CARY

HERALD STAFF WRITER

Installing a small modular nuclear reactor at the site of Energy Northwest's never-completed WNP-1 nuclear power plant north of Richland is being proposed.

A small modular reactor could be used to provide power to the Hanford vitrification plant and possibly also Pacific Northwest National Laboratory in Richland, according to a letter of support from Washington Gov. Chris Gregoire to Energy

Secretary Steven Chu.

It also could help offset the loss of jobs as environmental cleanup progresses at Hanford, which previously was used to produce weapons plutonium, she said in the letter.

"Our future depends on the availability of safe, clean and affordable electrical energy to fuel our economic growth, create jobs and provide for future generations," Gregoire said. "Continued development of a new generation of advanced nuclear energy facilities has the potential to be an important part of that future."

The Department of Energy is considering proposals to award \$450 million to

BRIEFS

Hanford Reach center bid higher than expected

Richland Public Facilities District officials have learned there was only one bid submitted by a contractor to begin work on the first phase of the Hanford Reach Interpretive Center, and it's more expensive than expected.

The board meets in an open session at 5 p.m. Monday at Richland City Hall to hear a report from Public Works Director Pete Rogalsky on why the only bid, which is from Kennewick contractor Apollo, may not be accepted

and what the options are.

Board member Rick Jansons said he expects Apollo officials will explain their bid amount.

Richland has a federal highway grant for some of the project.

"I think it has to be started by the end of the summer. That's the urgency," Jansons said.

The Richland council meets Tuesday, when Rogalsky is expected to recommend Apollo's bid be rejected.

"Just because this is urgent doesn't mean doing something that isn't prudent. We will take the time to do it correctly," Jansons said.

On Tuesday, the Reach Interpretive Center and facilities district staff plan an open house at their new office at 229 Columbia Park Trail in Richland.

The public is welcome to attend from 4 to 6 p.m. Reservations should be made with Dianna Millsap at diannam@visitthereach.org or by calling 943-4100.

HANFORD REACH INTERPRETIVE CENTER

Cost-cutting measure means another layoff

JOHN TRUMBO

HERALD STAFF WRITER

Cost-cutting for the Hanford Reach Interpretive Center has eliminated a third staff position.

Davin Diaz, who was hired in 2008 as campaign manager and became director of development, has been let go. His last day was May 31, said Lisa Toomey, CEO for the Reach.

"It was part of our strategy for layoffs to control costs," Toomey explained. The decision had nothing to do with his performance, but solely was because of financial reasons, she said.

Toomey, who was hired in February to replace former CEO Kimberly Camp, said her first responsibility is to get finances under control.

"Outside contracts had to go, then it was operational cuts. It got to the point of looking at staffing levels," Toomey said.

Steve Lee and Doug Hageman, who Diaz hired a year ago, were the first two Reach employees to lose their jobs.

Diaz, who was hired by Camp four years ago, became the third, and Toomey said her strategy calls for the possibility of a fourth employee being laid off.

Other cost savings have included moving out of a suite of offices that cost \$20,000 a year into a smaller space that has been provided at no cost.

Toomey said she has taken on some of the duties that were handled by laid-off staff members.

Diaz worked on developing support for the interpretive center project. He recently began working on a series of educational projects that were to show how Hanford Reach stories can be shared with the public even before the multimillion dollar facility is built.

Lee handled public communications for the Reach Interpretive Center and Hageman's primary responsibility was writing grants.

The first round of cuts, including Lee's and Hageman's positions, were expected to shrink expenses by 35 percent for the rest of 2012.

Toomey told the Richland Public Facilities District board in April that the current budget would be \$283,000 less with her recommended cuts, which included eliminating outside consulting for marketing, public relations and fundraising.

The additional savings from eliminating Diaz' job will bring the total savings to about \$350,000.

The Reach board voted in April to move ahead with plans to build the project in two phases, with the first phase being 26,000 square feet.

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HANFORD REACH INTERPRETIVE CENTER

Bid for phase 1 surprises board

Panel plans to take up to 45 days to evaluate options available

JOHN TRUMBO

HERALD STAFF WRITER

A construction bid more than \$1 million higher than expected has given the Richland Public Facilities District board reason to pause on the Hanford Reach Interpretive Center project.

Board members voted unanimously at a special meeting Monday to not recommend accepting or rejecting the \$4 million bid from Apollo to build the first phase of the

project at the west end of Columbia Park but to take up to 45 days to evaluate the options.

The board called for bids a month ago, but the city council, which created the facilities district and appointed its members, will make the final decision.

Apollo's base bid of \$3.4 million — at 36 percent higher — was well beyond the engineer's estimate of \$2.5 million, which was for site work, road construction and a parking lot.

The facilities district hoped to bring the project in at a price that would come under a federal transportation grant of

BRIEFS

8 JUNE 12

Energy secretary to visit Hanford next week

Energy Secretary Steven Chu plans to visit Hanford June 14 and 15, the Department of Energy confirmed Thursday.

His visit has been expected since he told the Defense Nuclear Facilities Safety Board in December that he would visit Hanford this year to emphasize the need for a strong safety culture.

He will be accompanied by David Huizenga, DOE senior advisor for environmental management.

During the visit, Chu will

meet with large and small groups of employees to discuss his expectations for a robust safety culture and to hear candid questions and feedback from workers, according to DOE. He's also expected to hold a brief news conference.

Chu also visited Hanford in August 2009.



26 MAY 2012

Hanford robotic arm back at work

Success of technology
critical to meeting
consent decree by '14

ANNETTE CARY

HERALD STAFF WRITER

Hanford's new robotic arm resumed emptying radioactive waste from an underground tank this week after seven months of down time.

The success of the new technology, the Mobile Arm Retrieval System, or MARS, is critical to meet a court-enforced consent decree to empty the 16 tanks in the group called the C Tank Farm by fall 2014.

In more than eight years of work, six or possibly seven of the 16 tanks have had enough nonliquid waste removed to be classified as empty. Several more tanks have had some nonliquid waste removed.

MARS is the largest and most robust system yet tried to get millions of gallons of radioactive waste out of enclosed, underground tanks that date back to World War II, but so far it's only been used for a couple of weeks total.

The waste is moved to newer and sturdier double-shell tanks for storage until it can be treated for disposal at

1 JUN 12

DOE gets dismissed

Judge says whistleblower can't make case

ANNETTE CARY
HERALD STAFF WRITER

A federal judge has dismissed the Department of Energy from a federal lawsuit brought by Hanford whistleblower Walter Tamosaitis.

Judge Lonny Suko in Eastern Washington U.S. District Court ruled that

Tamosaitis could not make his case against DOE on any of three grounds. The ruling does not affect Tamosaitis' case against his employer, URS, which is part of the same lawsuit and will move forward.

DOE moved that the lawsuit be dismissed

See **DOE** | Page A2

1 JUN 12

Bechtel faces fine for safety incidents

ANNETTE CARY
HERALD STAFF WRITER

The Department of Energy proposed a \$150,000 fine against Bechtel National on Thursday following two construction incidents at the Hanford vitrification plant.

In the first incident in July 2010, a worker had to have two toes amputated after a 569-pound guide rail he was trying to position slipped and landed on his foot.

Field supervisors should have provided a mechanical way to move the guide rail, according to the DOE Office of Health, Safety and Security's Office of Enforcement and Oversight.

The second incident in March 2011 is considered a "near miss." Equipment needed to lift and flip over a 5,000-pound panel of formwork — a metal form for fabricating concrete panels — was improperly rigged.

Field supervisors should

See **SAFETY** | Page A2

BRIEFS

13 JUN 12

N Reactor's status to be announced Thursday

The Department of Energy plans to announce Thursday that Hanford's unique N Reactor has been cocooned.

David Huizenga, the DOE senior advisor for environmental management, will visit the reactor and make the announcement. Huizenga is visiting the Tri-Cities with Energy Secretary Steven Chu, who will be here Thursday and Friday.

N Reactor has been cocooned, or put in temporary storage, in a process that

includes tearing down as much as possible of the reactor and its support structures and then sealing up what remains, including the attached heat exchanger building.

It is planned to remain cocooned for up to 75 years to allow radioactivity to decay to more manageable levels.

N Reactor was Hanford's longest-running and most modern plutonium production reactor. It operated from 1963 to 1987.

It is the only reactor to produce weapons plutonium and power for utility customers, prompting President John F. Kennedy to visit shortly

before his assassination.

The cocooned N Reactor complex is about three times larger than previously cocooned reactors at Hanford because of the attached heat exchanger building needed for power production.

DOE has cocooned six reactors, including N Reactor, and has started work to cocoon the K East Reactor.

That will leave only the K West Reactor to be cocooned after radioactive sludge is removed from water in its attached basin.

Hanford's ninth plutonium-production reactor, B Reactor is being preserved as a museum.



14 JUN 12

Water treatment resin saves taxpayers money

DOE expects to save up to \$1.6M per year

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is expecting to save up to \$1.6 million a year at Hanford after switching to a new resin to strip chromium from contaminated ground water.

“It removes more chromium

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at much less cost,” said John Morse, Department of Energy senior technical adviser.

The resin first was used at a new water treatment plant that began removing chromium from ground water near the former D and DR reactors in late 2010.

See **WATER** | Page B2

HANFORD TANK FARMS

Contractor wins DOE mentor award

ANNETTE CARY

HERALD STAFF WRITER

Washington River Protection Solutions at Hanford has won a Department of Energy award for the company's leadership in mentoring Hanford area small businesses.

The DOE Mentor of the Year is given to the federal contractor that demonstrates excellence in DOE's mentor-protége program.

WRPS has provided oversight and coaching to Columbia Energy and Environmental Services, a Richland engineering firm, and Total Site Services, a Richland construction firm, through the program.

"WRPS' goal is to prepare and strengthen each protégé company in

order to allow them to compete successfully in the federal marketplace," John Robinson, WRPS procurement services manager, said in a statement.

Through the mentorship program, it creates long-lasting relationships, shares best practices and lessons learned and enhances its protégés' ability to win federal contracts, according to DOE.

As a protégé, Total Site Services has grown to employ 21 people and "to compete on a whole other level," said president Lisa Chapman-Rosa in a statement.

Last year, it used Recovery Act money to improve tank farm infrastructure, such as decontamination trailers and safety showers, and office facilities, including renovation of an

office trailer complex. WRPS operates the Hanford tank farms, where 56 million gallons of radioactive waste from the production of weapons plutonium are stored in underground tanks.

Among Total Site Services projects for other DOE contractors has been renovation of the 331 Laboratory, design and construction of Hanford's new record storage facility and installation of the Pretreatment Engineering Platform for testing of vitrification plant processes.

Being a protégé has helped Columbia Energy and Environmental Services gain new skills, said Brian Brendel, president, in a statement.

With Recovery Act money, it helped develop the Mobile Arm Retrieval System, or MARS, equipped with a vac-

uum tool for removing radioactive waste from underground tanks.

WRPS provides the two small businesses opportunities to grow by leveraging new work opportunities, improving professional and technical capabilities, and strengthening relationships with WRPS' parent companies and with other DOE contractors, said Marc McCusker, contracts and property management director for the Hanford DOE Office of River Protection, in a statement.

"In addition, WRPS has provided guidance with respect to safety training, technology development and business procedures," he said.

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14 JUN 12

Review of safety culture sparked DOE to make improvements

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy is making improvements to its Hanford Employee Concerns Programs, which have been criticized over the past year.

The changes are driven by a review the Hanford DOE Richland Operations Office requested a year ago from the DOE Office of Health, Safety and Security, said Matt McCormick, manager of the Richland Operations Office. The request was routine, based on the fact that two DOE programs had been merged and the Richland Operations program had not been reviewed since 2006, he said.

But before the review was done, questions were raised about the safety culture of the Hanford vitrification plant, including the effectiveness of Employee Concerns Programs.

“Both the Defense Nuclear Facilities Safety Board (DNFSB) and the DOE Office of Health, Safety and Security (HSS) have issued reports that include findings critical of the employee concerns functions at both the DOE and contractor levels,” said the Hanford Advisory Board in a letter sent to DOE on Friday.

15 JUN 12

B Reactor park bill in Senate

Proposal maintains
T Plant; House's
version coming soon

ANNETTE CARY

HERALD STAFF WRITER

A bill to create a new Manhattan Project National Historical Park that includes Hanford's B Reactor was introduced in the Senate on Thursday.

The bill comes from Sens. Maria Cantwell and Patty Murray, both D-Wash., and a companion House bill will be introduced by Rep. Doc Hastings, R-Wash., early next week when the House reconvenes after a weeklong district work period.

The three congressional leaders have advocated since 2003 for preservation of

B Reactor, the world's first full-scale nuclear reactor. The reactor ushered in the Atomic Age, creating plutonium for the world's first nuclear explosion and the bomb dropped on Nagasaki, Japan, helping end World War II.

"Hanford's B Reactor tells an important chapter in our nation's history and deserves preservation as part of a new national historical park," Cantwell said in a statement. "I believe Hanford deserves the same status as Independence Hall, Valley Forge and Abraham Lincoln's birthplace, as a key site in this nation's history."

The Senate bill also would allow Hanford's T Plant, the huge processing plant that workers called the Queen Mary, to be incorporated into

VIT PLANT

Chu could get personal

Energy secretary says he wants to hand-pick panel; might get involved in plant

ANNETTE CARY

HERALD STAFF WRITER

The possibility of a serious problem once the Hanford vitrification plant begins operating weighs heavily on Energy Secretary Steven Chu, he said Friday during a visit with Hanford workers in Richland.

He is likely to assemble the sort of panel of brilliant and creative thinkers he brought together after the Fukushima, Japan, nuclear disaster and the Gulf oil spill, he said.

He might become personally involved, carving out a week to spend on the issue at Hanford with the project's engineers, he said.

Chu was in the Tri-Cities on Thursday afternoon and Friday morning to meet with small and large groups of Hanford employees to discuss the importance of safety. He told the Defense Nuclear Facilities Safety

Board he would travel to the Tri-Cities and meet with Hanford workers after the defense board questioned the nuclear safety culture at the Hanford vitrification plant.

The visit included a question and answer session with about 500 employees Friday morning at Howard Amon Park in Richland.

One employee told Chu he had concerns about the vitrification plant, in part because of the lack of experienced nuclear manufacturing in the

See **CHU** | Page A2

HANFORD

N Reactor sealed

Dual-purpose reactor given small send-off by DOE official, guests

ANNETTE CARY

HERALD STAFF WRITER

Almost half a century ago, President John F. Kennedy stood before a crowd of 37,000 people at Hanford's N Reactor to dedicate the reactor and preside over the ground-breaking for a steam turbine plant that would generate electricity.

N Reactor, the newest and

longest-running of the nine production reactors at the Hanford nuclear reservation, would produce plutonium for the nation's nuclear weapons program and enough electricity at its peak for about 650,000 homes.

Thursday, a much smaller crowd of about 100 invited guests and workers gathered near the same spot to mark the end of the reactor.

Washington Closure Hanford has finished most of the work to cocoon the reactor, putting it in storage until


Photo gallery
tricityherald.com

the radiation in its core can decay for 75 years to more manageable levels.

David Huizenga, the Department of Energy senior adviser for environmental management, repeated Kennedy's words of Sept. 26, 1963, just two months before the president's assassination.

"Along this river, men have played a significant role in the last 20 years, which has changed the entire history of the world," Kennedy told the crowd, and spoke of "the role the men and women who worked here

See **SEALED** | Page A2

PNNL

20 Aug 12

adds new associate director

HERALD STAFF

Jud Virden has been named associate laboratory director for Pacific Northwest National Laboratory's Energy and Environment Directorate.

A 20-year PNNL veteran with experience creating energy research partnerships with U.S. industry, Virden will lead a staff of



Virden

1,100 and oversee a business volume of more than \$200 million annually.

The group is working to increase the nation's energy capacity and reducing dependence on imported oil. Areas of research include energy efficiency, biomass conversion, vehicle technology and advanced manufacturing.

Secretary Chu ^{15 JUN} visiting Hanford ¹²

ANNETTE CARY

HERALD STAFF WRITER

Bechtel National appears to have turned the corner on the path to improving the nuclear safety culture at Hanford's vitrification plant, said David Huizenga, the Department of Energy senior adviser for environmental management.

He and Energy Secretary Steven Chu were scheduled to be at Hanford on Thursday and today, as Chu meets with large and small groups of workers to discuss the importance of a strong safety culture. He also plans a brief press conference today.

The visit fulfills a commitment Chu made to the

HANFORD REACH INTERPRETIVE CENTER

19 JUN 12

Team recommends more modest plan

Cost analysis finds
project might be
too showy, expensive

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center project might be too big and too expensive, and it might have to go back to the drawing board, according to a cost analysis done by Lockheed and Mission Support Alliance.

The Richland Public Facili-

ties District Board learned Monday that the only way to cut dollars out of the 58,000-square-foot center planned for the west end of Columbia Park is to start over with a more modest concept.

"You have to go with a clean sheet of paper," advised Dave Ruscitto, chief operations officer for Lockheed/MSA.

Ruscitto said the review team spent a lot of time preparing "a snapshot of costs going forward."

See **MODEST** | Page A2

HANFORD AND PNNL

More ill workers may be paid

Eased rules would cover those employed at site through 1983

ANNETTE CARY

HERALD STAFF WRITER

A compensation program for ill nuclear workers won key approval Tuesday to ease rules for \$150,000 payments to additional Hanford workers or their survivors.

A federal advisory board meeting in Santa Fe, N.M., voted to recommend that the eased rules, which are allowed for

groups designated special exposure cohorts, be extended to workers at the site through 1983.

The current special exposure cohort, which allows compensation for workers for about 22 cancers that medical research has linked to radiation exposure, covers Hanford workers who were at the nuclear reservation from Oct. 1, 1943, through June 30, 1972. It also covers Pacific Northwest National Laboratory workers for those years.

HANFORD NEWS ONLINE

Find related stories at
www.hanfordnews.com

The Advisory Board on Radiation and Worker Health will send its recommendation in support of the expanded special exposure cohort to Kathleen Sebelius, secretary of Health and Human Services, who is expected to approve the recommendation.

Then Congress would have 30 days to review the proposal, and if it takes no action within 30 days, the special exposure cohort would take effect.

See **WORKERS** | Page A2

22 JUN 19

Hastings introduces B Reactor park bill

Manhattan Project
National Historical
Park focus of plan

ANNETTE CARY

HERALD STAFF WRITER

Legislation to create a new national park that would include Hanford's historic B Reactor was introduced in the U.S. House on Thursday by Rep. Doc Hastings, R-Wash., and two other representatives.

The language of the bill is similar to companion legislation introduced in the Senate last week, after a draft of the Senate bill was changed to more closely match that of the House draft bill.

Both bills would create a multi-state Manhattan Project National Historical Park, with sites in Hanford, Oak Ridge, Tenn., and Los Alamos, N.M.

B Reactor was the world's first full-scale nuclear reactor and produced plutonium for the first nuclear explosion and the bomb dropped on Nagasaki, Japan, helping end World War II.

"In less than three years, scientists and engineers succeeded in harnessing the

BRIEFS

Power restored to vit plant after storm

Power was restored to the Hanford vitrification plant construction site early Monday evening.

Work at the Waste Treatment Plant site will resume today after workers were told to stay home Monday.

A quick, intense storm Saturday afternoon that brought heavy rain and hail to parts of the Mid-Columbia caused the outage. Work through the rest of the weekend to restore power continued Monday.

The vitrification plant, which is being built to treat radioactive waste for dis-

posal, uses a temporary electrical system now. But when the plant is operating, it will have a permanent system plus backup generators in case of outages.

Work to restrict I-182, Highway 395 traffic

Maintenance work by Washington State Department of Transportation is scheduled to restrict lanes westbound Interstate 182 and northbound Highway 395 today.

The left two lanes of westbound traffic on I-182 will be closed from 8 a.m. to 4 p.m., according to a WSDOT news release. The closure will be on the bridge over the Colum-

bia River for inspection of the overhead sign.

Drivers heading north on Highway 395 between 9 a.m. and noon today will experience a right lane closure for deck repair on the blue bridge.

The on-ramp from Columbia Drive to northbound 395 also will be closed.

Between 11 a.m. to 3 p.m. today drivers will experience a right lane closure in the southbound lanes for deck repair on the blue bridge. The on-ramp from Lewis Street also will be closed during this time.

Hanford board seeks Grant County member

EPHRATA — The Hanford

Advisory Board has an opening for a representative for Grant County.

Those interested in the position should send a letter by the end of the month to the Grant County Commissioners Office, Barbara J. Vasquez, 35 C. St. N.W., Ephrata, WA 98823.

The volunteer board reaches consensus on policy recommendations to the Department of Energy and its regulators on Hanford environmental cleanup.

The board holds two-day meetings in the Tri-Cities five times a year, plus committee meetings. Some per diem may be available.

— Herald staff

2358012
DIRECTO

Public update on Hanford cleanup set for Tuesday

A public workshop on environmental cleanup along the Columbia River at Hanford is planned from 5:30 to 8:30 p.m. Tuesday in Richland.

It follows workshops by the Department of Energy, the Environmental Protection Agency and the Washington State Department of Ecology in Seattle, Portland and Hood River, Ore., earlier this month. The local workshop will be at the Richland Public Library, 955 Northgate Drive.

The workshops will provide information and context for upcoming cleanup decisions, including near Hanford's nine former plutonium production reactors and in the 300 Area, where research was conducted and reactor fuel manufactured just north of Richland.

The meeting will include three 30-minute breakout sessions on history, contaminants and cleanup challenges and then a 45-minute group discussion.

23 JUNE

12-minute video details Hanford cleanup effort

The Department of Energy has released a 12-minute video looking at efforts to clean up environmental contamination along the Columbia River at Hanford.

The video is the seventh "chapter" in a series of videos telling the story of the Hanford nuclear reservation, which produced plutonium for the nation's nuclear weapons program during World War II and the Cold War.

The 220-square-mile area

along the Columbia River that the Department of Energy calls the river corridor, included nine plutonium production reactors that produced almost two-thirds of the nation's plutonium.

The river corridor also includes the 300 Area just north of Richland, where more than 20 million slugs of uranium rods were produced to fuel the reactors.

Cleanup of the river corridor is more than half completed, with future plans for the area including recreation, conservation and some limited industrial use just north of Richland.

The video can be seen at tricityherald.com.

- Herald staff



HANFORD

Waste level rising in 52 tanks

Possibility of precipitation or snowmelt getting in tanks has state concerned

ANNETTE CARY

HERALD STAFF WRITER

Measurements of radioactive waste in Hanford's underground tanks appear to show that the level of waste in 52 of the tanks is rising.

The reason for the readings, taken

over decades in some cases, is a mystery.

But the worst-case scenario, that precipitation or snowmelt may be getting into some of the waste tanks, has the state of Washington concerned.

Hanford stores 56 million gallons of high-level radioactive and hazardous chemical waste left from the production of weapons plutonium in underground tanks. That includes 28 newer double-shell tanks and about 141 older single-shell tanks, some of which have leaked in the past.

An assessment of routine measure-

ments of the single-shell tanks concluded that levels may be rising in 52 of the tanks. For some tanks, an average increase of a couple thousands of an inch a year has been measured. But measurements taken in 21 of the tank indicate larger increases of up to an average of about three-quarters of an inch a year.

The measurements have been taken four times a year for decades for some of the tanks.

"At this point, we are not sure what the cause is," said Dennis Washenfelder, engineering manager for tank and

pipeline integrity for Washington River Protection Solutions.

Some of the measurements are taken by periodically lowering a plummet on a wire in the tank until it hits the waste. But the surface of the waste can be rough, with peaks and valleys across tanks that can have diameters of 75 feet and capacities of up to 1 million gallons.

It's possible that the plummet, which stays in the tank between measurements, could be hitting different places on the surface of the waste when it is

See **WASTE** | Page B2

Cigarette tax to be delayed

Franklin County judge
overrules Olympia on
roll-your-own smokes

JOHN TRUMBO

HERALD STAFF WRITER

Roll-your-own cigarettes won't be hit with a 15-cent tax in Washington when the new

BRIEFS

Ecology releases draft of Hanford waste permit

The Washington State Department of Ecology has released the final portion of its draft Hanford Facility Dangerous Waste Permit.

The state permit regulating activities with hazardous chemical waste and waste mixed with radionuclides at the Hanford nuclear reservation is regularly updated with public comment accepted on individual changes. But the release this spring of the new sitewide draft permit marks the first time since 1994 that the public has had a chance to comment on the entire permit.

An additional portion of the draft permit covering Hanford's single-shell tanks holding high-level radioactive waste and hazardous chemicals took longer to prepare but now is available.

A public hearing will be held on the single-shell tank portion of the draft permit at 5:30 p.m. Aug. 7 at the Richland Public Library. It is posted at www.ecy.wa.gov/programs/nwp/permitting/hdwn

4 JUL 12

Richland rejects bid on Hanford Reach center

ERIC FRANCAVILLA

HERALD STAFF WRITER

The Richland City Council rejected in a unanimous vote Tuesday the only bid to build the first phase of the Hanford Reach Interpretive Center.

Apollo Inc.'s bid of \$4 million exceeded the Jones & Jones engineer's estimation for the project by \$1.1 million but there were no other bidders.

In June the Richland Public Facilities District board investigated options for scaling back the entire project. The facilities district board unanimously voted June 18 to recommend that Richland

reject Apollo's bid.

The rejected bid could affect federal funding if construction doesn't begin soon, Steve Simmons, a facilities district board member, said during the council meeting.

"We need to start showing proof that we can get it done with the funds at hand," he said.

Despite setbacks, Simmons reassured the council that the center will be built.

"It may not be the original grand version, but it will be something the city and region is proud of," he said.

◆ *Eric Francavilla: 582-1535; efrancavilla@tricityherald.com*

More Seats available for B Reactor tour

The U.S. Department of Energy has made more seats available for tours of the B Reactor National Historic Landmark in July and August.

Tour registration is available online at <http://manhattanprojectbreactor.hanford.gov> or can be made by calling the B Reactor Tour Headquarters at 376-1647 from 8 a.m. to 4 p.m., Monday through Thursday. Special group tours may be arranged by calling Russ Fabré at 373-2774.

- Herald staff

104212

Tank work in high gear

Contractor may be first to attempt to empty
3 high-level radioactive waste receptacles

ANNETTE CARY

HERALD STAFF WRITER

Work is under way to empty three of Hanford's underground tanks of high-level radioactive waste, which is believed to be a first since solid waste retrieval began, according to Washington River Protection Solutions.

The Department of Energy contractor has an ambitious schedule to meet a court-enforced legal deadline to have all 16 underground tanks in the group called C Tank Farm emptied two years and three months from now.

So far, the Hanford contractor believes that seven may be emptied enough for the state to approve. But emptying those tanks and a tank in the S Tank Farm has been done at an average rate of about one every 18 months.

"Our mandate is to increase that pace," said Kent Smith, Washington River Protection Solutions project manager.

To meet the deadline,

workers will need to complete retrieval on three more tanks this year, three in 2013 and finish three more in 2014.

"WRPS is simultaneously retrieving waste from three tanks and performing construction activities on two additional tanks," said Lori Gamache, DOE spokeswoman. "Activities in the tank farm will continue at this pace as we work toward retrieving waste from the remaining tanks in C Farm to meet the consent degree milestone by September 2014."

Earlier this year, Washington River Protection Solutions announced it was retrieving waste from two tanks simultaneously, the first time that had been done in more than a decade.

"It is a great thing that they are in three tanks," said Jeff Lyon, the Washington State Department of Ecology manager for tank waste storage.

CH2M Hill's leader to leave

Lehew to be replaced
by Mid-Columbia
native John Fulton

ANNETTE CARY

HERALD STAFF WRITER

John Lehew, who has led central Hanford environmental cleanup for the past four years, will be leaving the nuclear reservation, he told employees Thursday.

He will be replaced as president of CH2M Hill Plateau Remediation Co. by John Fulton, a long-time Hanford leader and Mid-Columbia native.



Lehew

HANFORD

7 JUL 12

Cantwell visits Richland to talk park bill

Proposal set for consideration
by House committee next week

MICHELLE DUPLER

HERALD STAFF WRITER

Hanford's B Reactor and two other Manhattan Project sites could take a step closer to becoming part of a national park next week in Congress.

A bill, introduced by U.S. Rep. Doc Hastings of Pasco, is set for consideration in the

INSIDE

Cantwell also visits Selah fruit company. | B4

House Natural Resources Committee — of which Hastings is the chairman — Wednesday morning in Washington, D.C.

"I expect the committee will vote to favorably advance the bill to the full House for consideration," Hastings said in a statement. "A great many volunteers have been working for years to bring this idea into reality, and I'm pleased that progress is being made in the lawmaking process to preserve this

amazing and important piece of our nation's history."

A companion bill co-sponsored by Sens. Maria Cantwell and Patty Murray had a hearing in the Senate Energy and Natural Resources Subcommittee on National Parks in late June.

On Friday, Cantwell visited Richland to talk to Tri-City leaders about the bill and what a national park could mean to the community.

"Elevating B Reactor to a national historic

See **PARK** | Page A2

Morning thunderstorm sparks Hanford fires

14 JUL 12
An early morning thunderstorm Friday sparked two fires on the Hanford nuclear reservation, one on the Hanford Reach National Monument and one on the south side of Rattlesnake Mountain.

More fires are possible this weekend, with the National Weather Service issues a red flag warning for fire weather through 5 p.m. Sunday for the

Mid-Columbia. It's predicting a 30 percent chance of thunderstorms Saturday decreasing to 20 percent Sunday.

At Hanford on Friday, 20 to 30 acres on Gable Mountain burned, with the fire contained about 3:30 a.m., said Deanna Smith, spokeswoman for Mission Support Alliance. In addition about five acres burned near US Ecology, a disposal site for commercial, low-level radioactive waste.

Neither fire burned areas with radiological or chemical contamination, Smith said.

The fire on the national monument burned about 190

acres north of the Columbia River in the Coyote Rapids area, which is not far from Hanford's B Reactor.

Lightning also is being blamed for burning about 125 acres of privately owned open range land on the south side of Rattlesnake Mountain.

Prosser Fire District 3 and Benton Fire District 2 responded at 1:22 a.m. and had the fire controlled at 3:50 a.m. Firefighters remained at the scene until 9 a.m., bulldozing a line around the fire area and putting out hot spots.

— Herald staff

HANFORD

13 JUL 12

Employee accused of time card fraud

ANNETTE CARY

HERALD STAFF WRITER

A third former employee of CH2M Hill Hanford Group has been accused in federal court of submitting false time cards claiming pay for hours not worked at the Hanford tank farms.

Rhonda Lee Stamper has been charged with conspiracy to defraud the government in Eastern Washington U.S. District Court from Oct. 1, 2003, to Dec. 16, 2008.

Former Hanford tank farm workers Carl Schroeder and Christian Davel Careaga already have pleaded guilty to conspiracy to defraud the federal government, but have not been sentenced.

Stamper could face a maximum of 10 years in jail and a fine of \$250,000. However, under the plea agreement reached by Schroeder, he agreed not to appeal his sentence if the court imposes a prison term of one year or less and a fine of not more than \$50,000.

The alleged fraud occurred when the Hanford tank farms, where 56 million gallons of radioactive waste is stored in underground tanks, were managed by former Department of

BRIEFS

DOE advertising for vit plant assistant manager

The Department of Energy began advertising Friday for an assistant manager for the Hanford vitrification plant.

The position has been vacant since Dale Knutson, who had the title federal project director, left at the end of May when his contract expired. He was performing the same duties as the position being advertised now but under a loaned executive agreement with Pacific Northwest National Laboratory.

The new assistant manager for the vitrification plant will be a federal employee and picked by Scott Samuelson, manager of the DOE Hanford Office of River Protection. Samuelson will continue to serve as acting federal project director until the position is filled.

Ensuring that an assistant manager with the appropriate skills, experience and abilities is selected in a timely manner continues to be a top priority for DOE, said Erik Olds, the Office of River Protection chief of staff, in a statement.

Applications for the job, which pays \$119,554 to \$179,700 a year, are due Aug. 20. The job posting is at www.usajobs.gov.

MANHATTAN PROJECT NATIONAL PARK

B Reactor bill goes to House

Committee OK's
legislation to include
landmark in project

ANNETTE CARY

HERALD STAFF WRITER

Legislation to make Hanford's historic B Reactor part of a new Manhattan Project National Historical Park was approved by a House committee Wednesday as supporters work to get legislation passed this year.

The bill now will be eligible for consideration by the full House. Similar legislation has been introduced in the Senate.

"Today's committee approval moves the historical park another step forward with our eye on enacting the bill into law before the end of this year," said Rep. Doc Hastings, R-Wash., in a statement.

The bill passed out of the House Natural Resources Committee, which he leads as chairman, unanimously and without amendment.

Supporters of making the

reactor part of a national park want legislation passed this year while advocates of the bill head key House and Senate committees. Sen. Jeff Bingaman, D-N.M., is chairman of the Senate Natural Resources Committee, but plans to retire at the end of his term.

In addition, a change in the White House could mean new leadership in the Departments of Energy and Interiors, which are working together now on the national park plan.

The proposed park would include Manhattan Project historic facilities at Hanford and also Los Alamos, N.M., and Oak Ridge, Tenn.

"The goal of this bill is to officially declare the importance of preserving this history of the Manhattan Project, provide access to the public and involve the unique abilities of the Park Service to help tell this story," Hastings said.

B Reactor was the world's first full-scale production reactor, built in about a year during World War II when the nation's leaders feared that Germany was preparing

to unleash an atomic bomb.

The reactor looks much the same as it did when it produced the plutonium for the world's first atomic explosion and the bomb dropped on Nagasaki, Japan, ushering in the atomic age worldwide.

Other Hanford facilities also could be included in the national park. T Plant continues to be used in the environmental cleanup of Hanford, but could be considered for the park when it is no longer needed by DOE. The massive plant, called the Queen Mary by early workers, chemically processed the irradiated fuel to separate out plutonium.

Some buildings left by settlers forced to leave their homes, businesses and farms to make way for the secret Hanford nuclear reservation also would be considered for inclusion. They include the Bruggemann warehouse, the White Bluffs Bank, the Hanford High School and the Hanford Irrigation District pump house.

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8 JUL 12

Lawmakers prod energy secretary on reactor project

Bipartisan effort by state, federal leaders

MICHELLE DUPLER

HERALD STAFF WRITER

A bipartisan group of 30 state lawmakers has joined with much of Washington's congressional delegation in urging Energy Secretary Steven Chu to locate a small modular nuclear reactor project in the Tri-Cities.



Haler

The group of 21 Republican and nine Democratic members of the state House of Representatives, including 8th District Reps. Larry Haler, R-Richland, and Brad Klippert, R-Kennewick, sent a letter to Chu last week expressing strong support for the reactor proposals cur-

rently under consideration by the Department of Energy.

Similar letters were sent by nine of Washington's congressional leaders in June, and by Gov. Chris Gregoire in May.

"We believe nuclear energy provides clean, reliable power," the letter said. "Tri-Cities offers not only a very skilled nuclear work force and a supportive community, but the Hanford site offers land, infrastructure and other essential resources that would



Klippert

provide significant cost benefits to developing and constructing this more modern, more reliable and safer reactor technology here in Washington state."

Initial batch of sludge removed

Major step in preparing basin for demolition, CH2M Hill leader says

ANNETTE CARY

HERALD STAFF WRITER

Hanford workers moved the first batch of highly radioactive sludge from the K West Basin near the Columbia River to central Hanford for storage Friday.

The transfer marked the culmination of three years of equipment design, system testing and operator training by contractor CH2M Hill Plateau Remediation Co. The sludge had been underwater at the K Reactor basins for more than 30 years, and it was created by the corrosion of underwater fuel stored in the basin.

"Today marks a turning point in our cleanup," said Matt McCormick, manager of the Department of Energy Hanford Richland Operations Office, in a statement. "This is a great step toward reducing the risk of the Columbia River."

It's also a major step toward preparing the K West Basin for demolition, said John Lehew, CH2M Hill president, in a statement.

That began with getting the irradiated fuel left in the K Reactor Basins after the end of the Cold War transferred from the water to central Hanford for storage, which was completed about eight years ago.

That work has helped guide removal of the first batch of sludge to be moved, which comes from the knockout pots. The knockout pots filtered out the

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MID-COLUMBIA

SECTION B | tricityherald.com | Saturday, July 21, 2012

CONTACT THE NEWSROOM: 582-1502; news@tricityherald.com; fax 582-1510

TAMOSAITIS WHISTLEBLOWER LAWSUIT

URS asks judge to dismiss case

Former vit plant employee claims he was wrongly fired after raising safety issues

ANNETTE CARY

HERALD STAFF WRITER

URS Energy and Construction is asking a judge to award it summary judgment to end the whistleblower lawsuit brought by former Hanford vitrification plant employee Walter Tamosaitis.

It is the last defendant standing in legal action brought by Tamosaitis in Eastern Washington District U.S. Court.

Tamosaitis alleges he was removed from work at the vitrification plant for raising issues about the future safe operation of the plant.

URS and Bechtel National, the prime contractor on the project, have strongly denied that. Bechtel said work was wrapping up for Tamo-



Tamosaitis

saitis, the research and technology manager, and plans already had been made to reassign him when he wrote an email that upset officials.

Since then, construction on key parts of the plant has been slowed to address technical issues that could affect operation of the plant.

URS is arguing that Bechtel made the decision to remove Tamosaitis from the project and it did not know about the decision until his removal was in process. URS is Bechtel's sub-contractor and continues to employ Tamosaitis. Its contract with Bechtel

allows Bechtel to remove any URS employee from the project it deems objectionable, according to URS.

Tamosaitis was escorted from his office building July 2, 2010. After the Independence Day holiday, URS believed it had reached an agreement with Bechtel to reinstate Tamosaitis on the project, only to be told July 8 by Bechtel that he could not return to the project, according to court documents.

URS also raised an argument that was successful for DOE and URS's parent company, both of which have been released from the lawsuit by federal

Judge Lonny Suko.

Tamosaitis filed an administrative case before the Department of Labor on July 30, 2010, naming URS, Inc. The correct name of his employer is URS Energy and Construction and its parent company is URS Corp.

The complaint was not amended to name URS Energy and Construction until Sept. 1, 2011. Six days later, Tamosaitis gave notice that he planned to move the case to federal court, because the Department of Labor had not acted

See **CASE** | Page B2

15 JUL 12 Reach's future is now

With DOE's use for the land largely complete, scientists and federal officials weigh next steps

ANNETTE CARY

HERALD STAFF WRITER

Twelve years after the buffer area around the Hanford nuclear reservation was made a national monument, it might be time to start thinking about the next step for the land.

The Department of Energy owns the almost 300-square-mile Hanford Reach National Monument. It's managed by U.S. Fish and Wildlife Service, including the

120-mile Fitzner/Eberhardt Arid Lands Ecology Reserve, set aside primarily for scientific research.

DOE's use for it is largely completed.

The federal government seized the checkerboard of private and public land in 1943 to serve as a buffer zone around Hanford, as part of the Manhattan Project to produce an atomic bomb during World War II.

The horseshoe-shaped zone that almost ringed the nuclear

reservation continued to be needed as the Cold War escalated and about two-thirds of the nation's plutonium was produced at Hanford.

"Primarily it shielded prying eyes and was a buffer in case something would go wrong," said Colleen French, DOE Hanford government affairs program manager.

It had a military presence with the Army constructing Nike Ajax missile sites on the slope of Rat-

tlesnake Mountain and north of the Columbia River.

But much of its use has been for environmental research, initially by Pacific Northwest National Laboratory and more recently by U.S. Fish and Wildlife.

"We think it may be time to start thinking about what would work best for the future of monument lands," French said.

The decision was made about

See **FUTURE** | Page A2

25 JUL 12 Review of Hanford concerns programs finds weaknesses

ANNETTE CARY

HERALD STAFF WRITER

A review of four Hanford Employee Concerns Programs found some weaknesses, but concluded the programs were sound enough that it made no formal findings, according to a report by the Department of Energy's Office of Health, Safety and Security.

The DOE Hanford Richland Operations Office requested the review last year and announced plans for improvements last month before the report was issued. The review team spent the first week of May looking at the programs.

It reviewed programs run by DOE at Hanford and by three DOE prime contractors: CH2M Hill Plateau Remediation Co., Mission Support Alliance and Washington River Protection Solutions.

The review found the programs met legal requirements, but did question some policies and procedures, and the thoroughness of some investigations. Weaknesses could cause a lack of confidence in the programs by some workers, the report said.

"In many cases, the details of employee concerns were not sufficiently established and documented to ensure a full and accurate understanding of the employee's issue," the report said.

In one case, an employee alleged that workers were

required to work faster to meet a deadline at the expense of safety so management could earn a bonus. The term "bonus" was interpreted during the investigation as monetary awards to individuals, which management denied existed.

However, there might have been a corporate performance-based incentive bonus in place, and there was no evidence that was investigated, the review said.

In another case, an allegation that a supervisor directed a worker not to report an injury was resolved based on discussion with the accused supervisor, and nothing in the paperwork showed an attempt to interview the injured worker or coworkers.

The report also found inadequate communication, particularly when workers were sent letters closing out the concerns they filed. Some letters said only that the concern had been investigated and not substantiated, but gave no details on the investigation.

Among strengths in the programs reviewed was the strong message to workers about their responsibility to report concerns about environment, safety, health and management of Hanford operations, the report said.

The programs' managers and workers had received appropriate training, were experienced, were knowl-

edgeable about Hanford operations and seemed open to finding ways to improve programs, the report said.

Last month, DOE told workers that it was making improvements to Hanford Employee Concerns Programs, including better explaining how the investigation reached a conclusion.

Service to the employee would be improved in the programs, including capturing the concern accurately, investigating it thoroughly and communicating frequently with the employee during the investigation, said Matt McCormick, manager of the DOE Richland Operations Office, in June.

He also said that to make sure that employees have confidence in the investigations, the programs will rely more on technical experts not directly involved in the issues during investigations.

The review did not include Washington Closure Hanford, because it is ramping down to the completion of cleanup along the Columbia River in 2015, the report said.

Bechtel National, which is building the Hanford vitrification plant, was not included because its program was evaluated during a safety culture review in December, the report said.

◆ Annette Cary: 582-1533;
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PFD seeks public's input on Reach project

Board wants input
on what interpretive
center will look like

JOHN TRUMBO

HERALD STAFF WRITER

The Richland Public Facilities District board is asking for the public to weigh in on what they'd like the Hanford Reach Interpretive Center project to look like.

"We want to bring the public up to date and hear what they have to say. We have some big decisions that need to be made," said Fred Raab, board president.

The meeting is scheduled for 6 p.m. Monday at Richland City Hall, 505 Swift Blvd.

The interpretive center project, originally conceived as a \$40.5 million facility to be built at the south end of Columbia Point in Richland, had been scaled back and relocated to land in the west end of Columbia Park that falls within Richland's boundaries.

The original concept's design envisioned a facility with striking architecture and impressive, grand inte-

rior spaces, similar in scale to the Oregon Museum of Science and Industry in Portland.

But financial circumstances have forced the facilities district board to consider backing away from a large museum complex and developing the interpretive center in smaller stages.

Raab noted that a recent study by Lockheed Martin suggested several options to help reduce construction costs. One of those options is to build a municipal-style building, similar in size to a large library. That would be about half the size of the original concept.

"This is not a decision-making meeting. It will allow us to present to the public this current state of the project and to hear what they have to say. It'll be a listening session," Raab said.

He said the board wants to hear if the public is interested in the look of the outside of the building, or more interested in what kinds of exhibits and activities would occur inside.

The interpretive center project was one of four

31 JUL 12

Ground water cleanup planned

Goal potentially to have drinking water source

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy and the Environmental Protection Agency are proposing a plan to clean up much of the radioactive and hazardous chemical ground water contamination over 35 years in a portion of central Hanford.

However, a lack of viable technology for certain contaminants will keep the ground water from being cleaned to drinking water standards for much longer than that.

DOE and EPA picked the 35-year plan as their preferred alternative after also considering 25- and 45-year plans.

The differences would include how aggressively contaminated water is pumped out of the ground and treated to remove carbon tetrachloride, uranium, nitrate, chromium and technetium 99. Cleaned water is then reinjected into the ground.

Hanford produced plutonium for the nation's nuclear weapons program during World War II and the Cold War, and liquid wastes were disposed to the ground in ditches, ponds, trenches and other in-ground structures.

The goal of DOE, EPA and the Washington State Department of Ecology is to clean ground water to potentially be used as a source of drinking water.

The contamination under consideration is in the southern portion of the 200 West Area of

22 JUL 12
Plan could lead to less
local work at Hanford,
group's message says

ANNETTE CARY

HERALD STAFF WRITER

The Tri-City Development Council is concerned that an initiative intended to provide more work to small businesses at Hanford may do more harm than good to the local economy.

It could lead to less work at Hanford being awarded to Mid-Columbia businesses and make it more difficult for start-up and niche companies to compete for work, TRIDEC said in a message to its members.

The Department of Energy is being pressured by the Small Business Administration to assume direct accountability for small business contract awards. Now most small business awards come through

See **TRIDEC** | Page B2

DOE told environmental statement not complete without having conclusion

31 JUL 12

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy needs to pick a preferred way to treat all Hanford tank waste before a massive study is released in the next few months, the state Department of Ecology has told DOE headquarters.

DOE has invested eight years and \$85 million on the environmental study, but without a conclusion on how all the waste should be treated, the study will

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be incomplete, the state said in a recent letter. It was sent by Jane Hedges, manager of the Department of Ecology's Nuclear Waste Program, to Tracy Mustin, principal deputy assistant secretary of DOE's Office of Environmental Management.

The Tank Closure and Waste Management Environmental Impact Statement is expected to be released by the end of the year, a delay from earlier DOE statements that it might be available this summer.

The comprehensive document will cover topics such as disposal at Hanford

of radioactive waste, the end for the Fast Flux Test Facility, retrieval of waste from Hanford's underground tanks and treatment of the tank waste.

But DOE has said it is not ready to pick a method for treating all 56 million gallons of radioactive waste now held in underground tanks. The waste is left from the past production of plutonium for the nation's weapons program.

High-level radioactive waste in the tanks will be glassified at the Hanford vitrification plant under construction. But the plant was never planned to treat all of the low-activity radioactive waste now held in the tanks in a reasonable amount of time.

"The department has decided the

See **CHOOSE** | Page A2

MID-COLUMBIA

Tuesday, July 31, 2012

CONTACT THE NEWSROOM: 582-1502; news@tricityherald.com; fax 582-1510

HANFORD REACH INTERPRETIVE CENTER

Public still in support of center

Community tells board that even if project is smaller, they still will champion it

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center project may have to be downsized even more, but it is worth doing,

the public said during a workshop Monday.

About two dozen people attended a special session of the Richland Public Facilities District board to show interest and support for the project being considered for Columbia Park West in Kennewick.

There were no naysayers, and two of the Tri-Cities' more prominent businessmen, George Garlick and Bill Lampson, voiced strong support.

"I am personally totally committed to this project. We need to redefine and recommit," said Garlick, a Hanford developer. "There is no question in my mind this project will go forward and that all of us will pull together to make the Tri-Cities a wonderful place to live," he said.

Garlick said he has contacted several nationally recognized, outstanding construction companies in the Tri-Cities about working together to fix a cost and

a timeframe for completing whatever the board decides should be built.

A letter from Bill Lampson, owner of Lampson International in Kennewick, stated he and "my colleagues" have fully agreed to help.

"The best and most prudent next step is to abandon the design in favor of bringing in a new local designer and designing something that is attractive,

BRIEFS

3 AUG 12

DOE's D'Agostino plans Hanford tour next week

Thomas D'Agostino, the Department of Energy undersecretary responsible for Hanford environmental cleanup, has planned a second visit to Hanford next week.

He'll see parts of the nuclear reservation he didn't get to see during his September 2011 visit and also will spend time at DOE's Pacific Northwest National Laboratory in Richland.

At the national laboratory Wednesday he'll receive updates on its work on

national security issues, including work being done at its new Ultra-Trace Laboratory on radiation detection methods to identify weapons of mass destruction and terrorist activities. He also will review science programs doing work related to Hanford environmental cleanup.

On Thursday, he'll announce the opening of the 200 West Pump and Treat Facility in central Hanford, which has begun treating contaminated ground water for a variety of pollutants. He also is expected to visit the Plutonium Finishing Plant and the vitrification plant under construction.

Highway 240 work to affect Hanford

Hanford commute traffic will experience delays and lane closures next week on Highway 240 in both directions between the intersections of Van Giesen Street and Aaron Way to allow crews to mark pavement for crosswalks, stop bars and directional arrows.

The work will start Monday, from 9 a.m. to 3:30 p.m. and continue through Thursday.

There will be multiple lane closures in both directions at the intersections, with work proceeding gradually from one intersection to the next.

Hanford safety gets uniform

Procedures to be the same wherever a worker is assigned

ANNETTE CARY

HERALD STAFF WRITER

No matter where a Hanford worker is assigned to hazardous cleanup projects across the nuclear reservation, the worker will know exactly what safety procedures to use in most situations.

The Department of Energy announced Thursday that since Hanford began adopting sitewide safety and health standards in 2008, 15 programs now are standard across the site.

"The goal is to get workers home safely to their families," said Karen Flynn, DOE Richland Operations Office assistant manager for mission support.

One of the newest programs provides sitewide standards for fall protection.

While much of the public attention at Hanford is on its unusual radioactive and hazardous chemical dangers, industrial hazards remain one of the largest poten-

tial risks for workers, said Jeff Frey, DOE Richland Operations Office deputy assistant manager for safety and environment.

Hanford workers have had some serious falls, most recently the 2009 accident in which a Washington Closure Hanford worker fell through an open hatch of a 50-foot-high catwalk, but survived after hitting a ladder part way down to break his fall.

A man died in 2004 after a fall from a ladder while he was on site briefly to remove a mobile office, and in the early '90s, an ironworker died after falling through the roof of a reactor that was being repaired.

Individual contractors always have had safety programs, but the new sitewide safety standards combine the best of the diverse programs and streamlines them into a single, uniform safety program.

A building trades worker might finish up a project at Hanford one day and go out on another the next, working for different contractors, said Gordon McCleary, vice president of the Opera-

tive Plasterers' and Cement Masons' International Association.

Sitewide safety standards provide consistency for workers, avoiding ambiguity and allowing workers to be trained to just one program, according to DOE.

Standardized fall protection training will be done by Mission Support Alliance at the HAMMER training center. The training has been offered by HAMMER since its opening in 1997, but this is the first effort to train Hanford workers from different cleanup contractors and job classifications to the same guidelines and standards.

For fall protection, workers will have a day of classroom instruction and practical exercises, and then a half day of retraining every two years.

The first program to go sitewide was a lockout/tagout system to make sure electrical and other systems are turned off and stay turned off when maintenance or other work is being done.

Other sitewide programs added since then include beryllium protection;

For breaking news throughout the day, go to www.tricityherald.com

MID-COLUMBIA

SECTION B | tricityherald.com | Wednesday, Aug. 1, 2012

CONTACT THE NEWSROOM: 582-1502; news@tricityherald.com; fax 582-1510

CH2M Hill to lay off 95, and cuts not over yet

ANNETTE CARY

HERALD STAFF WRITER

The Hanford Atomic Metal Trades Council has been notified that 67 workers it represents will lose their jobs at Hanford as a result of a planned layoff by CH2M Hill Plateau Remediation Co.

In addition, 28 people responded to a request for volunteers for layoffs, bringing the total job cuts for workers represented by HAMTC to 95.

The layoffs have been expected. CH2M Hill announced in April that it would cut up to 400 union and nonunion positions in two phases. In the first phase, 58 employees were laid off in June.

That leaves up to about 340 layoffs possible in September, when the second phase of the job reduction will occur. The potential 340 layoffs include the 95 workers represented by HAMTC.

The HAMTC layoff notice was for

workers at CH2M Hill and subcontractor Materials and Energy Corp. However, laid off workers with more seniority than workers with the same jobs elsewhere at Hanford can claim their jobs in a "bump and roll." That means workers across the nuclear reservation will be affected.

The 67 HAMTC-represented positions targeted for layoffs are spread across 13 specialties, with the largest number being 25 nuclear chemical operators.

CH2M Hill told workers in a bulletin Tuesday that reduction in force notices will go out Sept. 17, and Sept. 27 will be the last day of paid employment.

While layoffs for union workers will be based on lack of seniority, layoffs for nonunion workers will be decided based on evaluation of skills needed and a rating and ranking process.

CH2M Hill said in April that layoffs will include CH2M Hill workers and workers with the 11 subcontractors that have been with CH2M Hill since

it took over the central Hanford environmental cleanup contract.

Many workers will be eligible for a severance package that includes one week of pay for every year worked up to 20 years.

CH2M Hill, with Washington State University and WorkSource, plans an open-to-the-public job fair Oct. 11 at a location to be announced.

◆ *Annette Cary: 582-1533; acary@tricityherald.com*

VIT PLANT

Chu to assemble a panel

Experts will review black cells, where people cannot enter

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu has assembled a group of technical experts he will work with to take a fresh look at the Hanford vitrification plant and its black cells.

During his visit to Hanford in June, Chu said the possibility of a serious problem

once the plant begins operating weighed heavily on his mind. He was considering assembling the sort of panel of brilliant and creative thinkers he brought together after the Fukushima, Japan, nuclear disaster and the Gulf of Mexico oil spill, he said.

The Department of Energy announced Thursday the new technical review panel to look at the plant's "black cells" areas, designed to have no worker access during the 40 years the plant operates because of high levels of radioactivity.

"I will be receiving input from each of these highly capable experts to help

improve our ability to detect and address any potential issues in the black cells that could arise during the course of the Waste Treatment Plant's operational life," Chu said in a statement.

"These experts have a reputation for developing creative solutions to highly technical issues and their independent advice will enable us to integrate worthwhile ideas into the design of the plant before construction is completed," he said.

Chu and the independent experts will

See **PANEL** | Page A2

4 Aug 2012

Washington will hold off on vit plant dispute resolution

ANNETTE CARY

HERALD STAFF WRITER

The state of Washington will not immediately go to dispute resolution over court-enforced deadlines that will be missed at the Hanford vitrification plant, Gov. Chris Gregoire said Friday.

But she also will not allow the

Department of Energy to “throw in the towel” on the deadlines and tell the state to trust the federal government without full information, she told the Herald editorial board.

Technical problems should be fixed at the \$12.2 billion plant, but

See **DISPUTE** | Page A2

BRIEFS

Hanford waste hearing is Tuesday in Richland

The state Department of Ecology will hold a public hearing at 5:30 p.m. Tuesday on proposed requirements for Hanford's single-shell tanks.

The state just has released the final portion of its draft Hanford Facility Dangerous Waste Permit covering Hanford's 149 single-shell tanks holding millions of gallons of radioactive and hazardous chemical waste.

The hearing will be at the Richland Public Library.

CREHST, Reach center holding show, dinner

30 56
12

The CREHST museum and the Hanford Reach Interpretive Center are having an authentic World War II mess hall dinner and USO show.

The dinner and show will begin at 6 p.m. Sept. 21 at Building 59, 3416 N. Swallow Ave., Pasco.

Tickets for the dinner are \$50 and can be purchased at the museum, 95 Lee Blvd., Richland, or at the Reach office, 1229 Columbia Park Trail, Richland.

Concrete coming down near K Reactors

6 AUG 12
Only 25 of 85 buildings left

ANNETTE CARY

HERALD STAFF WRITER

The 100 K Area at Hanford is starting to look a little bare.

Where once 85 buildings stood around the K East and K West Reactors, just 25 remain.

The K East Reactor still looms as a gray monolith just 400 yards from the Columbia River. But its size is deceptive.

After work to tear the reactor down to the shield walls around the reactor core, it has less than half the footprint of its nearby twin, the K West Reactor.

"Our strategy is to take out the facilities not necessary to support the reactor," said Tom Teynor, Department of Energy project director. "Then we will go after the soil sites."

The K East and K West Reactors are the last of the plutonium-production reactors lining the Columbia River that will be cocooned, or put in storage for 75 years while their radioactivity decays to more manageable levels.

Six of the nine reactors already have been cocooned and the first reactor to be built, B Reactor, will be saved as a museum.

The K Reactors have been left until last because their attached cooling basins were used to store irradiated fuel that was not processed to remove

plutonium for the nation's weapons program. The fuel, left unprocessed after the Cold War ended, decayed and created a highly radioactive sludge.

With sludge from both reactor basins now moved to underwater containers at the K West Reactor basin, work has begun to cocoon the K East Reactor.

The offices, ventilation room and outer control rod room of the K East Reactor have been torn down. Inside what remains of the reactor, work is continuing to remove lead, asbestos, mercury and oils from pumps so the reactor can be put in storage.

In addition, metal plates and concrete are being used to seal up openings

See **REACTORS** | Page B2

7 AUG 12

Building to be done in phases

Director says action needs to be taken to avoid lost pledges

JOHN TRUMBO

HERALD STAFF WRITER

Running short on time and money, the Richland Public Facilities District board voted Monday to abandon an earlier plan for constructing an impressively sized Hanford Reach Interpretive Center in favor of pursuing something more affordable

and doable in phases.

The board voted unanimously to follow the advice of Executive Director Lisa Toomey, who said decisions had to happen Monday if there is any chance of meeting a timeline for receiving pledged financial support for the project.

"There has been too much waffling for too long," said board member Nicholas Ceto before making the motion to cease activities with Jones & Jones Architects, which developed the original plans for a

5 AUG 12



Washington State's permit to regulate Hanford's single-shell tanks is important to ensure that retrieval of dangerous wastes meets state laws that protect people and the environment. Come learn more about the single-shell tank permit and ask questions at a public hearing. You will also have an opportunity to comment on the permit.

Be heard on Hanford



TUESDAY, AUGUST 7, 2012
the hearing begins at 5:30 p.m.
Richland Library, 955 Northgate

Questions?

E-mail Hanford@ecy.wa.gov or call 800-321-2008



**DEPARTMENT OF
ECOLOGY**
State of Washington

HANFORD TANK FARMS

Double-shell might be leaking

Radioactive material found between inner, outer walls for first time in newer tanks

ANNETTE CARY

HERALD STAFF WRITER

Radioactive material has been found between the inner and outer walls of an underground double-shell tank at Hanford for the first time.

The discovery increases the concern that the inner shell of the tank may have leaked, indicating the deterioration of at least one of the 28 double-shell tanks that are

needed to hold millions of gallons of waste for decades to come.

"If we determine there was a leak or a previous spill, it reinforces the urgency of emptying the tanks and completing the mission," said Tom Fletcher, Department of Energy assistant manager of the tank farms. "The tanks are not getting any younger."

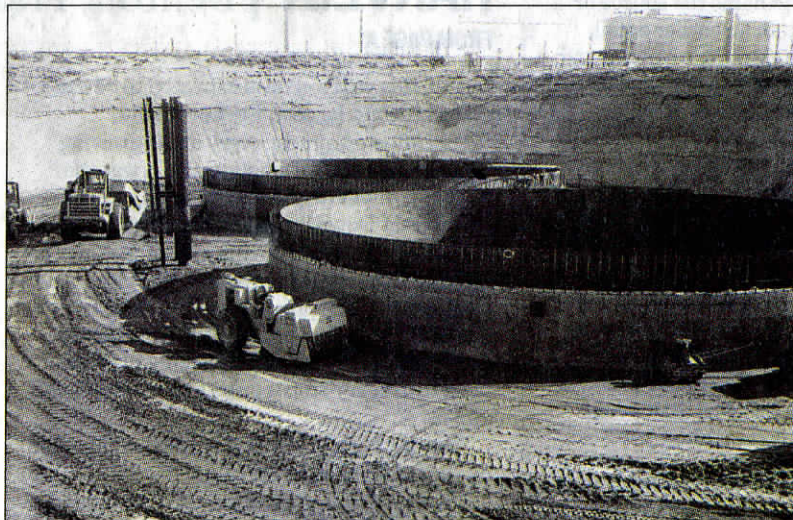
Hanford has 149 leak-prone single-shell waste tanks that

are being emptied into the newer double-shell tanks. The waste is planned to be held there until the vitrification plant under construction can treat the waste for disposal, with the tanks required to be emptied by 2052.

"This changes everything," said Tom Carpenter, executive director of Hanford Challenge. "These tanks were supposed to last another 40 years, but that thinking has been superseded by this new reality."

DOE notified its regulator,

See **LEAKING** | Page A2



Underground waste Tanks AY-101 and AY-102 are shown under construction in about 1969. Radioactive material has been found between the inner and outer shells of Tank AY-102, raising concerns that the inner shell may have leaked. It's the first time radioactive material has been found in the space between the inner and outer shell of one of Hanford's 28 double-shell tanks.

Courtesy DOE

23 AUG 12

More spots open up on tours of Hanford site

This is a good time of year to watch for open seats on tours of the Hanford nuclear reservation because there may be cancellations.

Registration for all of the tours this year opened in March, with all seats claimed within six hours. However, there tend to be cancellations for the late summer tours as people forget they registered or make other plans, said Department of Energy spokesman Rich Buel.

Remaining tours this summer are at 8 and 10 a.m. Aug.

28-30, Sept. 11-13 and Sept. 25-27. To check for openings as cancellations occur, go to www.hanford.gov and click under the "Tours" section on the right side of the page.

Participants must be at least 18 years old.

The five-hour sitewide bus tours include a look inside B Reactor, plus stops at other facilities where environmental cleanup work is being done.

Separate tours limited to B Reactor also are offered. Information about those tours is available at the same website or by calling 376-1647.

- Herald staff

Terranear gets N Reactor cleanup

Texas business will earn
\$5.6M for remaining work

ANNETTE CARY

HERALD STAFF WRITER

Washington Closure Hanford has awarded what it expects to be its final subcontract for the completion of its cleanup work at Hanford's N Reactor.

TerranearPMC, a small Texas business with an office in Kennewick, has been given a subcontract worth \$5.6 million to clean up the remaining waste sites near N Reactor.

Already, the 113 support buildings and other facilities for N Reactor have

come down and the reactor has been "cocooned," or put in temporary storage. The reactor, which once produced electricity for the commercial market and plutonium for the nation's weapons program, has been torn down to its most radioactive portions, sealed up and reroofed to let radiation decay to safer levels over 70 years.

"Washington Closure has done a great job of removing the structures and highly contaminated facilities at the N Reactor area," Rob Cantwell, director of Washington Closure's field remediation program, said in a statement. "Now we begin the final phase of cleaning up the remaining pipelines and soil contamination."

The work is critical to protecting

groundwater and the nearby Columbia River, he said.

Terranear will pull out pipes and dig up contaminated soil, and then package material for shipment to the Environmental Restoration Disposal Facility, a lined landfill for low-level radioactive and hazardous chemical waste in central Hanford.

The other eight plutonium-production reactors at Hanford used coal for backup power. But N Reactor, the newest of the nine reactors, used gasoline, oil and diesel instead for backup power.

"The majority of work remaining includes the removal of pipelines and the cleanup of petroleum that was spilled during reactor operations," said

Mark Buckmaster, Washington Closure project manager for field remediation at N Reactor, in a statement.

Other piping, including for steam and for sewers, also will be removed.

Terranear is expected to complete work on the three square miles around N Reactor by December 2013. All that should remain is continuing cleanup of groundwater.

Terranear is expected to remove about 275,000 tons of contaminated material. Washington Closure already has removed 875,000 tons of contaminated material, including building rubble, from the N Reactor area.

► *Annette Cary: 582-1533;
@tricityherald.com*

Reach might see big windfall

Unspent money from previous site can be put toward center

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center project might be getting about 700,000 unexpected dollars soon to help build a new road and to do utility work at the site selected in the west end of Columbia Park.

Pete Rogalsky, public works director, told Richland

City Council members Tuesday that the money was left over after being unspent at the previous site at the south end of Columbia Point, which was the first choice for the project.

Rogalsky said the federal government is allowing the Washington Department of Transportation to "realign unspent and unallocated" money in the jurisdiction where the money was originally intended to be used.

There is \$200,000 available for the south end of Columbia Point and another \$500,000 that was con-

tracted for but not spent, Rogalsky explained.

The Columbia Point south plan fell apart in 2009 when it became clear that project supporters wouldn't be able to overcome rigorous federal permitting requirements because the land is considered sacred to Native American tribes in the region.

Councilman Robert Thompson said he wasn't ready to put all the money toward the Reach project without knowing if there could be other uses for the \$700,000 that would better serve the city.

"Is this the highest need today for that amount of money? The Reach may be the way to go. I just don't know," he said.

But Rogalsky said the goal is to put the dollars to use quickly for a shovel-ready project, which is what the Reach offers.

"We have to get this through the funding process before the year's end and we have a week to make a decision," he said.

Taking time to consider options could send a wrong

2 Hanford workers being checked for radioactive cesium

Seal on waste storage tank failed, leading to possible exposure

ANNETTE CARY

HERALD STAFF WRITER

Two Hanford workers are being checked for radioactive cesium 137 in their bodies after a seal on a pipe from a waste storage tank failed.

If they did have an internal uptake of cesium 137, it was at a very, very low level, said John Britton, spokesman for Washington River Protection Solutions, the Hanford tank farm contractor.

Workers were doing maintenance in the 242-A Evaporator facility when the problem was discovered, Britton said.

The evaporator is periodically used to reduce water in Hanford's double shell tanks

to make more space for radioactive waste being emptied into them from Hanford's leak-prone single-shell tanks.

Hanford has 56 million gallons of radioactive and hazardous chemical waste stored in underground tanks awaiting treatment for disposal. The waste is left from the past production of plutonium for the nation's weapons program.

Last week, workers were in the condenser room, where radioactive waste is processed when the evaporator is operating, when one worker felt air coming through a pipe and told the shift manager, Britton said.

The cause was determined to be a failed seal on a pipe from a double-shell tank of radioactive waste, which provided a pathway for vapors

See **WORKERS** | Page b2

29 AUG 12

Contractor responds to DOE memo that criticized performance

ANNETTE CARY

HERALD STAFF WRITER

No matter how hard engineers and scientists work on the Hanford vitrification plant, it will never be perfect, said Frank Russo, Bechtel National project director.

But he is confident that the plant will operate safely and efficiently while protecting the

public, the environment and the employees who operate the plant, he said.

His comments were in response to an internal Department of Energy memo made public Monday, in which DOE's engineering division director for the project criticized Bechtel's performance.

The memo called for Bechtel to immediately be removed as the design authority responsible for establishing the design requirements. Bechtel also is designing and building the

See **BECHTEL** | Page A2

22 AUG 12

Energy secretary to visit Tri-Cities

Steven Chu, experts to focus on plant with rooms designed to have no access by workers because of high radioactivity

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu is tentatively expected to spend much of next week in the Tri-Cities, holed up with a group of hand-picked experts.

Chu and his team plan to take a fresh

look at the Hanford Waste Treatment Plant, focusing specifically on its black cells.

The vitrification plant is being built to treat up to 56 million gallons of radioactive and hazardous chemical waste left from the past production of plutonium for the nation's weapons



Chu

the 40 years the plant operates because of high levels of radioactivity.

program. It will be turned into a stable glass form for disposal.

The plant is planned to have 18 black cells — enclosed concrete rooms with tanks and piping that are designed to have no worker access during

The review will look at the plant's capability to detect equipment failure and to repair failed equipment within the black cells. Changes to the design or operation plan of the plant could be proposed.

Chu is not expected to conduct any other business related to the Hanford nuclear reservation or DOE's Pacific Northwest National Laboratory while he is in town.

See **CHU** | Page B2

30 AUG 12

Number of approved layoffs for fiscal 2011 will climb to 100

ANNETTE CARY

HERALD STAFF WRITER

Mission Support Alliance plans to complete layoffs in September that were approved by the Department of Energy for fiscal 2011.

The Hanford contractor told employees Wednesday that 11 workers would be let go, which will bring the total number of layoffs to 100, the top number earlier approved by DOE.

The layoffs will include nine union and two nonunion employees. The union workers may be eligible for a "bump and roll," claiming the jobs of union employees with

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less seniority who work elsewhere at Hanford.

Mission Support Alliance has conducted its layoffs in three rounds with 35 and 54 employees laid off in earlier rounds. It now has 1,676 workers, including workers for the subcontractors who were named when it won the Department of Energy contract to provide services across Hanford.

The job cuts are planned to realign Mission Support Alliance with the overall Hanford work force and the anticipated Hanford budget for fiscal year 2013, which starts in October.

Mission Support Alliance

See **LAYOFFS** | Page B2

28 AUG 12

Board will try to get \$700,000 returned

Money thought to be lost since it was linked to previous proposal

MICHELLE DUPLER

HERALD STAFF WRITER

The Richland Public Facilities District Board voted unanimously Monday to try to recapture a \$700,000 "windfall" of money previously earmarked for the Hanford Reach Interpretive Center project.

The money was believed lost to the project because it was tied to the previous proposed location at the south end of Columbia Point, but the federal government recently opted to release the money back to Washington to re-allocate to a shovel-ready project.

Richland Deputy City Manager Bill King told the facilities district board that the city can apply to the Washington State Department of Transportation to have the money sent back to Richland for the Reach project, but would need an agreement with the transportation department by year's end.

Facility will be used to boost college's engineering program after vit plant testing finished

30 AUG. 12

ANNETTE CARY

HERALD STAFF WRITER

Washington State University Tri-Cities' newest building was dedicated Wednesday, thanks to Hanford and the generosity of EnergySolutions and NuVision Engineering.

The approximately \$3 million EnergySolutions Engineering Laboratory initially will be used to continue testing of mixing systems for the Department of Energy's Hanford vitrification plant to resolve technical issues.

EnergySolutions, which has a subcon-

tract for the research, constructed the building with a high bay to carry out large-scale testing in a tank with a 14-foot diameter. Its subcontractor NuVision Engineering is an investor in the building.

But rather than keeping the building, EnergySolutions donated it to WSU Tri-Cities and will lease it back for a nominal fee through June 2013 and then likely longer at market rates to conduct the research.

When that work is completed, the laboratory will be available for university use, with plans to bolster the school's growing engineering program.

"It will impact students, faculty and economic development in this community for years to come," said Fran Forgette, WSU regent and Tri-City attorney.

The building, on Q Avenue just off University Drive in north Richland, also will

bolster the Tri-Cities Research District, said James R. Pratt, WSU Tri-Cities interim chancellor.

In a time of tight government budgets, there is little hope of capital projects for the school being paid for by the state or other sources, Forgette said.

Instead, "the community has to pull together to form partnerships like we have today," he said.

"I don't want to see this facility be just for the Department of Energy, although they are a very important customer," said Alan Parker, president of EnergySolutions' government group. "I want to see the next Rover test done on this campus."

WSU Tri-Cities has been short on large spaces and has had to turn away a large equipment donation for lack of a place to

See **LAB** | Page A2



Richard Dickin | rdickin@tricityherald.com

A ribbon-cutting ceremony was held Wednesday for a \$3 million building in Richland that EnergySolutions has donated to Washington State University Tri-Cities. The building will be leased back by EnergySolutions while it works to resolve Hanford vitrification plant technical issues. [See video at tricityherald.com.](http://tricityherald.com)

Layoffs at Hanford less than first planned

31 AUG 12
200 or fewer layoffs
to hit CH2M Hill

ANNETTE CARY

HERALD STAFF WRITER

CH2M Hill Plateau Remediation Co. will hold its layoffs in September to 200 or fewer Hanford workers, it told workers Thursday.

It had planned two layoffs in the fiscal year that ends in September with up to 400

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workers total. In the first round, 58 workers lost their jobs through voluntary or involuntary layoffs.

But instead of laying off up to about 340 workers to reach as many as 400 job cuts, it will limit the layoffs to a maximum of just half of the 400 in September. It already has

See **LAYOFFS** | Page B2

Pipeline breaks near contaminated soil site at Hanford

1 SEP 12

Water did not reach waste at 324 Building

ANNETTE CARY

HERALD STAFF WRITER

Up to 150,000 gallons of water spilled from a broken pipeline Thursday at Hanford not too far from one of the most highly radioactive soil contamination sites known at the nuclear reservation.

However, the water did not reach the spilled radioactive waste about 150 yards away beneath the 324 Building or any other known soil contamination sites, said Peter Bengtson, spokesman for

Department of Energy contractor Washington Closure Hanford.

The 324 Building just north of Richland has large hot cells where research was done with high level radioactive waste and materials. In 2010, Hanford officials discovered that cesium and strontium had leaked into the soil beneath the building from a newly discovered crack in the sump at the bottom of one of the building's hot cells.

Radioactivity has been measured at 8,900 rad per hour in the soil. Direct exposure for a few minutes would be fatal, according to Wash-

6 SEP 12

Ninth tank emptied out at Hanford

ANNETTE CARY

HERALD STAFF WRITER

Workers have emptied the ninth underground tank holding high-level radioactive waste at the Hanford nuclear reservation, the Department of Energy announced Thursday.

Although workers still have 140 single-shell tanks to go, this was the second tank DOE

believes it has emptied to regulatory standards this year.

Before that, workers made progress on several tanks, but failed to finish any tank for five years.

DOE is confident it has broken that bad streak, however, and will have an additional two tanks emptied by the end of October.

See **TANK** | Page A2

WASHINGTON CLOSURE HANFORD

DOE review looks at protection efforts

Contractor needs to make sure that improvements last in avoiding falls, review finds

ANNETTE CARY

HERALD STAFF WRITER

Washington Closure Hanford needs to continue to pay close attention to preventing worker falls to make sure improvements are lasting, according to the Department of Energy.

The DOE contractor made improve-

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ments in its program to identify fall hazards and prevent falls after a worker fell 50 feet to the floor through an open hatch in a catwalk in a Hanford building in 2009. He survived after hitting a ladder halfway down.

DOE completed a review this summer, looking at the state of Washington Closure's protection program three years later and made 12 findings, according to a staff report of the Defense Nuclear Facili-

ties Safety Board released this week.

DOE views the identified issues as precursors to potential problems, providing information showing what improvements can be made to prevent serious problems, according to DOE.

"The review also identified that Washington Closure Hanford LLC (WCH) needs to remain diligent in ensuring that corrective actions from previous events continue to be effective and are not diminished when immediate attention wanes," said a letter from DOE contracting officer Jewel

See **EFFORTS** | Page B2

DOUBLE-SHELL TANKS

DOE finds more evidence of leak

More unusual material was found between walls of Tank AY-102

ANNETTE CARY

HERALD STAFF WRITER

More evidence was discovered this week that might indicate that one of Hanford's double-shell tanks is deteriorating.

In early August, radioactive material was found between the inner and outer walls of an underground tank at Hanford for the first time,

raising concerns that waste may be leaking out of the inner shell of the tank.

This week, more unusual material was found when a video camera inspected another part of the area between the inner and outer walls of Tank AY-102.

It was the first additional area of the tank checked as an investigation was launched.

A photo of the same area between the two shells of the tank in 2006 showed it was clean six years ago.

Chu

8 SEP 13

keeps up work on vit plant

Energy secretary
unable to meet with
governor while in state

ANNETTE CARY

HERALD STAFF WRITER

Energy Secretary Steven Chu continued to work on Hanford vitrification plant issues through Friday evening in Richland.

He arrived Wednesday with a team of independent scientists and engineers who he picked to take a fresh look at Hanford Waste Treatment Plant issues, specifically focusing on the plant's black cells.

Gov. Chris Gregoire's staff



Chu

Stimulus money to boost Reach center construction

JOHN TRUMBO

HERALD STAFF WRITER

The proposed Hanford Reach Interpretive Center is poised to start construction at Columbia Park using \$700,000 of newly found leftover stimulus money.

Lisa Toomey, executive director of the Reach, told the Richland City Council this week that the Richland Public Facilities District board said she believes the first phase — putting in the road, utilities, parking lot, lighting and amphitheater — is possible by next June.

“It will take a continuation of our close relationship with you and the city

staff,” Toomey said in her presentation.

The update to the council comes as the Reach project evolves away from a showcase facility to being a campus setting in which several buildings on 18 acres will present what Toomey calls “our story” about the history, peoples, agriculture, the Manhattan Project and B Reactor, Ice Age floods and growth of the communities along the Columbia River.

The first step is to build the first building with funds in hand, Toomey said.

“The next nine months promise to be transformational for this project and this community,” she said.

Toomey said the city can help by approving the \$700,000 surplus stimu-

lus money for the Reach and by reducing the amount of money required for a reserve in case the project stalls.

A smaller set-aside would allow “(us) to build the biggest facility possible,” she said.

Toomey’s presentation described the reconfigured Reach project as having multiple buildings, the first being 10,000 to 12,000 square feet at a cost of \$3.4 million.

No fundraising campaign would be needed.

There would be a 300- to 400-seat amphitheater, and the first building would feature the Hanford Reach, the Manhattan Project, Ice Age floods, agriculture related to the Grand Coulee

Dam and the Columbia River.

There also would be tours for the Hanford area, wineries, irrigation and agriculture.

Toomey said the annual operating cost would be about \$680,000, with a potential deficit of \$57,000 if there is no support revenue.

The projected operating budget would see \$135,400 from admissions, \$179,000 from tours, \$91,200 from adult education programs, \$50,008 from store sales and \$26,290 from memberships. Another \$123,950 would come from rentals and endowments, she said.

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11 SEP 12

State of the Site meetings should resume, board says

Meetings a benefit, allow people to raise issues, ask questions

ANNETTE CARY

HERALD STAFF WRITER

The Department of Energy should resume annual Hanford State of the Site meetings, according to the Hanford Advisory Board.

The meetings have allowed members of the public — and often Hanford retirees, work-

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ers and their families — access to Hanford leaders to raise issues and ask questions.

The last State of the Site meeting was in spring 2011 and before that a meeting was held in 2008, according to Herald records.

Public meetings show decision makers what they should care about, said Steve Hudson of the Hanford Advisory Board, quoting former board Chairman Todd Martin, from a

board meeting Thursday and Friday in Kennewick.

The State of the Site meetings “create a unique environment, unlike the environment one typically finds during more formal public comment periods, for the discussion of Hanford cleanup issues,” said a letter of advice sent by the board to DOE and its regulators.

The less formal atmosphere of the State of the Site meetings helps establish a healthy working relationship among DOE and its regulators, the

HANFORD

12 SEP 12

3 hourly workers plead guilty to overtime fraud

ANNETTE CARY

HERALD STAFF WRITER

Three more current or former Hanford workers have pleaded guilty to timecard fraud in federal court.

That brings the total to eight hourly workers who have pleaded guilty to conspiracy to defraud the government by claiming overtime that was not worked at Hanford.

William Kim Jones, Darin Judy and Douglas Mallory

are the latest to plead guilty. All worked as radiological control technicians for former Hanford tank farm contractor CH2M Hill Hanford Group.

Judy and Mallory continue to work for the current tank farm contractor, Washington River Protection Solutions.

It was accepted practice in the past at the tank farms, where 56 million gallons of radioactive waste is stored in

DOE wants changes to advisory board

Term limits 1 of proposals

ANNETTE CARY
HERALD STAFF WRITER

The Department of Energy is changing the rules for the Hanford Advisory Board, to the dismay or anger of most of its board members. Initially, that would include term limits for members representing some Hanford employees on the

board and the general public. However, DOE Hanford officials and DOE Headquarters officials are continuing talks on additional changes to the board, with the wish for changes driven by officials in Washington, D.C., rather than at Hanford. DOE declined to say what other changes are being discussed. "A promise was made to the board four years ago. The promise was not kept," said Jeff Luke, who represents

non-union, nonmanagement employees on the advisory board. The Hanford Advisory Board was formed almost 19 years ago, before policies were made that cover DOE boards across the nation. In 2008, the Hanford board agreed to a revised charter after two years of discussions with DOE, after DOE unilaterally imposed term limits. The compromise reached did not have the term limit language, which

some board members said then appeared to be an attempt by some in DOE to get rid of members with opinions it disliked. DOE said then that changes were needed to meet legal and policy requirements, but ultimately allowed the board to continue operating differently than more recently formed advisory boards. The board considers Hanford issues and then reaches consensus on what it believes DOE and its regula-

tors should be doing. It's fought for issues such as better worker protection from contaminants and cleaning up environmental contamination rather than leaving it in place with engineered caps to keep it from spreading toward groundwater. Board members misunderstood what the promise was in negotiations four years ago, said Cate Alexander,

14 SEP 12

Herald wins awards for Hanford series, photos

The Tri-City Herald received a second-place journalism award for its nine-day series on the effects of the Hanford layoffs.

The Herald's second-place Debby Lowman Award for Distinguished Reporting of Consumer Affairs and other C.B. Blethen Memorial Awards for newspaper reporting were announced Thursday at the annual meeting of the Pacific Northwest Newspaper Association in Portland.

Herald reporters and photographers took a closer look at what the 2,000 layoffs at the Hanford nuclear reservation would mean to Tri-Citians and our economy in the series called, "Hanford Layoffs: The Ripple Effect."

20 Sep 12

Interpretive center to get money

Richland city council agrees to assign \$700,000 to project to start building in park

JOHN TRUMBO

HERALD STAFF WRITER

The Hanford Reach Interpretive Center project is getting more money along

with fewer restrictions from the city of Richland to start building in the west end of Columbia Park.

This week, the city council agreed to assign \$700,000 in unused Washington State Department of Transportation funds allocated to Richland for the Reach project.

The council's vote of 5-1 included opposition from Brad Anderson. It also accepted the interpretive center's pro-

posed operations and budget plan. And the council amended the city's sublease with the Richland Public Facilities District to give more time to begin construction, as well as reduce the financial reserves required as a facility contingency fund.

Prior to the council vote, Fred Raab, president of facilities district, asked the council to consider how useful the

See **MONEY** | Page B2

HANFORD

F Reactor site completely cleaned up

First time workers finished removal of contaminated waste at a reactor location

ANNETTE CARY

HERALD STAFF WRITER

Hanford workers have finished cleaning up a Hanford reactor site for the first time, the Department of Energy announced Wednesday.

Gone is the industrial complex with more than 100 buildings that once

surrounded F Reactor, Hanford's third plutonium production reactor along the Columbia River.

Contaminated soil and waste sites — where debris was disposed of in unlined pits and trenches — have been dug up. What remained of Hanford's former experimental animal farm, including buried carcasses and radioactive manure, was hauled off.

Now most of the 2-square-mile complex looks much as it did before settlers began arriving, only to have to give up their farms and homes during World War II to make way

for the Manhattan Project.

An expanse of sagebrush stretches from what remains of F Reactor to the blue of the Columbia River.

"It's a momentous occasion," said Matt McCormick, manager of the DOE Hanford Richland Operations Office, at Wednesday's brief ceremony with contractor Washington Closure Hanford to mark completion. "You guys removed the source of contamination that could threaten the Columbia River."

See **REACTOR** | Page A2



Matt McCormick, manager of the U.S. Department of Energy, Richland Operations Office, talks to workers Wednesday after a celebration marking the completion of the F Reactor area cleanup. F Reactor operated from 1945-65 and was placed in safe storage in 2004. [See video at tricityherald.com.](#)

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19 SEP 12

Hanford tank contractor reaches safety milestone

Employees of Washington River Protection Solutions have worked more than 5 million hours without a work day lost to injury.

“This is unprecedented in Hanford’s tank farm history,” said Mike Johnson, president, in a statement.

Employees have worked 520 days or more than 15 months without an injury that required a day away from work.

IG audit can see challenges in getting waste to vit plant

But progress seen in system allowing plant to operate

ANNETTE CARY

HERALD STAFF WRITER

Challenges remain for completing a system to deliver and feed radioactive waste to the Hanford vitrification plant, according to an audit released Tuesday by the Department of Energy Office of Inspector General.

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But overall, DOE has made progress in completing the system that will allow the vitrification plant now under construction to eventually begin operating, the audit concluded.

"We found the department completed a number of waste feed delivery sub-projects earlier than planned and was on track to complete other critical

path activities," the audit concluded.

The \$12.2 billion vitrification plant is planned to turn up to 56 million gallons of radioactive and hazardous chemical waste now held in underground tanks into a stable glass form for disposal. The waste is left from the past production of plutonium for the nation's weapons program.

The waste will be staged at double shell tanks nearest the vitrification

See **AUDIT** | Page A2

BRIEFS

2 Hanford workers clean for radioactive exposure

Test results have come back clean for two workers being checked for radioactive exposure at Hanford's 242-A Evaporator this summer.

Some 29 workers at the evaporator were sent for whole body counts after a seal on a pipe from a waste storage tank failed. It created an open ventilation path from a tank holding high level radioactive waste to the evaporator's condenser room.

Tests for 27 of the workers showed no exposure, but the whole body counter detected cesium 137 at levels slightly above established detection levels. The levels were too low to calculate a radiation dose to the workers' bodies.

As a precaution, urinalyses were done for those two workers. The completed tests showed no radioactivity in their bodies above background levels.

Washington River Protection Solutions considers the two whole body counts with readings to be false positives. The Department of Energy contractor continues to investigate why the ventilation pipe seal failed.

1.5M tons of material cleaned up at F Reactor

Hanford workers have finished environmental cleanup of a reactor area at Hanford, a first for the nuclear reservation, Washington Closure Hanford and the Department of Energy are scheduled to announce Wednesday.

About 1.5 million tons of contaminated material, including building rubble and soil, were removed from the area around F Reactor and away from the Columbia River. Work also included digging up the carcasses of animals used for radiation exposure research in the early years of the Cold War.

F Reactor was one of nine reactors lining the Columbia River that produced plutonium for the nation's nuclear weapons program. It was Hanford's third reactor and produced plutonium from the mid 1940s to the mid 1960s.

Near F Reactor was a laboratory and an animal farm used for radiation exposure research.

DOE director wants Bechtel authority cut

Official says technical issues erode confidence in contractor's ability to complete design work

ANNETTE CARY

HERALD STAFF WRITER

Bechtel National should be removed as the design authority for the Hanford vitrification plant, according to a memo from a key Hanford Department of Energy official overseeing engineering of the project.

Bechtel holds the Department of Energy contract to build the \$12.2 billion plant, including serving as the design authority to establish the design requirements and make sure the design process is technically adequate. It also is assigned to design the plant.

"The behavior and perform-

ance of Bechtel Engineering places unnecessarily high risk that the WTP (Waste Treatment Plant) design will not be effectively completed, resulting in fully operational facilities," Gary Brunson, DOE engineering division director for the plant, wrote in the memo.

DOE continues to be frustrated with the lack of progress on the project as it continues to work with Bechtel to address ongoing technical issues, said DOE in a

See **DOE** | Page A2

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Official lists technical concerns

The Department of Energy has uncovered technical findings in the vitrification plant's proposed design at a nearly constant rate since 2008, according to Gary Brunson, plant engineering division director for DOE.

"The number and rate of problems identified is indicative that issues are not being resolved," he wrote in a memo.

He listed 34 examples, detailing some of his concerns that he said DOE engineering staff have worked to have corrected, as follows:

▶ Contractor Bechtel National said the process offgas from some of the melters turning radioactive waste into glass

should be under positive pressure.

That means any pinhole leak would result in fatal concentrations of gases in a matter of seconds for nearby people. Bechtel said it could manage or seal 560 potential leak sites, according to Brunson. The design has since been changed to put much of the system under a vacuum.

▶ Bechtel advised that melters can be purged of high-level radioactive waste glass before disposal using a vacuum system. However, the melters are in an area that is sealed and have no space for a vacuum system to be

See **CONCERNS** | Page A2