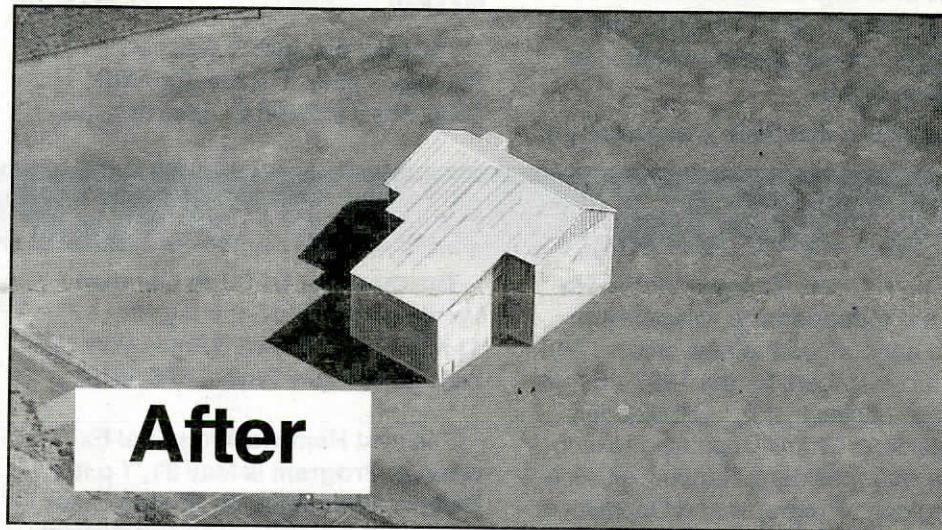


Before

C Reactor in FY1996



After

Artist's rendering of C Reactor at end of FY1998

C Reactor is beginning of end for site reactors

For nearly a quarter century, the U.S. Department of Energy has been considering what to do with the nine plutonium production reactors dotted along the Columbia River at Hanford. Today, plans have turned into action and DOE's Richland Operations' Environmental Restoration Project is well into decontaminating and decommissioning the first of these reactors, C Reactor.

C Reactor is actually two projects rolled into one. The \$18 million price tag for decontaminating and decommissioning (D&D) C Reactor is being split between DOE's divisions of Environmental Management (EM-40) and Science and Technology (EM-50). While the EM-40 program is the sponsor for tearing down the existing reactor, the EM-50 side is demonstrating at least 20 new technologies that are expected to help reduce costs and time at other Hanford projects. Successful technologies can also be quickly transferred to other DOE sites and to private industry.

"It's an important project for the DOE," said Rich Holten, RL-ER Director of Restoration Projects. "C Reactor provides us with a venue to show Congress, regulators and our stakeholders that we are solving problems and implementing solutions that are clean-

ing up the Hanford Site."

Activity now taking place at C Reactor is based on an Environmental Impact Statement completed in 1993. The EIS, which included public involvement and participation, resulted in a record of decision with a preferred alternative to place Hanford's reactor buildings in a safe storage mode for up to 75 years, and then move the reactor cores to a specially prepared burial site in the 200 West Area.

Today, workers managed by the Bechtel Hanford, Inc.-led Environmental Restoration Contract (ERC) team are busy removing hazardous materials and nonessential equipment and structures from C Reactor. When the decontamination and decommissioning work is completed, all that will remain is the reactor block and its existing three-to-four feet thick concrete shielding walls. These walls will serve as the base for a new stainless steel roof.

The new facility containing the reactor block will be 70 percent smaller than the original structure. Remote monitoring equipment will be installed and the facility will be sealed. Workers will enter the building only once every five years to inspect the facility.

"Surveillance and maintenance costs for C Reactor have been about \$200,000 a year," said Jeff Bruggeman, RL-ER D&D project manager. "When the C Reactor project is finished, our costs will be cut nearly 75 percent to about \$50,000 annually."

Construction of C Reactor began in June 1951 and operations commenced in November 1952. The reactor produced irradiated nuclear fuel for producing plutonium, and served as a test facility where new operating procedures could be tried before implementing them at Hanford's other production reactors. Since its shutdown in 1969, C Reactor's exterior structure has slowly deteriorated.

"There's a touch of irony that the Hanford reactor used to test new operating techniques is now being used to test new D&D technologies," said Greg Eidam, ERC project manager. "These are valuable lessons, however, as we anticipate that the D&D work at other Hanford reactors can be accomplished for \$5 million less than the cost at C Reactor."

To date six new technologies have been tested, including the laser-assisted ranging and data system, used to map

contamination sites; the system for tracking remediation, engineering, activities & materials (STREAM), a type of virtual reality data bank; the temporary power & light system, a portable power supply and communication center; the self contained battery operated shears, portable hydraulic shears used to remove piping; the gamma ray imaging, a safe, portable system safely locate gamma-ray-emitting nuclides; and the position sensitive radiation detector/monitor, used to pinpoint alpha or beta contamination.

"So far, our investment in showcasing these technologies is providing a real payback," said Shannon Saget, D&D project Manager for the RL-Science and Technology Division. "With the possible exception of the portable hydraulic shears, each technology appears to meet our criteria for enhancing the safety and efficiency, and reducing costs of D&D work."

At least 14 more D&D technologies will be tested at the reactor before the project is completed in September 1998.

Additional information about C Reactor can be found on the internet at <http://www.bhi-erc.com/projects.htm>. ■

Hanford companies good mix of large, small

By JOHN STANG

Herald staff writer

Hanford's six enterprise companies include giants like Fluor Daniel Northwest Inc., a company that pours millions of dollars into the Tri-City economy.

And they include tiny firms with specialized niches — three with work forces equal to or smaller than that of Kennewick's Red Robin restaurant.

All six companies were spun off from the old Hanford to become part of a newer Hanford that helps diversify the Tri-City economy.

The six companies are headed in their individual directions. Here is how they are shaping up:

■ Fluor Daniel Northwest Inc.

Fluor Northwest now is the largest construction company in Washington — and the fourth largest in the entire Fluor corporation.

The company took over the role the former ICF Kaiser Hanford Co. played at Hanford.

Six months ago, Fluor Northwest had 883 office and 379 building trades employees, for a total of 1,262 workers. As of April 1, that number stood at 880 office and 360 building trades workers, for a total of 1,240.

While President Stew Heaton expects no mass hirings or layoffs, there will be some fine-tuning to get the mix of work skills that Fluor Northwest wants. Also, a handful of people may be transferred to Fluor operations in other cities.

Fluor Northwest still is developing its long-term plan for weaning itself from Hanford contracts. Heaton speculated shifting 10 percent of its business from Hanford within a year "would be a stretch right now."

Heaton figures it will take three years to build a respectable non-Hanford client base. The parent Fluor corporation has built numerous

food processing and power plants and biochemical and pharmaceutical buildings — prospects that Heaton sees as ripe ones for Fluor Northwest.

He guesses 25 percent of Fluor Northwest's business could be outside of Hanford in three years, but cautions that is a "blue sky" guess.

Of all the enterprise companies, Fluor Daniel Northwest's presence has been felt the most in the Tri-Cities.

With creation of the new Fluor subsidiary, what had been Westinghouse Hanford Co.'s biggest subcontractor became an outside commercial company.

The former ICF Kaiser Hanford

Co. was strictly a federal government contractor — bound by federal procurement rules.

But the new Fluor Northwest has to operate leaner as it faces more cut-throat competition away from Han-

ford. Fluor also has a different corporate culture than Kaiser.

One major change was that Kaiser opened bidding on its project contracts to everyone. Fluor Northwest picked what it believed are the four or five best companies for a job and limited the bids to them.

Heaton said this is standard procedure in the nongovernment commercial construction world and in the overall Fluor corporation.

But the practice drew criticism from Mid-Columbia contractors, who felt squeezed out of Hanford work that they competed for in the past.

In response to that criticism, Fluor Northwest recently reopened the bidding to any qualified company.

Some tension is caused by a shrinking Hanford construction budget.

About \$40 million of Kaiser's fiscal 1996 budget went to subcontracted construction work — an amount Heaton suspects will shrink 5 percent this fiscal year. That means tougher competition for Hanford construction work.



Herald/Bob Brawdy

Gary Geiger, a scientific technician, with Environmental Management Inc., baits a pigeon trap at Hanford's 300 Area as part of his company's contract with Rust Federal Services Northwest. Rust is one of six so-called enterprise companies working on Hanford cleanup.

■ Lockheed Martin Services.

Lockheed Martin Services is a spinoff of Lockheed Martin Hanford Co., which runs Hanford's tank farms. But this spinoff bears little resemblance to the parent company.

Lockheed's enterprise company inherited the role and workers of Boeing Computer Services. Boeing and Kaiser were the two chief subcontractors of Westinghouse when it ran Hanford.

Lockheed runs computer management, payrolls, photography and video services for Hanford.

Six months ago, LMS started out with 550 employees. Then it lost about 70 people, with the majority leaving to rejoin Boeing.

Although LMS has a 401(k) plan, it does not offer a pension plan, which Lockheed says is a fact of life in the competitive computer services industry. That prompted many people to rejoin Boeing.

Lockheed has since increased its employees to 498, and President Bob Russell expects to stabilize the work force at 520.

Russell said LMS's Hanford operations have been "going extremely well." But he is disappointed with efforts to expand beyond Hanford. Marketing the firm outside of Hanford has taken longer than he expected.

So far, LMS has a small contract with Siemens Power Corp. in Richland. Its first out-of-town contract is with the Oregon Health Sciences University in Portland to work on computer animation.

Russell said Lockheed is seeking contracts with about 30 potential clients for jobs ranging from \$5,000 up to a couple of million dollars.

He sees getting small contracts as a way to get his firm's foot in some doors.

"If we get the smaller ones, we'll

get an entrée to bigger contracts," he said.

■ B&W Protec

B&W Protec's first non-Hanford venture is eyeing a contract at another Department of Energy site.

The company handles security at Hanford, and its work force has remained steady at about 175 people.

This is Babcock & Wilcox Co.'s enterprise counterpart, but it is actually a subsidiary of B&W Federal Services of Lynchburg, Va., which already handles security at DOE sites at Rocky Flats and Idaho Falls.

B&W Protec's market is security for government and high-tech sites, said Richard Loving, company president.

The company has not set specific expansion goals so far, Loving said. But he said B&W Protec joined forces with another company in a joint venture that made the short list of bidders to provide security at a DOE site. He declined to elaborate.

■ SGN Eurisys Services Corp.

SGN Eurisys hopes to grow from 105 employees to 125 by year's end.

This is Numatec Hanford Inc.'s "outside-the-fence" counterpart, and it is actually a joint venture of the SGN corporation of France and Cogema Inc. of Bethesda, Md.

SGN Eurisys designs and tests equipment to study and retrieve radioactive wastes stored in underground tanks.

Bruce Morson, the company's manager, hopes to get 15 percent of his company's work outside of Hanford by 1999. Some of that would be at other DOE sites. And some would be at commercial sites in and out of the United States.

So far, SGN Eurisys has five small contracts — mostly with DOE sites — scattered across the United States.

■ Rust Federal Services Northwest

Rust Northwest has increased from 47 to 97 employees since Oct. 1, 1996. But that was because of Fluor Daniel Hanford transferring an old

Westinghouse department that specialized in packaging and transporting fuels and hazardous wastes to this enterprise counterpart of Rust Federal Services of Hanford Inc.

The company handles a variety of environmental monitoring.

There is a wide-open market for federal and commercial non-Hanford work in these fields, said P.K. Brockman, Rust Northwest's general manager. But he added, there is also heavy competition in these fields.

The addition of the old Westinghouse packaging and transportation division brought an existing chunk of non-Hanford work that used to be handled by Westinghouse.

Overall, Rust Northwest hopes to get 10 percent of its total workload into commercial clients by the end of 1997, Brockman said.

One edge possessed by Rust Northwest is it is a subsidiary of gigantic Waste Management Inc., the nation's largest company dealing with conventional and hazardous materials landfills, garbage hauling and other waste operations.

Brockman said that connection will open doors for Rust Northwest, but Rust still must compete for Waste Management contracts along with other companies.

■ DE&S Northwest Inc.

DE&S Northwest's main mission is providing quality assurance for Fluor Daniel Hanford — meaning independent checks of management systems and processes.

Consequently, this company will play a role in a major Fluor push to trim Hanford's indirect costs — the overhead and other costs shared by the "inside-the-fence" companies.

Fluor's indirect costs have drawn attention from Hanford's regulatory agencies and various interest groups.

George Grier, DE&S Northwest's president, expects his work force to remain stable at 44 people. He has a staff member exploring non-Hanford business opportunities.

Enterprising concept coming together



Producer and editor Nick Murphy makes in-house videos for Hanford. Murphy and his crew work for Lockheed Martin Services, one of sev-

eral Hanford enterprise companies hoping to increase efficiency and diversify the Tri-City economy.

Herald/Tracy Montauk

Plan aims to help efficiency, economy

By JOHN STANG

Herald staff writer

Eight months ago, Fluor Daniel brought to Hanford a radical new way to manage the federal site — an approach that included the birth of six new “enterprise companies.”

The birth pains of these new companies are now past, and the companies are taking their first baby steps. But they have a long way to go before they can run.

Creation of the enterprise companies is a new concept to the Tri-Cities, to Hanford and to the Department of Energy.

The concept is a grand experiment in spinning off government work to the private sector in an effort to increase efficiency. There's also hope the new companies will be able to round up other nongovernment work to diversify the Tri-City economy.

Hanford: The Enterprise Companies

Caught in the middle of this experiment are 2,180 Hanford employees.

These test subjects are the employees who lost their jobs with one of Hanford's big government contractors and were reassigned to one of the new enterprise companies — the so-called “outside-the-fence” companies. About 10,930 workers remain with Fluor and other “inside-the-fence” companies.

In many cases, the “outside-the-fence” workers are doing the same jobs they did before — though for a new private company

and with fewer benefits. In fact, the cores of the enterprise companies are old Westinghouse departments or subcontractors that were moved wholly “outside the fence.”

The idea is the enterprise companies initially will do almost all their business with Hanford. But they are to wean themselves gradually from Hanford to become permanent Tri-City companies that will remain when Hanford cleanup is done.

It may be years before anyone knows if the enterprise company idea was a good one.

However the experiment goes, the credit — or the blame — will go to Fluor Daniel.

Though DOE has tinkered with splitting off small contractor divisions into new private firms at several of its sites, it never before has tried anything as big and elaborate.

It was Fluor that suggested the Hanford experiment.

The idea came as Fluor officials looked at

Please see **ENTERPRISE**, Page A10►

Studies continue into blast

Questions throwing suspicion on Hanford

By JASON HAGEY

Herald staff writer

Amid the slew of unanswered questions about Wednesday's explosion at Hanford, one thing is certain: The blast will be studied extensively.

The immediate physical damage from the explosion was surprisingly minimal, Hanford's top officials say, but the fallout from the ensuing investigation is certain to be more extensive and expensive than the cost of cleaning up the building.

“There will be a ripple effect,” said Lloyd Piper, acting manager of Hanford.

French keeping eye on Hanford

By JOHN STANG

Herald staff writer

The French government wants to keep a close eye on Hanford, that nation's ambassador said Monday in Richland.

“The French government will follow with the utmost interest what will go on at this site, especially on the ‘back end’ of nuclear technology,”

Ambassador Francois Bujon de l'Estang told about 100 Hanford and Tri-City officials and French Tri-Citians at the Hanford House.

That “back end” is the reprocessing or disposal of spent nuclear fuel and radioactive wastes.

And French engineering and technology in those fields are playing a growing role at Hanford.

Numatec Hanford Inc. belongs to Fluor Daniel Hanford's seven-company team, and provides engineering support for the other corporations.

Numatec is co-owned by SGN-Eurisys Group of France and Cogema Inc. of the United States, which is a subsidiary of the French Cogema corporation. Those two companies handle practically all processing of spent nuclear fuel and radioactive wastes in France.



Bujon de l'Estang

Cause of Hanford blast believed found

Several questions still unanswered

By JOHN STANG

Herald staff writer

Investigators believe evaporation caused two substances inside a Hanford chemical tank to react and explode.

The big remaining question is: Why was the solution neglected and allowed to become volatile?

A Department of Energy investigating team reached the preliminary conclusion Monday on what caused the explosion that blew the top off a 1,000-gallon tank inside Hanford's Plutonium Reclamation Facility on Wednesday evening.

Last week, there was confusion and conflicting reports on what was in the tank. Now investigators believe the explosion was caused by a volatile mix of hydroxylamine nitrates and nitric acid.

DOE official Ron Gerton, chairman of the

investigating team, said the accident began in 1993. That's when a solution of nitric acid and hydroxylamine nitrates was put in the tank on the building's fourth floor to be used for a training exercise. The chemicals are used to recover plutonium from wastes.

Investigators were told the remaining solution was left in the tank for future decontamination work, but they have not confirmed that yet, Gerton said.

That solution had a volume of 185 to 200 gallons. At that volume, the water kept the nitric acid and hydroxylamine nitrates in a safe, stable condition, Gerton said.

But over time water evaporated out of the solution, and the vapor escaped through tiny openings in the tank.

The volume of liquid shrank to less than 40 gallons — leading to much greater concentrations of hydroxylamine nitrates and nitric acid. The greater concentrations heated up the chemicals, causing them to react.

Last week's rising temperatures probably was not a factor in the explosion, Gerton said. "At that concentration, it was going to go off irrespective of what was going on outside," he said.

Investigators now are looking at why the

solution was allowed to evolve into an explosive mixture, Gerton said. He said it hadn't been determined yet how often the tank was checked.

"Why was something not done? They could've prevented it by adding water. ... That's the part that the investigation is in now," Gerton said.

Meanwhile, DOE believes after an initial survey of Hanford site managers that this mixture does not exist anywhere else at Hanford — but it is doublechecking. "It's the old 'trust, but verify,'" Gerton said.

Other DOE sites also will be checked to see if they have tanks containing the mixture.

The investigation team's final report is due by mid-June.

The team's preliminary findings also noted two small holes in the room's roof but no indications that radiation escaped through the holes. DOE is investigating further.

No airborne contaminants have been detected so far.

The explosion ruptured a water sprinkler pipe, which flooded the immediate area and sent water down an elevator shaft where some soaked into the ground.

Initial tests showed slightly higher radioac-

tivity than background levels in the halls, but DOE believes that could be because of contamination from an earlier spill.

Meanwhile, the health of eight workers who were outside the building after the explosion will be monitored for at least six months.

No "significant, serious problems" have shown up so far, said Dr. Larry Smick, a physician with the Hanford Environmental Health Foundation.

Exams on Friday showed minor rashes on two workers. A few suffered nausea and flu-like symptoms, Smick said. One worker complained about an impaired memory.

Some symptoms could be because of exposure to "low-level irritants," Smick said. But the workers have improved since, he said.

HEHF is keeping in touch with toxicologists at the University of Washington.

Meanwhile, the Washington Department of Health is conducting its own investigation on if radiation escaped from the building.

"It's like putting together a 500-piece puzzle, and you have only 200 pieces," said Al Conklin, manager for radioactive air emissions for the state health department.

"But we've not seen anything so far that indicates any releases," he added.

School districts say state can't share settlement

By JILL FITZSIMMONS

Herald Valley bureau

PROSSER — The state is wrongly trying to cash in on a tax settlement between the Prosser School District and the federal government, the district superintendent said Tuesday.

So the district has joined forces with four other school districts in Benton, Grant and Franklin counties that believe they shouldn't have to share a portion of their tax settlements with the Department of Energy with the Office of Superintendent of Public Instruction, Superintendent Ray Tolcacher said.

"The whole mind set of DOE was to serve the kids of Prosser and Richland — not all over the state of Washington," he said at Tuesday's school board meeting.

The school district is among 11 taxing jurisdictions in Benton County that shared in a nearly \$12 million settlement with DOE. The money represents back taxes for Hanford lands taken off the county tax rolls.

The federal government also is paying the county an annual tax bill, which is to be redistributed among the taxing jurisdictions.

The district has received about \$220,000 so far and expects to receive nearly \$50,000 annually when DOE

pays its tax bill, Tolcacher said.

The state argues the money is added income so it should be taxed and redistributed throughout the state, Tolcacher said. But DOE never intended for the money to go to school districts that aren't affected by Hanford, he countered.

The state also received a portion of the overall settlement and is to receive an annual payment from the tax bill. For the state to receive a settlement and a portion from the school districts is "double dipping," Tolcacher said.

It's unclear how much the state is asking for, Tolcacher said. But while the district awaits an answer, the school board on Tuesday voted not to use any of the settlement money until a decision is made. That means such projects as the building of new soccer fields won't be done, Tolcacher said.

In other business, the school board's decision to hire AIDS speaker Julie Lewis of Spokane met little opposition Tuesday after several parents last week spoke against hiring someone from the group People of Color Against AIDS. Some parents said the group didn't emphasize abstinence.

The 90-minute presentation will be given to seniors May 28. A preview of Lewis' presentation is to be at 5:30 p.m. today in the high school library.

New Bechtel president will arrive at end of June

By JOHN STANG

Herald staff writer

Bechtel Hanford Inc. will get its fourth president in less than three years on June 30.

"I plan on being here awhile," said Steven Liedle, Bechtel's current vice president for operations, who will become president.

He will replace the retiring Mike Little, 52, is retiring for personal reasons, including concerns over his future health, a desire to spend more time with family, wanting to teach and wanting a general change of pace.

"This has been a very rewarding experience. It has been the capstone of my

career," Little said.

Bechtel has been Hanford's prime environmental restoration contractor since mid-1994 and employs about 700 people.

It has a five-year contract.

Bechtel Hanford's first president in 1994 was Ed Keen, who retired in March 1995. Vice President Joe Nemec replaced Keen.

Meanwhile, Little led Bechtel's year-long



Liedle

effort to become the Department of Energy's lead contractor at Hanford — a contract that Fluor Daniel won last August.

Then Nemec was promoted to president of Bechtel Environmental Inc., which is headquartered in Oak Ridge, Tenn., and Little became Bechtel Hanford's president last October.

Liedle, 42, was among the first Bechtel executives to arrive at Hanford in early 1994.

The Milwaukee, Wis., native started as Bechtel's manager for the 300 area, a slot that expanded to managing the 200 and 300 Areas. He then became the company's manager of projects, before becoming vice presi-

dent for operations in March 1996.

"The biggest challenge will be keeping up the momentum," he said.

Liedle pointed to Bechtel's completion of a giant landfill for Hanford's hazardous, chemical and low-level radioactive wastes over the next few decades. And he cited the ongoing and highly visible C Reactor "cocooning" and N Reactor deactivation projects, as well as some ground water treatment projects.

Liedle does not expect to make major changes. Bechtel's manager of projects Mike Hughes will fill his vice president slot.

Lurking in the background are possible federal budget cuts, which could affect Bech-

tel's operations. But Liedle noted the proposed Hanford budget for fiscal year 1998 includes \$130 million for Bechtel's environmental fix-it work, which is about the same as it has in fiscal year 1997.

He earned his doctorate in environmental science and engineering from the University of California at Los Angeles. Until 1994, Liedle spent his entire career at Bechtel's Oak Ridge operation, where he managed several environmental cleanup projects.

Meanwhile, Little is finishing a career that included time in the federal government and 17 years with the Boeing Co. before moving to Bechtel three years ago.

Medical isotopes offer new hope to cancer patients

By ANNETTE CARY

Herald staff writer

Robert Schenter of Pacific Northwest National Laboratory heard from a 15-year-old cancer patient this week.

"No way do I want to go through chemotherapy again," she said, according to Schenter. "I want to try the smart bullet approach."

Coping with the disagreeable side effects of chemotherapy, she had seen a video on experimental procedures getting good results treating cancer with radioactive isotopes.

They act like "smart bullets," traveling through the body until they find a cancer cell to lock onto and bathe in a lethal dose of radiation.

"That's the theme. That's why we're work-

ing so hard in this area," said Schenter at a forum Wednesday in Richland to discuss prospects for medical isotope production at Hanford. The event was sponsored by PNNL.

The national laboratory already is producing and marketing radioactive isotopes for medical research. They are derived from nuclear waste materials at Hanford.

But that laborious method is impractical for producing the increased amount of medical radioactive isotopes that may be needed in the future as new uses are developed.

Every year new applications are found for radioactive isotopes that could be produced at the Fast Flux Test Facility at Hanford, Schenter said.

Not only are tests under way using radioactive isotopes to provide high power radiation to kill cancer cells, but the isotopes also are being used for pain relief

and treating other diseases.

Cancer patients already are getting relief from radioactive isotopes for the excruciating pain caused by the malignancy spreading and growing within their bones — a pain narcotics won't stop.

In Europe, arthritis is being treated by radioactive isotopes injected into joints. The isotopes reduce pain and symptoms by killing inflammatory cells, said Thomas Tenforde, manager of the Hanford Radioisotope Program at PNNL.

The radioactive isotopes also may eventually be used to save 150,000 people a year in the United States from undergoing painful arterial bypass surgeries, Tenforde said.

In about a third of angioplasties — a non-surgical way to clear plaque-blocked arteries — the tissue surrounding the blockage responds to the trauma by growing and shutting off the artery again. Then patients

must have bypass surgery.

But radioactive isotopes have shown promise in preventing cells in the surrounding tissue from dividing and spreading.

Radioactive isotopes are widely used in medicine. But they most often are used in low doses in diagnostic procedures.

They can be used to check for conditions ranging from brain tumors to liver disease to tumors to heart disease.

Some 90 to 95 percent of the radioactive isotopes used for those diagnostic procedures are imported to the United States.

Supporters of restarting the Fast Flux Test Facility at Hanford are hoping it would be used to meet an increased demand for radioactive isotopes — rather than relying on foreign suppliers or seeing their use stall for lack of a high-quality and diverse supply.

The reactor was ordered to shut down in

December 1993 for lack of a mission. But this January, it was put on standby to be considered for a joint mission of producing tritium for nuclear warheads and isotopes for medical uses.

In 1998 Energy Secretary Federico Pena will decide if the FFTF will play a role in tritium production. However, that's not the final decision.

If he decides in favor of the FFTF, more studies will be done, and the public asked for comment.

The Department of Energy's Richland office plans an education effort starting in June to talk about the capabilities of the FFTF and possible plans for its use.

Speakers will be talking to environmental groups, the tribes, state politicians and others to dispel misrepresentations, said Al Farabee of the DOE's Standby Project Office.

PFP tank room: a trail of troubles

By JOHN STANG

Herald staff writer

One of Hanford's best-known whistleblowers returned last week to the Plutonium Finishing Plant.

Ed Bricker was part of a state health department team checking the aftermath of a May 14 explosion that blew the lid off a chemical tank in Room 40 of the PFP's Plutonium Reclamation Facility.

Bricker was Hanford's first high-profile whistleblower, calling attention to safety

problems at PFP and other sites in the 1980s.

And the fourth-floor Room 40 especially beckoned to him May 16 as he stood outside PFP.

A Hanford worker wondered why Bricker appeared worried, saying that room had never been contaminated before.

Bricker replied: "You have no institutional memory. That room had been highly contaminated (in the past)."

The Department of Energy now is poking around in its institutional memory.

What DOE is looking for is past track records of explosions or severe chemical

"You have no institutional memory. That room had been highly contaminated (in the past)."

— Ed Bricker,
Hanford whistleblower

reactions involving the same substances that caused the May 14 explosion — at Room 40, at Hanford, and elsewhere.

So far, two possible incidents might fit the profile — including one that probably occurred in Room 40.

Many chemical accidents are logged in Hanford reports and databases. And investigators are learning of other possible incidents through tips and rumors.

"We want to find out if there had been previous explosions of the same materials, why was that not factored into the operation of the (PFP) facility," said Ron Gerton, head of the DOE investigating team.

As investigators sort through records, they are finding some incidents "similar in

the sense of the same chemicals. But the circumstances are not the same," Gerton said.

Investigators tentatively believe the explosion was caused by a solution of hydroxylamine nitrates and nitric acid mixed in the 400-gallon tank in 1993 and left there.

Originally, the solution was 185 to 200 gallons — a volume at which the two chemicals were diluted enough by water to remain safe.

But much of the water evaporated over

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PFP tank checks stopped months before explosion

By JOHN STANG

Herald staff writer

Workers inexplicably stopped regular checks of a chemical storage tank 6½ months before it exploded at a defunct Hanford plutonium plant, the head of an investigation into the blast said Friday.

Initial findings show workers checked the status of the partly filled Tank A-109 every month from 1993 through October 1996.

Then the monthly checks stopped after Oct. 28, despite a steady decrease in the amount of water in the tank

The 400-gallon tank on the Plutonium Finishing Plant's fourth floor exploded May 14, punching a hole in the roof.

Now, Department of Energy investigators are trying to sort out why the monthly checks stopped and whether the steady decrease in water content — which likely triggered the blast — should have alerted Hanford that managers something was wrong.

Ron Gerton, head of the investigation, outlined some answers and

Please see EXPLOSION, Page A2 ▶

Hanford crew near blast faults medical treatment

By The New York Times News Service

Minutes after an explosion at Hanford, workers were ordered to walk into the path of a chemical release, then held for four hours without medical attention.

After driving themselves to the emergency room, the doctors "basically ... just gave us a cup of water and told us everything was OK," said Paul Kramar, an electrician who says he since has experienced breathing problems, severe headaches and bouts of inexplicable rage.

"The emergency room doctor ... said we were suffering from group hysteria," he told the Seattle Post-Intelligencer.

Department of Energy investigators say the May 14 explosion in the

Plutonium Finishing Plant released plumes of oxides of nitrogen and nitric acid. Some workers' respiratory and skin problems are consistent with exposure to those chemicals.

Ron Gerton, who is heading DOE's investigation, said when the plume of smoke was released, a "take cover" siren was sounded, indicating workers should stay inside.

At the time, eight workers were in a trailer next to the plant.

"The thing to do was to go indoors, shut the windows and stay indoors," Gerton told the Post-Intelligencer. "It's not clear to us why they were asked to come into the main building ... following a path that would have been directly under the plume."

"Part of what we're doing now is figuring out why those management decisions were made."

Steve Moore, who is handling a state Department of Ecology investigation, is looking at whether Hanford's emergency plans were implemented properly.

He said a plume of chemicals was continuously released for at least 11 minutes and perhaps as long as 15 minutes — a period all workers should have stayed inside.

Immediately after the explosion, a take-cover siren and an armed security guard told workers to stay put. But announcements over the public address system repeatedly told workers to head for a central room in the plant.

Winston McCulley, the crew superintendent, said he called the plant command center to find out which order to follow. The building emergency director ordered him to go to

the plant. On their walk, several men spotted plumes of smoke coming out of plant's stack, tasted metal and smelled chlorine. As soon as they arrived at the command center, they reported the metallic taste. Their Fluor Daniel Northwest supervisors suggested they go to Kadlec Medical Center.

But it took at 3½ hours to arrange for the men to leave. McCulley told the P-I he was sent to the trailer to pick up the men's car keys so they could drive themselves to the hospital. Once he got to the trailer, he learned from the security guard they both should have worn masks.

When the crew got to the hospital, they found Hanford doctors and Fluor Daniel supervisors waiting for them. They were told it was unlikely they had been exposed to anything.

Their requests for blood and urine tests were denied by emergency room doctors, they said.

All eight were examined in just 45 minutes, according to a May 15 chronology by a Fluor Daniel Northwest safety manager that was given to the workers.

"The emergency room was kind of joke," said electrician Bernard Griswold. "They took your vital signs and that was about it. They said we were imagining it."

But when Griswold got home from the hospital, he found his head was breaking out in a rash of red, measles-like blisters. He suffered headaches and a sore throat for a week.

"I honestly can't say whether that had to do with chemicals, or stress related," he said. "We sat in the dark basically for several days not know-

ing what kind of chemicals were involved, and it was stressful."

Kramar said he is convinced stress was not the cause of the aching lungs, headaches, and bouts of rage he has experienced since the explosion.

Gerton said a statement he received from Dr. Larry Smick, the Hanford Environmental Health Foundation doctor overseeing the men's care, conflicts with the workers' accounts, but refused to provide any more detail.

Since their trip to the emergency room, the men have received complete physicals, and those who choose will be examined this week at Harborview Hospital in Seattle, Gerton said.

Split command exposed PFP workers

By JOHN STANG

Herald staff writer

Confusion caused by two separate command centers was at least partly responsible for putting eight Hanford workers in or near a dangerous chemical gas plume earlier this month, investigators said.

One command center was at Hanford's Plutonium Finishing Plant complex in the 200 West Area, near a chemical storage tank that exploded. The other was a Hanford Patrol facility in the 200 East Area.

The eight workers were on break at a nearby trailer when the blast occurred but were told to go to the main building.

"They did walk through where the wind was carrying the plume. ... They could have been at the tail of the plume or at some part of the plume," Ron Gerton, head of the Department of Energy's investi-

■ **MONEY:** Hanford team saves taxpayers \$20 million. Page A3.
■ **WASTE:** Hanford contender for plutonium work. Page A3.

gation, said during a briefing Wednesday.

At 7:53 p.m. May 14, enough water had evaporated from a diluted solution of nitric acid and hydroxylamine nitrate to cause the two volatile chemicals to explode inside a 400-gallon tank on the fourth floor of the PFP complex.

Within two to five minutes, the Hanford Patrol was securing the area and enforcing a "lockdown" in which workers are supposed to stay indoors.

At 7:59 p.m., a patrol officer spotted a white plume on the roof. That could have

been dust and rock disturbed by the explosion or escaped gases, Gerton said.

While that white plume still is being analyzed, investigators know a yellow-brown plume went up a 150-foot smokestack to disperse out the top.

As the patrol staged the lockdown, the complex's public address system was giving a conflicting order, telling all workers to go to the PFP's Room 104.

The emergency manager thought everyone already was inside PFP's main complex and wanted them in Room 104 so offi-

cials could account for everyone, Gerton said.

At first, the workers outside followed directions on the PA system and left the trailer, but they were met by a Hanford Patrol officer who told them to return to the trailer.

Confused, they went back to the trailer and called the complex's emergency manager for instructions.

"They did not convey to the director they

Please see **EXPOSED**, Page A2▶

out how to do things better."

That simple philosophy was enough for the federal government's National Performance Review Board to present its Silver Hammer Award to the 12-person team from the Department of Energy and Bechtel Hanford Inc.

Bechtel handles environmental restoration at Hanford, cleaning up buildings and land after Hanford's maintenance and operations contractor — Fluor Daniel, now — stabilizes individual sites.

Three years ago, Bechtel and the energy department decided to approach the business of government differently.

Rather than the classic contract, where the government hires a contractor and tells it exactly how to do the job, the new agreement simply told the contractor what needed to

The energy department and Bechtel formed a Business Quality Improvement Team to save money. About the same time, Sandlin was working in contract management for the Washington Public Power Supply System.

"When the government people I knew said they were going to change the way government does business, I went down to the Federal Building and knocked on doors until I got a job," Sandlin said.

They put him in charge of the business quality team.

The successes were large and small.

Take the monthly Site Management Report. It costs \$480,000 a year to produce, but there didn't seem to be much need for it at a place where management reports are as

non as tumbleweeds. Sandlin and his team convinced Department of Energy it didn't need this one.

The Site Management Report is a quiet death, and apparently he missed it.

Another example: A team member noticed it was costing \$10 each dinner-plate sized radiation warning signs printed at the Han-sign shop. Bechtel started taking its business to a private Tri-City printer, who charged \$1 for each

All the savings remained at Hanford for cleanup, rather than returning to the federal treasury.

"What we're seeing is overhead reduction. We're not losing jobs, but we're doing more work in the field and less in the office. We're shifting the mix of people," Sandlin said.

The first years were easy. "We saw a bunch of low-hanging fruit. We just stuck out our hands and picked it."

But enough fruit remains within reach. Sandlin figures the team will save the taxpayers another \$10 million in the next year.

For the first \$20 million, a grateful nation gave Sandlin a bonus last year: \$500.

And don't forget a bowl of ice cream Wednesday.

Chocolate. Sandlin's favorite.

Scientists to test Wahluke chemical site

By MIKE LEE

Herald staff writer

Scientists will descend on the Wahluke Wildlife Area this morning to test a chemical dump site on land that was about to be taken off the national cleanup priority list.

The Environmental Protection Agency planned to remove that section of the Department of Energy's Hanford land from the contaminated list within the next several months, said Dennis Faulk, who oversees the cleanup of old waste sites for EPA.

While Wahluke cleanup was thought to be done, EPA investigators found the burial ground of two large tanks that once contained the herbicide 2,4-D and about 50 cubic yards — five dump trucks full — of contaminated dirt. They inspected the site in early May after a hunter reported signs noting the her-

bicide dump and they found one chemical "hot spot."

"Given what has happened at the 2,4-D burial site, we will wait until after that is cleaned up" to remove the slope from the priority cleanup list, Faulk said.

He said even if the contamination had been found after the site was cleared, DOE still would have been responsible for cleanup.

The good news for DOE is initial reports about the contamination level were wrong. DOE learned this week that the pesticide is not as concentrated as first thought; at the hot spot it was found at 2,500 parts per million, not the 25,000 ppm the EPA first reported.

The common contamination threshold is 800 ppm.

Today, investigators will work out from the hot spot, using a test that immediately will tell them the extent and level of contamination.

The results then will be sent to a lab for more study.

While disposal plans weren't set before today's tests, DOE spokesman Mike Fergus said the best way to clean the herbicide spill might be to turn the dirt over and let the herbicide deteriorate.

"In a matter of months it may be totally gone," he said.

Faulk said scientists are mystified the herbicide has lasted as long as it has, given its typically short life.

Starting in 1992, DOE contracted first with Westinghouse Hanford Co., then with the Army Corps of Engineers to scour the Wahluke Slope for contamination.

Faulk said Westinghouse's closest sample was taken about six feet from the hot spot detected this month. "If it turns out that is it just that one little hot spot, it is very understandable how it could be missed," he said.

The corps double-checked Westinghouse's samples by drilling eight holes in the area, Fergus said. Its scientists didn't detect 2,4-D either, and plans moved ahead to remove the site from the priority cleanup list, Fergus said.

Randy Smith, EPA's regional director of environmental cleanup, said the sampling problem was the size of the Slope. "You can imagine how expensive it would be to sample every few feet," he said. "There's always a chance that there's something in between your sample points. ... Obviously they missed something."

Before EPA investigators found the hot spot, the agency's recent site visits focused on plots of replanted sagebrush. Land in some areas had been mysteriously devoid of native plants, and the EPA was working with American Indian tribes to increase the sage population.

Plutonium discussion set for July in Richland

By JOHN STANG

Herald staff writer

An upcoming study on disposal of the nation's surplus plutonium is scheduled to be discussed publicly July 1 in Richland.

The Department of Energy recently announced it will conduct an environmental impact study on four locations as potential plutonium disposal sites.

Hanford is one of those four. The other three are DOE's sites at Savannah River, S.C., Idaho Falls, Idaho, and Pantex, Texas.

DOE is researching three processes:

- Combining plutonium oxide with uranium to produce mixed-oxide fuels for nuclear reactors.
- Taking apart nuclear weapons components to remove the plutonium and converting the plutonium into a form suitable for disposal.
- Immobilizing the plutonium inside a glass or ceramic material to be stored permanently in a repository.

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TRI-CITY HERALD

SATURDAY, MAY 31, 1997

Herbicide-contaminated dirt found at dump site on Wahluke Slope

By the Herald staff

Preliminary field tests have located about 20 cubic yards of herbicide-contaminated dirt at a 30-year-old chemical dump site on Hanford's Wahluke Slope.

That means as much as another 30 cubic yards of contaminated soil may remain somewhere in the vast wildlife area that abuts the north shore of the Columbia River and is south of Highway 24.

The Washington Department of Ecology and the U.S. Environmental Protection Agency are investigating a site on the slope where contaminated soil from a 1966 herbicide spill at the U.S. Bureau of Reclamation station in Eltopia was dumped.

This area is believed to be the burial ground of two large tanks that once contained the herbicide 2,4-D and about 50 cubic yards — five dump trucks full — of contam-

inated dirt that were dumped.

The site had been previously thought to be cleaned up, but in May, EPA investigators found a "hot spot" with high levels of 2,4-D.

On Thursday, the EPA and Ecology Department did field tests to get a better picture of the contamination. Preliminary tests pinpointed about 20 cubic yards of contaminated soil, said Jack Donnelly, a unit supervisor in Ecology's nuclear waste program.

Investigators now must plan their approach to finding the other suspected 30 cubic yards of waste, Donnelly said.

The probable cleanup measure will be to turn over the dirt and let the chemicals dissipate. But if the contamination is found to be too concentrated, the dirt likely would be trucked away.

Lab analyses on the initial field results should be complete in 1½ weeks.

Hanford changes emergency plans

By JOHN STANG

Herald staff writer

Hanford officials are revamping procedures for emergencies after coming under fire for the way they handled a tank explosion at a plutonium plant two weeks ago.

Officials also are looking over potential spots for chemical mishaps in the wake of the May 14 explosion at the Plutonium Finishing Plant.

At a Friday briefing, Department of Energy officials said Hanford's handling of the explosion went smoothly — once a central emergency operations center was set up at 10:55 p.m.

But that was about three hours after 35 gallons of chemicals blew up to destroy a 400-gallon PFP tank and punch at least one hole in the building.

Workers, guards and firefighters reacted quickly to seal off the area and check the explosion site, said Paul Kruger, DOE's director for environment, safety and health.

But DOE acknowledged major glitches occurred.

For one thing, it took too long — two hours and seven minutes — to declare an emergency, partly because an explosion with no radiation releases or injuries did not meet the official criteria to declare an emergency.

Even after an emergency was declared, it took another hour and 16 minutes to begin calling Mid-Columbia emergency and government agencies. The required time is 15 minutes.

Confusion after the explosion resulted in some conflicting direc-

tions to eight workers who might have been exposed to a chemical gas plume as a result.

Hanford officials met this week with Mid-Columbia emergency officials to ensure local agencies are informed more promptly in future incidents.

Any explosion at the PFP now fits that notification requirement, said Mike Yates, Fluor Daniel Hanford executive vice president. While any radiation release triggers an alert, some haziness exists on chemical accidents.

Lorlee Mizell, director of the Benton County emergency Services department, said DOE has been responsive to concerns voiced by local emergency officials.

DOE and its contractors are completing an inventory of chemicals on the site to ensure other volatile mixtures are not percolating. The tank explosion was caused by water evaporating out of a diluted solution of nitric acid and hydroxylamine nitrate.

Nitric acid is a common chemical at Hanford. So far, inventories show hydroxylamine nitrate — a rarer chemical used in extracting plutonium — in a 5-gallon container on a temporary storage site at the PFP and two small containers at the 222-S waste analysis lab.

None of these three containers holds nitric acid.

Also, emergency procedures addressing chemical incidents are being reviewed.

While PFP workers had the equipment to check radiation, they did not have the appropriate chemical monitoring equipment that night.

EPA Public Notice

Technical Assistance Grants for Hanford Superfund Sites

The U.S. Environmental Protection Agency (EPA) has received "Letters of Intent" from two separate groups--Hanford Family and Columbia River United ---seeking Technical Assistance Grants related to the Hanford Superfund sites. This Superfund grant program is intended to promote citizen involvement in decision-making on site-specific cleanup strategies.

EPA may award one grant for up to \$50,000 for each of the National Priorities List sites at Hanford. The three sites are: 100 Area NPL, 200 Area NPL, and 300 Area NPL. Both groups intend to apply for grants for all three sites, for a total possible award of \$150,000.

To ensure that the recipient group represents the diversity of community views, EPA encourages all citizen groups interested in applying for a grant for any or all of these sites to consolidate with either or both groups named above, and file a joint application. (If there is more than one qualified applicant and the groups do not consolidate, EPA will award the grant to the single most appropriate applicant.) By June 30, groups that wish to join either or both groups must notify:

Gordon J. Rogers
Hanford Family
1108 N. Road 36
Pasco, WA. 99301

Cyndy deBruler, Director
Columbia River United
PO Box 1254
Hood River, OR 97031

Any group wishing to file a separate application must send a Letter of Intent to EPA by June 30, 1997. Once EPA receives a letter, the group has 30 days to submit a formal application. Groups that require additional time to draft a Letter of Intent may submit a written request for an extension to EPA for consideration.

Letters of Intent, applications, extensions requests, and questions should be directed to:

Andrea Lindsay
Technical Assistance Grants Coordinator
EPA Region 10
1200 6th Ave, ECO-081
Seattle, WA 98101
Phone: 206/553-1896 or 1-800-4240-4EPA x 1896

Privatization of Hanford wastes relies on approval by Congress

By JOHN STANG

Herald staff writer

Turning Hanford's radioactive tank wastes over to private contractors could be a tough sell in Congress.

Ultimately, plans to privatize the effort to turn high-level wastes into glass depend on Congress setting aside several hundred million dollars to pay one or two corporate teams to do the work.

For now, many Congressional members are leery about the Department of Energy's ability to supervise a massive privatization project, especially after problems surfaced with a privatized cleanup project at DOE's Idaho site, said U.S. Rep. Doc Hastings.

Hastings, R-Wash., discussed the issue Friday with Tri-City area government representatives and the leaders of the two corporate teams submitting proposals to convert the tank wastes into glass.

Hanford tank waste glassification is supposed to unfold as follows.

Corporate teams led by Lockheed Martin Advanced Environmental Services and British Nuclear Fuels would each submit financial and technical plans in early 1998 on building pilot plants to convert up to 13 percent of Hanford's tank wastes into glass.

The idea is they would not be paid a penny until the glass canisters are steadily materializing between 2002 and 2007, which would be the

“There's an inherent distrust that (DOE) can administer this.”

—Rep. Doc Hastings, R-Wash.

first of two phases in the glassification program. Most of Hanford's waste would be glassified in the second phase beyond 2007.

Meanwhile, DOE must set aside money annually to pay for the glass — or pay the teams if DOE terminates the plan ahead of time.

DOE expects to budget about \$4 billion for Phase One.

The department set aside \$170 million in fiscal 1997, requested \$427 million in fiscal 1998, and plans to ask for another \$325 million in fiscal 1999.

Jack Dickey, head of Lockheed's team, said these figures are more than sufficient to cover the two glassification ventures to the turn of the century.

But Tri-City officials voiced concern about Congress' support of privatizing a major DOE project.

“There's an inherent distrust that (DOE) can administer this,” Hastings said. “What happened in Idaho has not been helpful.”

At the the Idaho National Engineering and Environmental Laboratory, Lockheed was to clean up a plutonium-loaded acre in a priva-

tized contract for \$179 million.

Problems there prompted Lockheed to ask for another \$158 million, bumping the total price tag to \$337 million.

Dickey said INEEL's problems were partly caused because DOE did not have a section specifically devoted to regulating the plutonium-loaded acre privatization project. However, DOE will have such a section for Hanford's glassification.

Also, the plutonium-loaded acre's waste was insufficiently analyzed so unexpected characteristics popped up.

Tri-City officials noted Hanford's wastes are complicated mixtures of known and largely unknown chemical makeups.

But Dickey and Bill Taylor, the DOE official in charge of the Hanford glassification venture, said the 14 waste tanks earmarked for Phase One have been thoroughly analyzed.

And DOE is contractually required to ensure the chemical makeup of that waste meets well-defined specifications before BNFL and Lockheed have to accept it.

Taylor noted DOE will have to sweat another budget problem — making sure Congress appropriates enough money for DOE and its contractors to perform all the work.

Hastings said Northwest congressional members and Energy Secretary Federico Pena need to lobby congressional leaders to ensure the set-aside money is allocated each year.

HEHF reviews its response to tank explosion

By JOHN STANG

Herald staff writer

The Hanford Environmental Health Foundation is reviewing its response to May 14's Hanford tank explosion, its president said Tuesday.

And monitoring is continuing on workers exposed to a chemical gas plume from the Plutonium Finishing Plant's smokestack after the explosion.

“I'm comfortable with our handling of the whole incident,” HEHF President Sandra Matheson said. She and two HEHF doctors discussed the incident with the Tri-City Herald's editorial board.

However, Matheson said the HEHF did not have someone to talk to the eight exposed workers about follow-up medical checks when they were discharged from Kadlec Medical Center a few hours after the explosion.

“We need to look at that extra bit of communication and who does that,” Matheson said.

The HEHF got involved when Dr. Larry Smick was called to the Department of Energy's emergency center in the Federal Building at 10:20 p.m. — 3½ hours after the explosion.

His role was advisory — especially on radiation and chemical releases. He obtained an

inventory of chemicals in the PFP, and then went to Kadlec to give that information to the emergency room staff.

The emergency room staff had the expertise to handle problems stemming from the PFP's chemicals, said Smick and Dr. John Calcagni, HEHF's medical director. The emergency room doctors had the lead role and did not need Smick for actual medical help, Smick said.

Smick gave the workers his phone numbers early during their checkups at the emergency room and told them to contact him anytime at work or home if needed. He then returned to DOE's emergency center.

On May 15, HEHF learned how much

chemicals went through the smokestack and obtained calculations on how they dispersed. The projected dose levels would cause the symptoms experienced by the workers, Smick said.

However, HEHF was concerned about possible unknown factors and talked to the workers when they returned to duty the afternoon May 15. Checkups were scheduled for May 16.

That evening, one worker had a rash on his head. His employer, Fluor Daniel Northwest, sent him to Physicians Immediate Care Center in Richland since HEHF is closed evenings, said Stew Heaton, Fluor Northwest president.

On May 16, HEHF checked the workers, finding some symptoms that could be linked to exposure to the PFP chemicals.

Workers were offered further checks at Seattle's Harborview Medical Center, an independent third party. Two have been checked at Harborview, and the rest have appointments scheduled, Heaton said.

HEHF is awaiting the Harborview results. However, follow-up HEHF medical checks have also been scheduled.

Future checks will continue for six months or until the workers don't want them. Two workers still had medical concerns during the last HEHF checks last week, Calcagni said.

Duke merger to have little effect on Hanford

By JOHN STANG

Herald staff writer

An upcoming merger of Duke Power Co. and PanEnergy is not expected to drastically affect the Duke Engineering & Services firms in the Tri-Cities, the prospective CEO of the new corporation said Wednesday.

However, the Duke firm in the Tri-Cities is considering expanding its presence, possibly in participating in reviving the Fast Flux Test Facility or by expanding a small 22-person office to possibly 200 in five years.

Paul Anderson Jr., the prospective president of the consolidated Duke Energy corporation, visited Hanford on Wednesday.

It was a homecoming for Anderson, who was born in Richland in 1945 and whose father was an early reactor operator.

North Carolina-based Duke Power — whose main thrust is producing electricity — is the parent corporation for the Tri-City engineering-oriented Duke company.

Duke Power and Texas-based PanEnergy — whose main business is natural gas — are in the final stages of merging. And Pan Energy's CEO — Anderson — will head the new Duke Energy.

Reasons for the merger are to improve flexibility, efficiency, expertise and geographical range in an evolving energy market that is being affected by major rewriting of regulations.

Duke Engineering & Services Hanford is a



Anderson

major subcontractor in the Fluor Daniel Hanford team. Its main enterprises are disposing of the spent nuclear fuel at the K Basins and various other engineering services at Hanford. It employs about 400 people.

DE&S Hanford also has set up an enterprise company with 44 people, which specializes in quality-control work, and a separate regional engineering office with 22 people. DE&S hopes to expand that engineering office, said company President Dave Rehn.

DE&S is also a member of Lockheed Martin Advanced Environmental System's team that is looking into glassifying Hanford's tank wastes.

The PanEnergy-Duke Power merger should not affect DE&S's rank-and-file workers, said Anderson and John Norris Jr., president of DE&S, the parent company of DE&S Hanford.

They said the only effects would be on employees' stock holdings in the corporation

and the ease of transferring workers in and out of other Duke Energy subsidiaries.

Meanwhile, DE&S is keeping an eye on the Department of Energy's studies on whether to revive the FFTF. If the FFTF gets a green light, DE&S would seriously consider joining forces with whatever company would be put in charge of the reactor, Norris said.

Duke Power has a longtime interest in nuclear power, operating seven reactors in the South, and Duke Energy would be interested in any DOE proposal to burn plutonium as fuel, Norris said.

But Duke Energy would pass on an expected DOE request for proposals on converting reactors to produce tritium. Tritium production would take a reactor off line about every three months to unload the substance used to boost the explosive power of nuclear weapons. That would seriously cut into the production of electricity, Norris said.

Wednesday's visit to Richland was the third for Anderson since he was a University of Washington engineering student in the 1960s. And it was the first time he ever visited Hanford, where his late father worked.

Anderson was born in Richland in 1945, and graduated from the old Columbia High School in 1963.

That era's secrecy led to Paul Anderson Sr. being vague to his son about his jobs at N and K Reactors. In those days, families could not get beyond the reservation's barricades.

"He said he sat in a control room, looked at dials and made adjustments," Anderson said. And his father loaded fuel into the reactors.

On Wednesday, Anderson visited the K West reactor. On-site work kept him out of the control room. But he saw the reactor and where his father loaded fuel.

"What my dad did was mysterious, and that fascinated me," Anderson said.

Hanford companies help Hispanic kids

The six firms that manage work at Hanford donated \$5,000 Thursday to the Hispanic Academic Achievers Program.

The money will be used for scholarships for Hispanic students honored by HAPP for their academic achievement.

It was donated by Fluor Daniel Hanford, Rust Federal Services of Hanford, B&W Hanford, DE&S Hanford, Numatec Hanford and Lockheed Martin Hanford, which manage the Hanford site and its projects for the Department of Energy.

"By supporting organizations such as HAPP, we help to make the Tri-Cities a better place to live and raise our families," said Fluor President Hank Hatch.

Watchdog group wants new PFP probe

By JOHN STANG

Herald staff writer

Heart of America Northwest has asked two federal agencies to conduct an investigation independently of the Department of Energy into the recent Hanford explosion.

On Thursday, the Hanford watchdog organization sent letters to several federal agencies, criticizing DOE's investigation into the May 14 chemical explosion at the Plutonium Finishing Plant. In the letter, Gerald Pollet, Heart of America's director, claimed DOE's investigation "lacks public credibility and seems designed as a combined public relations effort and obstruction of efforts to obtain the truth."

In an interview, Pollet contended it is inappropriate for DOE to investigate itself on a major accident — especially if the probe could unearth legal violations that could have led to the explosion.

The letter asks the U.S. Environmental Protection Agency and the federal Occupational Safety and Health Administration to jointly investigate the explosion's cause and aftermath. Pollet cited a December 1996 agreement between OSHA and EPA to jointly investigate major chemical explosions. The letter also asks EPA and OSHA to seek technical help from the states of Oregon and Washington and the federal Defense Nuclear Facilities Safety Board. The appropriate EPA and OSHA officials in Washington, D.C., were not available for comment on the request Thursday afternoon.

Pollet said DOE did a poor job monitoring the volatile chemicals at PFP. He also cited slow emergency responses to the explosion and contended DOE is downplaying health concerns of workers who were near the explosion.

Lloyd Piper, DOE's acting Hanford manager, contended DOE's internal investigation has been thorough, aggressive and open to the public. He also said independent parties are keeping an eye on it.

"We don't want this kind of situation to occur again, so we won't leave any stone unturned," Piper said.

DOE is about three weeks into investigating the causes of and response to the explosion, which apparently was caused by too much water evaporating from a diluted chemical solution, which made the liquid volatile.

The legwork for DOE's investigation is done, and the information is being analyzed, Piper said. He said DOE hopes to have a draft report ready by mid-June and a final report near the end of the month.

Meanwhile, the Washington state Department of Ecology is conducting a hazardous waste inspection of the site. The inspection covers a narrower range of issues than DOE's probe, but it includes the explosion's cause, emergency planning and emergency response.

One purpose of the state inspection is to see if a fine or other penalties should be levied. The inspection does not have a specific deadline.

The Defense Nuclear Facilities Safety Board was in the Tri-Cities earlier this week to look at several issues, and board members quizzed DOE about the explosion. Also, the state health department checked for radiation releases and found none.

Piper said outside chemical consultants have been brought in to help DOE. And union representatives are attending briefings on the investigation, he said.

The explosion blew the lid off a 400-gallon tank and knocked at least two holes in the building's roof. Eight workers apparently were exposed to a chemical gas plume, and at least 31 workers at PFP have been medically checked.

The Hanford Environmental Health Foundation is monitoring the eight workers for six months, and Harborview Medical Center in Seattle is conducting independent checks of those eight.

Rumors of cutting Hanford retraining plan denied

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — A top Democratic staffer on the Senate Armed Services Committee denied Friday that there had been discussions about eliminating a federal program that has provided millions of dollars to retrain laid-off Hanford workers and diversify the Tri-City economy.

"No one is working on it," said committee staffer Madelyn Creedon. "I am clueless."

Last week, officials of the Oil,

Chemical and Atomic Workers union said Creedon was drafting language calling for a study to determine whether an Energy Department program known as 3161 should continue. Creedon was out of the country at the time and could not be reached for comment.

Richard Miller, an OCAW policy analyst in Washington, D.C., said such a study could be the first step in killing the 3161 program. He said a Democratic committee staff member planned to call for a study in the report accompanying this year's

defense authorization bill.

On Friday, Miller stuck by his story but said he was relieved Creedon has appeared to back off.

"My understanding was she was looking at report language," Miller said.

"Her intent now is not to do anything, at this point."

OCAW has been a strong supporter of the program, but even Miller said there might be a need to talk about improvements.

"In the future, it would be useful to see how 3161 focuses on contract reform and not just transition

changes," Miller said, referring to layoffs and disruptions in the work force resulting from DOE's effort to change how its contractors do business.

Creedon said she continued to view the 3161 program as "very necessary" and said she had no idea why Miller and others thought she was drafting language to eliminate it.

"I do the DOE stuff for the minority staff, and I know of no one who is working on it," she said.

Creedon did concede she had brought up the issue in a general

way during discussions.

"I was wondering out loud, as DOE transitions down the road, are there things that need to be done?" she said.

Since it was first adopted in 1992, the 3161 program has funneled \$14 million in community transition funds into the Tri-Cities and millions of dollars more for worker retraining programs.

The administration has requested \$70.5 million in 3161 funding for the coming fiscal year, \$3.5 million more than the current congressional appropriation.

PNNL honored for medical innovation

By ANNETTE CARY

Herald staff writer

The soldier is in Bosnia. The doctor is in Germany. But using a virtual reality system developed in Richland, the doctor can diagnose the soldier as if they were in the same room.

That's the sort of technology that has the potential to change lives, Discover magazine decided.

This weekend the national science magazine awarded Rik Littlefield of Pacific Northwest National Laboratory one of eight prizes for technological innovation for his medical imaging system. Littlefield won the award for computer hardware and electronics.

The device takes a three-dimensional ultrasound image of a 10-by-6-by-6-inch portion of the body. That image is beamed to a doctor who might be in another country or on another continent. The doctor uses the scanned image just as he or she would a conventional ultrasound, manipulating the image on the computer screen to search through the body for internal bleeding or imbedded shrapnel.

The device, called MUSTPAC for Medical Ultrasound, Three-dimensional and Portable with Advanced Communications, was developed for the Department of Defense. The Army wanted a way to do sophisticated diagnoses in the battlefield—and do it in the critical hour after injury in which the soldier is most likely to die.

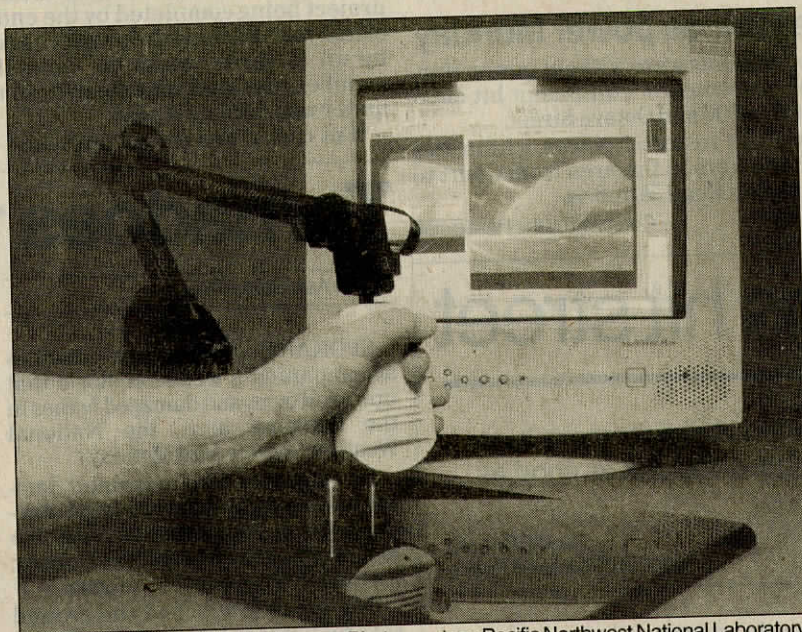


Photo courtesy Pacific Northwest National Laboratory

Doctors can use a new ultrasound system to diagnose injuries and illnesses of people thousands of miles away. The system was named one of the top inventions of the year by Discover magazine.

But the PNNL researchers who worked on the project think their device may one day be used more commonly off the battlefield than on. They foresee a day when ambulances could carry the medical imaging devices to accidents to beam information back to emergency room doctors.

Little training would be needed by the paramedics or the emergency room doctors to use the system. The system is simple enough "you can do

a scan on yourself," said Laura Curtis, one of the developers of MUSTPAC. And the controls are so similar to those of a conventional ultrasound, that doctors doing the diagnosis are comfortable with the equipment in minutes, she said.

The device also should be useful in nonemergency situations. Doctors could use MUSTPAC when they wanted a second opinion on a difficult diagnosis, sending virtual reality images to specialists any-

where in the world, Curtis said. The patient could undergo the ultrasound in a few minutes, then go home while specialists hundreds of miles away conduct virtual exams using the scanned information.

In Bosnia, the system was used to check problems ranging from torn muscles to liver damage, Curtis said. During a two-month test, 72 scans were done on 42 soldiers at the 212th Mobile Army Surgical Hospital in Tuzla. The images were beamed to doctors at an Army base in Landstuhl, Germany.

The first prototype used in Bosnia weighed 85 pounds and fit in a backpack—portable, but just barely. Developers at PNNL are now working on an improved design they hope will weigh a third less.

That product will be submitted for Food and Drug Administration approval, which is expected by the end of the year. The Army wants 20 of the new 3-D systems once FDA approval is granted. PNNL expects some of the work on the systems to be done by small high-tech firms that have been spun out of the Richland laboratory.

Then PNNL will look at other markets for the device, which developers hope they can refine to a model that costs \$50,000 to \$60,000. The Indian Health Services also has asked about the system for use on remote reservations, Curtis said.

In the meantime, the 7 million readers of Discover will learn about the device's possibilities in the July issue.

DOE steps up FFTF study timetable

By JOHN STANG
and ANNETTE CARY

Herald staff writers

The nation's tritium-production picture is evolving as the Department of Energy seeks ways to speed up a decision on the future of Hanford's Fast Flux Test Facility.

DOE is looking at several scenarios and scrutinizing financial and technical data to determine how it wants to produce tritium.

Originally, DOE expected to decide by December 1998 if the FFTF should be studied further for tritium production. But Energy Secretary Federico Pena wants a decision sooner.

How soon is uncertain, said Terry Lash, director of DOE's office of nuclear energy, science and technology when he visited the Tri-Cities Tuesday.

DOE's rough plan is either to build an accelerator in South Carolina or to convert a commercial reactor to become the nation's primary tritium source.

Tritium is a radioactive gas used to boost the power of nuclear weapons. Its short half life means the nation's supply sometime in the next decade would drop below what the federal government believes is needed.

The FFTF is being examined as a backup or interim source until a permanent source gets on line. The plan calls for its tritium mission to phase out as a new mission—producing medical isotopes—phases in.

From DOE's studies, Lash said these new factors are emerging:

■ The Nuclear Regulatory Commission wants a backup tritium reactor if a commercial reactor is picked as the primary source. That backup could be another commercial reactor or the FFTF.

The backup reactor would not necessarily have to produce much or any tritium, but it should be able to if the primary reactor goes off line, Lash said.

■ The Clinton administration is preparing legislation for Congress that would permit a civilian reactor to create military tritium—which currently is forbidden.

■ A request for proposals on converting commercial reactors will go out to the nation's electrical utilities soon. The conversion concept is being tested at a Tennessee Valley Authority reactor.

■ The accelerator's cost is being recalculated and is expected to drop, making it a better option.

Several months ago, DOE calculated restarting the FFTF and operating it through 2030 would cost \$3 billion. The drawback is the FFTF cannot meet all the nation's current tritium goals.

Those calculations also put the commercial reactor option at \$3.9 billion through 2030.

Meanwhile, the accelerator could hit \$9.9 billion for that period, and an accelerator-and-FFTF scenario could cost \$9 billion—options likely to cost less when the new figures arrive this summer.

DOE has budgeted \$1 million for studies of FFTF this year. Of that, \$200,000 will be used to study production of medical isotopes. Next year, \$6 million is budgeted for the studies, with \$400,000 for medical isotope issues. DOE will consider possible demand for isotopes to treat cancer and other illnesses, marketing issues, how isotopes could be produced, and safety and environmental issues.

Radioactive isotopes are widely used for diagnosing medical problems but also have shown promise in medical trials for treating cancer.

"There is promising research going

on," Lash said. "If it is successful, ... there would be a large demand for short-lived isotopes."

The United States has no facility that could supply large amounts of such radioactive isotopes other than FFTF. But now there is not enough market to justify radioisotope production at FFTF, he said.

It needs a dual mission of tritium production to keep it operating until there is enough demand for isotopes for treating cancer and other diseases. If tritium is not produced there and sodium is drained from the reactor's cooling system, it cannot be restarted for isotopes.

It's too soon to know if promising cancer treatments are commercially viable, Lash said. But some Hanford figures estimate FFTF could net \$400 million from sales of radioactive isotopes by 2015.

If the boom does materialize and the FFTF has been shut down, the United States would be dependent on imported medical isotopes for treatment procedures. It already must import nearly all medical isotopes for diagnostic procedures.

Over the past 20 years, the demand for isotopes for diagnostic procedures has boomed. About 36,000 diagnostic procedures that use medical isotopes are performed every day in the United States, and 100 million medical laboratory tests that use isotopes are done each year.

Most of those isotopes come from a 40-year-old reactor in Ontario, Canada, that is scheduled to be shut down in three years.

Canada plans to replace that reactor with two new ones. The first would produce the isotope most commonly used for diagnostic procedures. The second would be a backup and also could produce isotopes that may be used to treat cancer.

PFP tank exploded once before, DOE investigators find

By JOHN STANG

Herald staff writer

Last month's explosion at Hanford's Plutonium Finishing Plant's Tank 109 appears to be a repeat of an earlier blast, a government investigator said Friday.

The same chemicals in the same tank apparently exploded and popped a small lid off that tank in the early 1970s, according to Department of Energy investigators.

However, the DOE has not found a 1970s report of that first explosion.

The only paperwork mentioning

the 1970s explosion was written in 1987 — and that paperwork apparently was lost in the shuffle until a DOE investigation found it this week.

Tank 109 blew up last month on the fourth floor of a building in the PFP complex, punching a couple of holes in the roof.

Eight nearby workers were exposed to a chemical gas plume, and their health is being monitored.

So far, DOE investigators believe the explosion was caused by a diluted solution of nitric acid and hydroxylamine nitrate sitting in the tank for four years.

From 1993 to late 1996, the water in that solution evaporated through a vent, causing it to shrink from 180 gallons to 36 gallons.

Recent tests show evaporation would have increased the concentrations of the two chemicals, taking them from safe concentrations to volatile levels to cause the explosion, said Ron Gerton, head of DOE's investigation.

Also, the investigation shows the stainless steel of Tank 109 could have acted as a catalyst for the chemical reaction leading to the explosion, Gerton said.

Stainless steel contains iron, nickel and chromium. And diluted

nitric acid would dissolve those substances. The resulting chemical reaction likely increased the tank's temperature, helping trigger the explosion, Gerton said.

The investigation shows past paperwork at PFP warned about the possibility of a explosion with these two chemicals, but the plant's current paperwork does not, Gerton said.

"Why has our knowledge base gotten worse? That concerns us," Gerton said.

"If we had good data in 1987 that this chemical was unstable, why didn't someone take action?" he added.

A check of other DOE sites showed two documented chemical explosions at the Savannah River site in the 1980s, with one explosion closely resembling May's accident, Gerton said.

After those explosions, the Savannah River site installed stricter chemical disposal procedures, including getting rid of waste chemicals within five days.

Hanford apparently did not know about the Savannah River explosions, Gerton said. However, at least two other Hanford chemical accidents besides the phantom 1970s blast are believed to be linked to mixtures of nitric

acid and hydroxylamine nitrate.

Investigators found two 1987 memos this week that warned about the possibility of Tank 109 exploding, Gerton said. Former Hanford chemical engineer Craig Barrington wrote both memos.

Barrington was laid off in 1995. He lives in Richland but works as a chemical engineer for a company in San Jose, Calif.

In a phone interview Friday, Barrington said the fact concentrated nitric acid and hydroxylamine nitrate were routinely mixed in

Please see PFP, Page A2▶

Panel slashes tank privatization funds

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — A key House subcommittee hacked \$250 million Tuesday from the proposed budget to privatize the cleanup of Hanford's high-level radioactive tank wastes, though an effort was under way late in the day to restore some of the money.

The procurement subcommittee of the House National Security Committee left \$50 million remaining for the tank waste

project as the committee marked up its part of the defense authorization bill in a closed session.

Two weeks ago, the subcommittee's chairman, Rep. Duncan Hunter, R-Calif., indicated he opposed providing any money for Hanford tank cleanup privatization efforts.

The full National Security Committee meets today to vote on the defense bill, and Hunter and other committee members said they would consider adding \$60 million to the privatization, bringing the total to \$110 million for the coming fiscal year.

The Clinton administration initially requested \$427 million but scaled that back to \$300 million.

Congress provided \$170 million for the Hanford privatization during the current fiscal year, and the administration had planned to seek a total of roughly \$1.3 billion over six years.

The money is needed to cover some of the early costs of the two corporate teams involved in privatizing the cleanup work and to hold a reserve fund to cover the rest of the costs if DOE later changes its mind and seeks

another way to clean up the tank wastes.

The teams competing for tank privatization, one led by British Nuclear Fuels and the other by Lockheed Martin, have sent the subcommittee mixed signals on how much they need to cover their costs and to convince investors the effort would succeed.

Democratic Rep. Adam Smith, Washington state's lone member on the subcommittee and the full committee, along with Rep. Lindsey Graham, R-S.C., offered an amendment Tuesday that would have provided \$110 million for privatization.

It was the only amendment offered during the subcommittee's meeting, but after extensive discussion, Smith and Graham withdrew it amid promises by Hunter and others they would try to come up with the additional \$60 million before the full committee meets.

If not, Smith said, he is prepared to offer the amendment during the full committee meeting or even on the House floor.

Please see SLASHES, Page A2▶

Hanford well shows technetium increase

By JOHN STANG

Herald staff writer

A big increase in technetium in an 200 Area monitoring well provides new clues on how fast radioactive substances might be spreading from leaking underground waste tanks at Hanford.

Since technetium 99 is the fastest-moving radionuclide that might have leaked, it would be a likely forerunner for other radionuclides seeping down to the ground water, then toward the Columbia River.

However, state and federal Hanford tank farm officials say more study is needed to figure out what the new technetium readings mean.

The recent readings fit with the state Department of Ecology's belief that the technetium probably leaked out of tanks, instead of

from nearby soil dump sites, as the Department of Energy earlier believed, said Tom Tebb, Ecology's acting program manager for the tank farms, and Stan Leja, an Ecology hydrogeologist.

Dave Shafer, DOE's manager for vadose zone issues, said evidence points toward technetium originating from the tanks but added more study is needed to verify that.

The "vadose zone" is the area between the tanks and the ground water 210 feet beneath the surface.

If the technetium came from leaking tanks, that confirms a new hazard to overcome when sludges and solid wastes left in the tanks are removed to be converted into glass, officials said.

That is because water would have to be sprayed inside the tanks to

Please see WELL, Page A2▶

School districts battling for PILT

By JOE HARWOOD

Herald staff writer

Officials in four Mid-Columbia school districts thought they hit the lottery jackpot when the federal government finally agreed last year to make payments on the 560 square miles seized in 1943 to build the Hanford Nuclear Reservation.

But now it appears the districts hold lottery tickets with only five winning numbers instead of the required six.

Under settlements signed with Benton, Franklin and Grant counties last year, the Department of Energy agreed to pay about \$17 million to a variety of public entities.

Known as "payments in lieu of taxes" or PILT, the money is supposed to make up for taxes lost for 1988-95 because the feds took Hanford lands off local tax rolls. Property taxes provide the majority of revenue for schools.

The four school districts — Richland, Prosser, North Franklin and Wahluke — were set to receive about \$5.4 million of the settlement, plus annual payments ranging from about \$65,000 for North Franklin to \$311,000 for Richland.

But some folks in Olympia now think the state general fund should benefit from the school districts' PILT windfall — despite payments the counties already have made to the state school fund.

By June 1, for example, Benton County taxing entities that reached a December 1996 settlement with DOE for \$11.2 million had received nearly \$8 million of that money. Of that, about \$2.8 million went into state school coffers.

Despite those payments, state school equalization rules could mean all \$5.4 million the DOE earmarked for the districts goes to Olympia for distribution to other school districts.

"They've got their prorated cut, now they want all of what the school districts received," said Harry Culp, director of financial services for Richland schools.

Equalizing the money means taking it

Please see PILT, Page A2▶

Fluor pipe crew links layoffs to safety complaints

By JOHN STANG
Herald staff writer

Raising safety concerns brought layoff notices to several Hanford pipe fitters, some of those laid off say.

Five members of an eight-man Fluor Daniel Northwest pipe crew showed up on a layoff list June 2, a few days after the crew protested how a hydraulic pressure test was being conducted at Hanford's tank farms.

After additional protests and discussions, seven of the eight received pink slips Friday. "It's because we brought safety issues forward and stood by our principles," said one worker.

Some of the seven spoke with the Herald under the condition they remain anonymous.

The men said they were on a crew working on the cross-site transfer line in the 200 Area. The project is installing a pipe system to transfer radioactive wastes from the 200 West Area to the safer tanks in the 200 East Area.

The workers say they voiced safety concerns about three issues in April. Then, in the last week in May, they balked at participating in a hydraulic pressure test on a pipe they feared was unsafe.

"These statements by our workers concern us greatly," said Fluor Northwest spokesman Jerry Holloway. "Fluor Daniel Northwest takes safety seriously, as evident by maintaining one of the best safety records in the industry.

"We are reviewing the concerns about safety and the layoff process on their merits," he added.

Additional information from Fluor Northwest was unavailable.

The company was created in October as an "enterprise" company to assume most of the functions of the old ICF Kaiser Hanford Co.

In all the incidents, Fluor Daniel Northwest and subcontractor Apollo Sheet Metal & Plumbing were working on the pipeline near each other.

Fluor was installing pipe inside the tank farms where extensive radiation precautions are required. Apollo installed pipes outside of the tank farms. The two companies also apparently have different safety procedures.

The interviewed workers said that in April the crew voiced three safety concerns to their managers. These were:

■ They went just outside a tank farm fence to work on a pipe in an 8-foot-deep ditch leading into the tank farm.

They thought they would be working in an Apollo "trench box" of a certain size but ended up in one they contend was too small and of the wrong configuration to be safe in that ditch. A trench box is a barrier that protects workers in ditches from cave-ins.

■ When Apollo was doing X-ray checks of welds in pipes, radiation from the X-rays was detected on monitoring equipment at a nearby tank farm.

■ When the crew later returned to check the trench box just outside of the tank farm fence, it walked by a hydraulic pressure test on a pipe without encountering any warnings or barricades to keep them outside the test area.

In a hydraulic pressure test, a pipe is filled with fluid at specific pressures to test the

strength of the pipes, valves and joints.

Jesse VanSchoiack, Apollo's general manager, said the trench box and the X-ray checks met Apollo's safety standards and no Apollo workers voiced concerns.

VanSchoiack said he was not familiar with the April pressure test complaint and could not comment on it.

The final incident occurred the week of May 26-30 as Fluor Northwest and Apollo were working together on a hydraulic pressure test on a pipe.

The interviewed workers said they were told to install valves rated to handle 1,975 pounds per square inch of pressure. The hydraulic test was to be conducted at 2,300 psi. VanSchoiack confirmed the figures are approximately correct.

The crew members did not believe the 2,300-psi test should be conducted with the valves — and said they would not do it.

The question of the underrated valves went to Apollo, and two days later the answer came back that the test could be safely conducted with the 1,975-psi valves.

VanSchoiack said the valve ratings pertain to the safe limits for continuous pressures but added that standard industrial practices accept that those ratings can be safely exceeded for short periods of times, such as in tests.

One interviewed Fluor worker acknowledged this type of short-term excessive pressure is accepted elsewhere in this industry but said Fluor Northwest's standards do not allow that.

Eventually, the crew agreed to install the valves as long as they were not near the pipe during the test.

But on May 30, the test day, they found out they would have to slowly bleed air out of a valve during the test — and they balked again.

"Are they going to wait for another Lou Beatty to die?" one worker asked.

The reference was to Hanford's last industrial death. Beatty died after being scalded by steam and hot water that burst out of a valve under extremely high pressure in a Hanford pit in 1993.

May 30 was already a hectic day in the 200 Area. Nearby, a crane was lifting a trench box and did not have two of its outrigger legs extended — causing it to tip 45 degrees, according to a Hanford occurrence report. No one was hurt, and the Apollo crane was righted, VanSchoiack said.

Eventually, new valves — rated in excess of 3,000 psi — were brought in and installed May 30. The pressure test then went off without a hitch.

VanSchoiack said the valves were changed after Fluor Northwest sent a change order.

Then on Monday, June 2, Fluor Northwest announced some upcoming layoffs.

Five of the eight men on the crew were on a list to be laid off last Friday, and the foreman was being transferred to another crew as a worker. No other crews had more than one or two people targeted for layoffs, the interviewed workers said.

After some protests and some work juggling last week, two other crew members — including the foreman — ended up joining the original five. At least one apparently requested to be laid off as a gesture of support for the others.

Hanford contractors contribute to Mid-Columbia organizations

By the Herald staff

The Hanford contractors recently awarded about \$100,000 to community groups in the Mid-Columbia.

Pat Hale, manager of community relations for Fluor Daniel, said the six companies that operate Hanford for the Department of Energy have come up with a policy to help guide donations.

Since October, Hanford has been operated by Fluor Daniel Hanford Inc., B&W Hanford Co., DE&S Han-

ford Inc., Numatec Hanford Corp., Lockheed Martin Hanford Corp. and Rust Federal Services of Hanford Inc.

Contributions include:

■ \$12,000 for Columbia Basin College scholarships.

■ \$5,000 each to the American Cancer Society, the American Heart Association, the Boys and Girls Club, the Hispanic Academic Achievers Program, the Richland Chamber of Commerce's Cool Desert Nights, Junior Achievement, the Tri-Cities Corporate Council for the Arts.

■ \$10,000 each to the American Red Cross, the Columbia River Exhibition of Science and Technology, the Child and Family Development Network for The Children's Center and Northwest Public Radio.

In addition, Fluor Daniel made independent contributions of \$500 to Odyssey of the Mind, \$5,000 to Junior Achievement and \$15,000 to the Tri-Cities Corporate Council for the Arts.

DOE seeks \$12.5 billion for cleanup

By JOHN STANG
Herald staff writer

The Department of Energy thinks it will need \$12.5 billion over 10 years to speed up Hanford's cleanup.

The department unveiled Thursday the first draft of its proposal to get Congress to provide steady funding for a 10-year master

plan for DOE sites nationwide through 2006.

The same draft also contains preliminary calculations that Hanford's core environmental cleanup payroll could shrink by almost 2,900 jobs by 2006.

The 10-year plan's aim is to complete all cleanup at DOE's smaller sites and to complete much of the work at larger sites such as Hanford by 2006.

■ **HANFORD:** Department of Energy worries about a House committee's decision to cut money to privatize tank waste cleanup. **Page A8.**

Speeding that work is supposed to reduce future costs.

Plenty of work — especially at Hanford — would remain after 2006. In fact, DOE fig-

ures between \$54.3 billion and \$56.7 billion would be spent at Hanford from now through 2070.

DOE wants to convince the administration's Office of Management and Budget and Congress to appropriate \$6 billion annually for 10 years for accelerated cleanup at all sites.

That's the level needed for DOE to meet its legal cleanup obligations, said Al Alm,

DOE assistant secretary for environmental management.

But OMB has been leaning toward \$5.5 billion annually for cleanup, which DOE believes will not be adequate to meet its legal obligations and won't clean up as many sites as it hopes.

Besides, the \$5.5 billion level would delay

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DOE concerned about Hanford privatization funding

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — A House National Security Committee decision to provide \$70 million for privatization of Hanford tank waste cleanup sparked concern Thursday from the Department of Energy and one of the companies seeking the cleanup contract.

Overall, the defense authorization bill provides the department with the roughly \$5.3 billion it requested to clean up its nuclear sites, including Hanford.

But the \$70 million included for privatization of the tank waste cleanup at Hanford was \$230 million less than the administration had requested.

The administration sought funding for 13 privatization efforts.

Hanford was the only one to receive funding, as key committee members expressed reservations over the ability of DOE to administer the privatization program.

The defense authorization bill next goes to the House floor.

Democratic Rep. Adam Smith, Washington state's only member on the committee, said

he too shares concerns about how privatization money has been spent in the past.

"The solution, however, is to spend it better, not stop spending it," Smith said.

Smith was prepared to offer an amendment that would boost funding for the Hanford privatization to \$110 million, the minimum he and others thought was needed to keep the program on track.

"But it likely would have been defeated," Smith said.

"We are going to have to fight for more on the floor or take it to conference."

Initially, committee members considered cutting the Hanford privatization budget to zero, but Smith and Rep. Doc Hastings, R-Wash., a former member of the committee, spent the past week lobbying for funding.

"I felt it was irresponsible for Congress to turn its back on Hanford cleanup, when it should be a major priority," Smith said.

Hastings said the fact the committee provided the administration's full request for cleanup is a sign progress is being made at Hanford.

through different processing steps.

Over the years, the plant was modified relatively easily to handle increased requirements for plutonium production and environmental safeguards.

"I marveled at the versatility of the plant over the years," said Bailey, who began working there as a process engineer.

A safety violation closed PUREX in 1988. Steam pressure fell below the required level to operate a backup exhaust system. It took a year to come up with a repair plan. By then, the Cold War ended. So, from November 1989 to March 1990, the plant went back on-line to process the material still in the plant's system.

Deactivation began in 1993, a milestone ending Hanford's era as a plutonium-production complex.

"Until PUREX was taken out of the loop, we could still have had a weapons mission at the site," Bailey said.

Deactivation required getting rid of massive amounts of chemicals. They were drained, flushed, processed and sent to many different sites — ranging from the Hanford 200 Area's underground tanks to several U.S. companies to British Nuclear Fuels in England.

Today, no chemicals remain at PUREX, heading off the possibility

As for the cut in privatization funding, Hastings said because the Hanford privatization was the only one funded, it must be headed in the right direction.

"This demonstrates that we are on the right track ..." Hastings said.

"But this is a first step, and we'll continue to fight to ensure that the project receives the support it needs to move forward."

Al Alm, DOE's assistant secretary for environmental management, said he is optimistic Congress eventually will provide more money for Hanford privatization, but warned lack of funding could kill the program.

"There comes a point when the appropriations will be so low that the private sector loses confidence in the program, and we don't want that to happen," Alm said, though refusing to cite a specific dollar figure.

The president of BNFL Inc., one of two firms seeking the privatization contract, said he also is concerned about the committee's action on funding for what is known as the Tank Waste Remediation System (TWRS).

"While we appreciate TWRS received involving employees in the planning. PUREX was one of the first sites to use that philosophical overhaul.

The bottom line is the entire deactivation was budgeted at \$222.5 million, but ended up costing only \$147 million. And the original completion target of July 30, 1998, was beaten by 15 months.

Deactivation also cut PUREX's annual maintenance cost of \$34 million to about \$1 million a year.

PUREX will soon fall under Hanford's 200 Area "canyon" disposition planning. The planning addresses five canyon processing plants — PUREX, the REDOX plant, and the B, T and U plants.

Jim Goodenough, DOE's project manager for decommissioning the plants, said possibilities include using the plants as long-term or short-term waste storage facilities, tearing them down or sealing them from the outside world.

Goodenough expects the first decisions to be made in late 1999 or 2000 and to address the already deactivated U Plant.

Today, PUREX feels like a "ghost town" to Bailey, who remembers the noise and activity when it was in full operation.

"When the plant was operating, you couldn't hear yourself think. Now you can hear a pin drop."

funding, our concern is that if sufficient funds are not built up in the early phase of the program while spending rates are still moderately low, Congress will find it difficult to fund the much larger amounts necessary in later years when the spending rate peaks," said Rolland Langley, BNFL's president.

Langley added, "As we all too well know, the federal budget must be balanced by 2002, the precise year of peak spending for TWRS."

Maurice Bullock, a BNFL vice president based in Richland, said the federal money is needed to help ensure private funding can be secured for the privatization.

"We are prepared to lead a private sector financing to make this project go forward and not to receive any payment until waste is actually made safe," Bullock said.

"However, this program will flounder if it is subject to arbitrary stop-and-go flow funding support from Congress."

Bill Dixon, director of regulatory affairs at Lockheed Martin Advanced Environmental Systems' Richland office — the other tank privatization contract competitor — said his

company also is disappointed with the funding cuts.

Dixon pointed to the \$170 million Congress set aside for tank farm privatization in fiscal 1997, saying that and the fiscal 1998 projected appropriation of \$70 million will be enough to keep the privatization effort going for only about two years.

Langley also said there will be enough money to carry the program through the next fiscal year, however, "we and our financiers must ask, 'If Congress is unwilling to continue the stable funding profile for this year, what is the likelihood of them doing so over the next four years when the rest of the funds for this large facility will be required, and budget pressures will be even greater?'"

The administration has said it needs about \$1.3 billion over six years to pay some of the up-front costs of the companies interested in privatization and to establish a reserve fund to reimburse the companies for all of their costs if the department decides not to proceed.

The reserve fund also is intended to show the department's commitment so the private companies could arrange financing.



Herald file photo

A Hanford worker uses a glove box in the Plutonium Uranium Extraction Plant during the Cold War days when PUREX was operating. A glove box is a chamber where radioactive materials can be worked on by a person reaching into the chamber using protective gloves.

Battelle has eye on future

HAMMER

to help stop smuggling

By JOHN STANG

Herald staff writer

Richard Pappas showed he could tell which aluminum can held Diet Coke and which one held Classic Coke. Without sipping. Without looking at a label. Without popping open a can.

The Battelle-Northwest scientist did it using a specialized portable probe that bounced sonic waves through the can and the soda inside — detecting chemical differences between the two sodas.

The tool is one piece of equipment border guards from former Eastern Bloc nations will be

■ ARTIFACTS:
Center to help work around American Indian bones. Page A3.

trained to use when they attend a new school that will be set up at the Hazardous Materials

Management and Emergency Response Center taking shape at Hanford.

The entire HAMMER facility will open after a dedication ceremony Sept. 24-26.

One part of the training center will include a school to teach border guards how to spot smuggled materials that could be used to build nuclear, chemical and biological weapons.

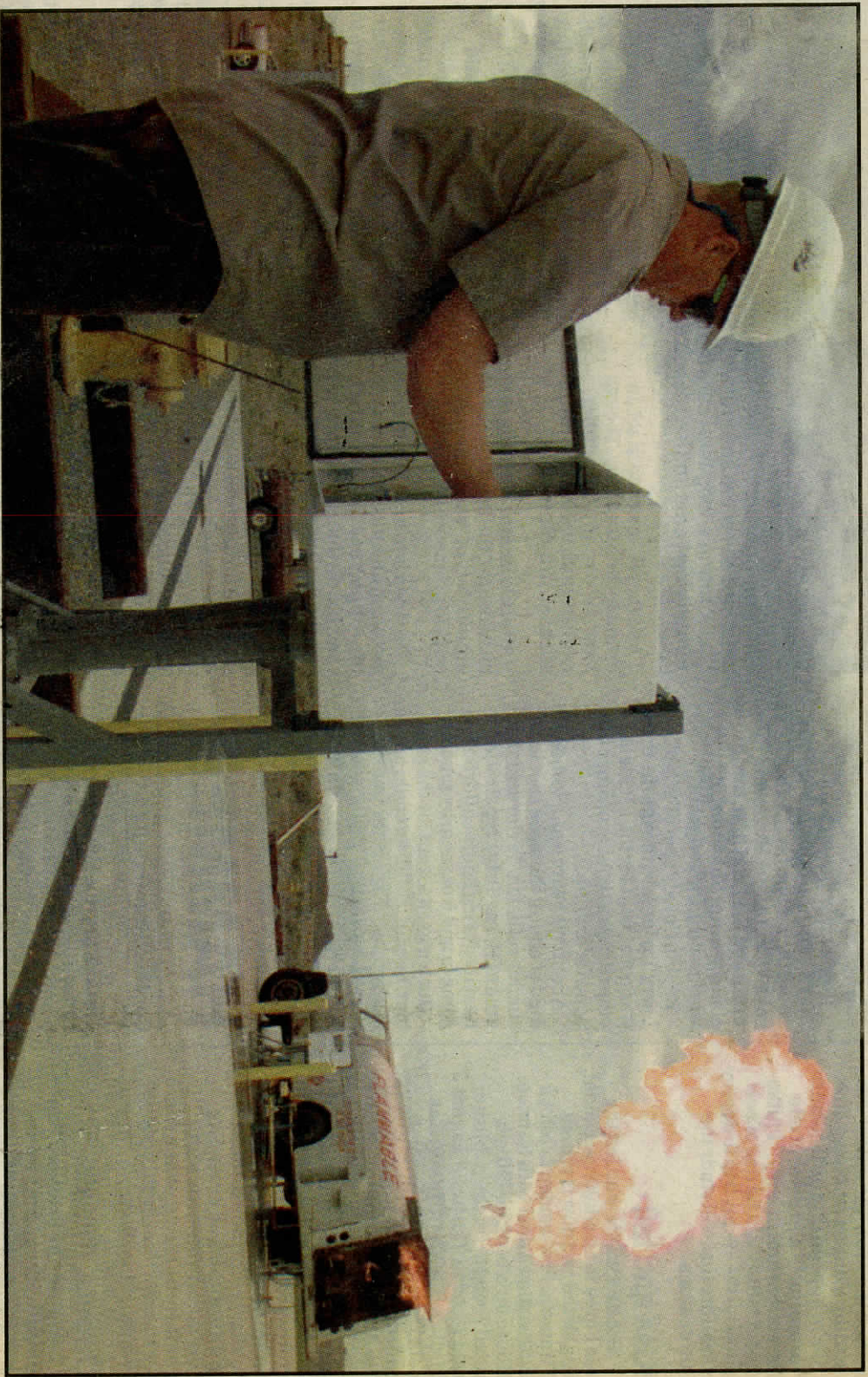
The first two-week class on detecting these materials could take place as soon as August.

Battelle, the U.S. Customs Service and the federal State and Defense departments hope to funnel about 420 border guards from about a dozen former Eastern Bloc nations through the HAMMER classes by 2000.

The guards will learn how to spot materials that could be used in nuclear weapons with and without sophisticated new detection equipment designed at Battelle.

Those students then will train other guards in their nations.

When the Soviet Union collapsed and split up, four of the resulting republics — Russia, Ukraine, Belarus and Kazakhstan — retained nuclear weapons. They have since officially trans-



Jack Justus, a project engineer with Symtron Systems Inc., demonstrates a fuel truck fire at the HAMMER site north of Richland. The sim-

ferred the weapons to Russia.

But several nations — including South Africa, North Korea, Iraq, Iran, Pakistan, India and Israel — have shown interest in building nuclear weapons in violation of international nuclear nonproliferation treaties.

And between these "have" and "have-not" nations are a huge number of new, small, and often poor, countries, each with different laws on materials used in making nuclear weapons.

Smart nuclear smugglers can zigzag through this patchwork of nations, picking the easiest borders to cross, said Bill Cliff, manager of Battelle's international affairs national security division.

"You can feel confident smuggling is going on in all these nations. The almighty dollar is attractive to people," he said.

Some of these nations signed nuclear nonproliferation treaties. And some have not, but they frown on nuclear-related materials crossing their borders. And there is another factor:



Many of these new nations draw a significant portion of their revenues from tariffs on items crossing their borders. They want to catch smugglers for the extra income.

Cliff drifted into consulting on smuggling issues a few years ago when he discussed with the U.S.

Please see **HAMMER**, Page A2 ▶

ulator can be used by firefighters to practice different techniques of fighting fuel fires.

Herald/André Ramieri

HAMMER features offer more training

By JOHN STANG

Herald staff writer

Initially, the purpose of Hanford's Hazardous Materials Management and Emergency Response training center was to train workers how to cope with massive chemical accidents.

But more features have been added to HAMMER in the past couple of years, and now it offers training ranging from practical archaeology to how to nab nuclear smugglers.

The unique training center is due to open after three days of dedication ceremonies scheduled for late September, which means a steady stream of trainees should begin going through it in October.

The dedication will cap several years of lobbying and almost two years of construction to bring the \$29 million facility to southeastern Hanford near Richland.

HAMMER began as an 80-acre facility to train a large number of emergency workers from Hanford and the rest of the nation how to handle disasters involving hazardous materials and chemicals. It's a joint venture of four federal agencies including the Department of Energy, several unions, three tribes and a university.

The facility's size and scope has expanded, and the site was expanded to 120 acres. Several functions also have been added that do not directly pertain to hazardous materials emergencies.

Please see **TRAINING**, Page A2 ▶

Check marks PUREX closing

By JOHN STANG

Herald staff writer

Workers whipped out one of those super-big posterboard checks Friday — the type used in donation ceremonies.

But this "check" went to the United States government, and was signed "The PUREX Team."

The amount: \$320 million.

That's what is expected to be saved over the next 10 years by closing and cleaning up Hanford's Plutonium Uranium Extraction plant (PUREX).

Friday's ceremony celebrated the deactivation of PUREX — 15 months ahead of schedule and \$75.5 million under budget.

At 1,000 feet long and 104 feet tall, PUREX was the largest chemical processing facility at all Department of Energy sites. It helped create 80 percent of the 53 tons of plutonium produced at Hanford.

Deactivation began in 1993 and ended in May — a milestone ending Hanford's era as a plutonium-production complex.

Hanford documents focus of new WSU library

By JOHN STANG

Herald staff writer

About 1 million Hanford and science-related documents and books are being consolidated under one roof at Washington State University at Tri-Cities.

The materials come from the Hanford Technical Library in the 300 Area, the Department of Energy's Reading Room at WSU Tri-Cities and the WSU Tri-Cities library.

The volumes will be available to the public Monday at WSU Tri-Cities' new \$16.8 million Consolidated Information Center building just north of the present campus.

"It'll be a little messy, but we'll be up and running," said Erik Anderson, manager of the Hanford Technical Library.

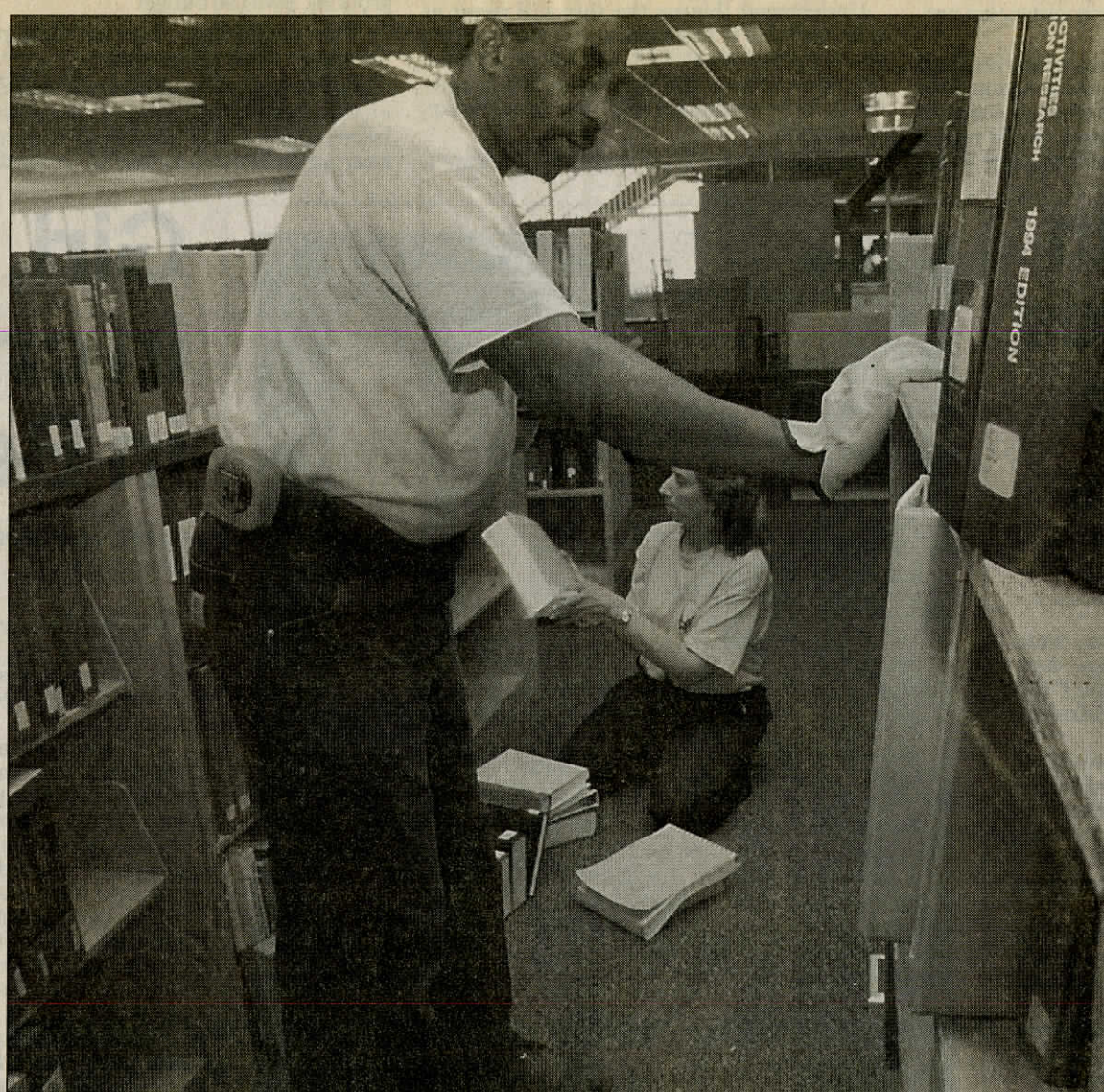
The three libraries will function separately but in the same two-story 24,000-square-foot area tucked away in the 74,000-square-foot center.

And the staffs of all three are being cross-trained to handle or route all library requests.

"This is to provide easier access to the public," Anderson said.

Public access has been difficult for the technical library. Part of it has been in a publicly accessible portion of the 300 Area, but few knew it was there. And another portion of the technical library was in a restricted part of the 300 Area.

The DOE Reading Room handles mostly management and overview documents pertaining to Hanford. The technical library handles mostly scientific and engineering documents, ranging from nuclear physics to life sciences to medical monitoring.



Herald/Tracy Montauk

Untangling and filing hundreds of reference books, Franklin Jennings and Diana Baraba from American Interfile, a company that specializes in reorganizing libraries, tackle the job of pulling together Washington State University's new consolidated reference center.

People won't be able to check out documents. But they can photocopy them.

The consolidated libraries' hours will be from 8 a.m. to 9 p.m. Monday through Friday, from 10 a.m. to 5 p.m. Saturday, and from 1 p.m. to 5 p.m. Sunday. The exception will be the DOE Reading Room, which will be open from 10 a.m. to 5 p.m. Monday through Friday. A formal dedication ceremony is set for 11 a.m. June 27. The rest of the building will contain a business assistance center and noncredit classes.

Benton delays decision on future of Hanford lands

By the Herald staff

Benton County's decision on future uses of Hanford land is on hold again.

The county commissioners Monday continued a meeting until November, when the Department of Energy is expected to complete its own planning process. It is the second delay since an April public hearing on the issue.

At issue is how much of the Benton County portion of Hanford will be set aside for wildlife habitat once federal cleanup efforts are finished. The county's planning commission recommends setting aside 290 square miles of the 427 square miles of Hanford in Benton County as wildlife habitat.

Benton County must plan for the protection of "critical areas" — wetlands, areas prone to landslides and fish and wildlife conservation areas — under the state Growth Management Act.

At the same time, the Energy Department is studying potential future uses of Hanford land as part of its cleanup plans. Benton County wants to see DOE's proposal before adopting its own.

A final recommendation from the DOE-led joint federal, state, local and tribal planning effort is due by October.

The county commissioners also are reviewing dozens of proposed changes to the draft critical areas law. Deputy Prosecutor Ryan Brown suggested the revisions to make the law clearer.

Battelle lab falls short of incentives

By JOHN STANG

Herald staff writer

The difference between 97 percent and 95 percent equals \$1.8 million in lost performance fees for Battelle-Northwest.

That's how much Battelle lost by not quite reaching its performance goals in building the Environmental Molecular Sciences Laboratory. Battelle received nothing for the EMSL portion of its fiscal 1996 performance fees from the Department of Energy.

Overall, Battelle earned \$12.7 million out of a possible \$17.2 million in base and incentive fees for fiscal 1996, which ended last September.

It also earned almost \$2.32 million for saving \$36 million in overhead and travel that year.

So the bottom line for Battelle's Hanford fees in fiscal 1996 was \$14.98 million. Despite the loss of the EMSL money, Battelle still will ultimately earn 28 percent more than the previous year's revenue, which was \$11.7 million.

Wildlife service to enlist comments on arid lands

By JOHN STANG

Herald staff writer

The U.S. Fish and Wildlife Service will go to the public in two or three months to begin mapping out how it should manage the Fitzner-Eberhardt Arid Lands Ecology Reserve at Hanford.

The wildlife service and the Department of Energy signed an agreement Friday to immediately put the service in charge of supervising the ALE for DOE, said Patrick Willison, environmental attorney for DOE Hanford's office of chief counsel.

No changes are expected in the near future in how the 120-square-mile chunk of western Hanford dominated by Rattlesnake Ridge is managed.

In August, DOE decided it would remain the owner of the ALE, which is a combination of wildlife reserve and buffer zone for Hanford. That was because the northern part of ALE is in a safety buffer zone for the 200 Area, which contains 177 underground tanks filled with 55 million gallons of radioactive wastes.

Without the ALE as a buffer, additional expensive safety measures would be required in the 200 Area.

After DOE made that decision, it began talking about shifting the ALE's management to the wildlife service, which plans no immediate changes in how the refuge is managed.

"Right now, it's going to be the status quo. We'll keep it as a research area for now. There will continue to be limited access," said Dave Goeke, manager of the wildlife service's

Columbia National Wildlife Refuge. That refuge office is now responsible for the ALE.

The ALE is the home to numerous ecologically sensitive plants and animals. And it is a religiously significant area to Mid-Columbia tribes.

The wildlife service expects to begin putting together its management plan for the ALE in late August or early September.

That plan must be finished in three years, but Goeke hopes to cut that to 18 months to two years.

Until that plan is completed, the ALE will function under a 1993 management plan created by Battelle-Northwest.

Although the wildlife service will be in charge of overall management, Battelle's wildlife and plant research will continue under DOE's supervision, Willison said.

Goeke said extensive public opinion will be sought as the new management plan is developed. He declined to speculate how public access to the ALE could be affected under that future management plan.

"Until we go through the public involvement process, it's premature to say exactly what will happen," he said.

Friday's agreement also calls for DOE to transfer \$300,000 to the wildlife service to help with the planning through the end of fiscal 1998. The wildlife service will take over funding responsibilities in fiscal 1999, which will be the first year that agency's officials can prepare their own budget request.

The \$300,000 will come from DOE's Washington, D.C., headquarters budget and not from Hanford cleanup funds, Willison said.

6-25-97

3161 back in House budget

By JOHN STANG
Herald staff writer

An amendment to revive and study a program that has been used to diversify the Tri-City economy and retrain Hanford workers passed a vote of the full U.S. House late Monday evening.

The measure will soon head to the U.S. Senate after the House finishes other work on its defense authorization bill. U.S. Rep. Doc Hastings' amendment is piggybacked on that bill.

The amendment passed without trouble

on the House floor. And Hastings, R-Wash., said he does not expect opposition in the Senate when the bill likely ends up there after July 4.

Hastings' amendment would eliminate a provision in the defense bill that would have prohibited money for economic diversification, ended hiring preferences for laid-off workers at Department of Energy sites and phase out the so-called 3161 program by September 1999.

The bill also would cut the 3161 money for the Tri-Cities in fiscal 1998 from \$70 million to \$22 million. Hastings' amendment bumps that back up to \$66 million.

■ **SPORTS:**
3161 money helps lure all-star football game to Tri-Cities. **Page B1.**

6-26-97

Hanford waste system to be done in August

Hanford officials expect to finish construction work on the 200 Area's 6.2-mile radioactive waste transfer system in August.

Officials hope to be using the new system in February to transfer liquid wastes from the underground storage tanks in the 200 West Area to the 200 East Area.

The new \$50 million system will have two pipes — one for liquids and one for solid-liquid slurries. It will replace the present transfer system of six pipes, of which four do not work and the remaining two do not meet current environmental standards.

Hanford has 55 million gallons of radioactive liquid wastes spread across 177 tanks. The plan is to get all the liquid wastes out of the 149 single-shell tanks, including 68 suspected leakers.

Twenty-five of the safer double-shell tanks are in the 200 East Area, which is near where treatment and glassification plants are to be built.

6-28-97 (cont)

WSU Tri-Cities dedicates Richland campus library

By MARINA PARR
Herald staff writer

With its large glass windows, airy hallways and polished granite walls, the new Consolidated Information Center at Washington State University at Tri-Cities gleamed Friday morning at its official public coming-out party.

"At the heart of any university campus is an outstanding library building," said WSU President Sam Smith. "This will form the nucleus for the campus."

The blend of science, technology and old-fashioned book-learning will all be a part of the CIC, which rises north of the university's Tri-City campus with its crescent-shaped roof and two-story high views ofattlesnake Ridge to the west and the Columbia River to the east.

The new \$18.6 million, 70,000-square-foot building, it should be noted, is not called a library, although plenty of books line its lower floor.

"In the past you would go to the library and read books. Now you go to gain information and that can come from anywhere," Smith said, noting that today much research is called up on computer. "What you can't pull up on screen ... you can borrow (from other libraries)." The CIC

Science center gets go-ahead

By the Herald Staff

Washington State University regents aren't the types to wait around.

Just hours before dedicating the new Consolidated Information Center at WSU Tri-Cities, the regents gave the go-ahead Friday to begin design work on a new Science Education Center.

It will combine laboratories for university science programs and

the university's teacher program under one roof. Local school districts will be able to use the center to further teacher education in math and science.

The 1997 state Legislature authorized the design money. The 50,000-square-foot facility is expected to cost a about \$21 million.

The new facility will emphasize science education. Construction is expected to begin in 2001.

is actually a hybrid of several information-rich sources. It merges the Hanford Technical Library with the WSU Tri-Cities library.

Previously, the Hanford library was housed at the Hanford site, seven miles north of Richland. The new facility will give the public easier access to the Hanford library's vast collection of scientific information, as well as access to any book on any shelf in the entire WSU library system.

The CIC also houses the University Center for Professional Education and the WSU Tri-Cities Business Assistance Center. The public's sup-

port of CIC was evident at Friday's ceremony. Supporters filled the CIC parking lot and walked around admiring the sleek, stark structure that laid bare heating ducts and support beams as a show of post-modern practicality.

"Look at the outpouring of community," said Jim Cochran, WSU Tri-Cities dean, who shook hands with folks from Yakima to Walla Walla to Prosser. "This is not just a resource for WSU, but for the community."

The CIC library is open Monday through Friday from 8 a.m. to 9 p.m.; Saturday from 10 a.m. to 5 p.m. and Sunday from 1 to 5 p.m.

Canada s

By The Associated Press

VANCOUVER, British Columbia — deal with the United States, Canada Friday for the 1997 Pacific salmon U.S. fishing industry "can no longer good will."

"It will not be business as usual with Fisheries Minister David Anderson da's overall 1997 salmon quota at 23.4 Anderson reduced the catch for

7-1-97

Bechtel awarded for performance

Firm again gets high marks from DOE

By JOHN STANG
Herald staff writer

Bechtel Hanford Inc. has pulled down its sixth consecutive semianual "outstanding" rating in handling Hanford's environmental restoration contract.

The Department of Energy gave Bechtel a grade of 89.15 percent for the period of Oct. 1, 1996, through March 31, 1997 — compared with 89.32 percent for the previous six-month period.

The bottom line for Bechtel is it earned \$4.68 million out of a possible \$5.25 million in performance fees for those six months.

Performance fees make up 70 percent of Bechtel's earnings. Another 30 percent comes from a fixed-base fee, which was \$2.25 million for those six months. The combined performance and

base fees add up to \$6.93 million.

Bechtel's performance and total possible fees vary from grading period to grading period because the scope of work changes. In the previous grading period, Bechtel earned a total of about \$9 million.

In this performance review, DOE cited Bechtel for good work on the Environmental Restoration Disposal Facility, a huge landfill in central Hanford for radioactive rubble and soil.

The ERDF contains about 350,000 tons of contaminated soil and debris, ahead of the 250,000 tons expected at this point.

The ERDF can hold about 1 million tons, with plans to expand it to hold 6 million tons. Those expansion plans will have to be sped up, said Steve Liedle, who becomes

Plutonium disposal topic of DOE briefing

By JOHN STANG
Herald staff writer

The public gets a chance today to discuss an upcoming study on disposal of the nation's surplus plutonium — which includes a Hanford option.

The Department of Energy has scheduled two public briefings and discussions on the study, an afternoon session from 1 to 4 p.m. and an evening session from 6 to 9 p.m. at the Shilo Inn in Richland.

DOE plans to conduct environmental impact studies on four potential plutonium disposal sites, including Hanford. The other three are DOE sites at Savannah River, S.C., Idaho Falls and Pantex in Texas.

The prime site at Hanford is the Fuels and Materials Examination Facility — a massive complex built in the 1980s to assemble nuclear fuel for the Fast Flux Test Facility, plus another prototype reactor in DOE's since-abandoned breeder reactor program. The FMEF has never been used.

DOE is researching three disposal processes. And the FMEF could be used for any of the three. They are:

- Combining plutonium oxide with uranium to produce mixed-oxide fuels for nuclear reactors — including possibly the FFTF.

- Taking apart nuclear weapons cores to remove the plutonium and converting the plutonium into a form suitable for disposal.

- Immobilizing the plutonium inside a glass or ceramic material to be stored permanently in a repository.

The study will look at all four sites for the weapons components disassembly and mixed-oxide fuel fabrication facilities.

And the study will look at Hanford and Savannah River for the immobilization facility.



Jim Steffen, facility manager at the Fuels and Materials Examination Facility, looks through the unused machinery in the pellet assembly room at the plant at Hanford. The facility will be the topic of public meetings today in Richland on disposing of plutonium.

Herald/Bob Brawdy

The draft study is expected to be completed by late 1997 or early 1998. A final report is expected sometime in 1998.

If Hanford is picked for one or all of the processes, they would be located at the FMEF, which is next to the FFTF.

The nation has nearly 50 metric tons of excess plutonium. And of

Hanford's 11 metric tons of plutonium, four metric tons are considered excess material usable for mixed-oxide fuel. The rest is not but could be encased inside glass or ceramic material for eventual disposal.

Preliminary DOE calculations show it would cost \$500 million to build a mixed-oxide fuel plant from scratch.

The same preliminary calculations indicate converting the FMEF would cost about \$300 million, converting a current Idaho Falls facility would cost \$350 million and converting an existing Savannah River facility would cost about \$400 million.

DOE already has conducted public briefings at the other three sites.

2 waste contractors renamed at Hanford

By JOHN STANG
Herald staff writer

Two Hanford contractors changed names Monday to reflect a closer relationship with their corporate family.

The 600-employee Rust Federal Services of Hanford Inc. — which handles waste analysis and treatment — now is Waste Management Federal Services of Hanford Inc.

And the 95-person Rust Federal Services Northwest — which handles environmental monitoring, and packaging and transporting fuels and wastes — now is Waste Management Federal Services Inc. Northwest Operations.

Plus a separate 22-employee Rust operation that is a Bechtel Hanford Inc. subcontractor running a central Hanford landfill, is now is part of Waste Management Federal Services.

The change reflects an overhaul of Rust Federal Services, said Tom Dabrowski, president of Waste Management Federal Services. Dabrowski visited Hanford on Monday and he is expected to leave today. He worked for former Hanford contractor UNC Nuclear Industries from 1968 to 1986.

In the late 1980s, corporate giant Waste Management Inc. bought the parent company of Rust, an engineering and construction firm.

But Waste Management was uncomfortable with Rust's engineering and construction work, and sold those portions.

This week's name change reflects the completion of that divestiture. Dabrowski said the change will help the Hanford companies tap into Waste Management's resources.

When they were Rust companies, the Hanford firms belonged to an out-of-the-way satellite that had trou-

ble catching the eyes of corporate officials, Dabrowski said. Now those companies fit better into the corporate culture, which should translate to easier lines of communications, he said.

"It will be easier to get corporate funds to invest here," Dabrowski said.

This especially will affect Waste Management Northwest, the "enterprise company spinoff of Waste Management of Hanford, he said.

Waste Management Northwest predicts it will generate \$10 million to \$12 million in revenue in 1997, with 25 percent coming from outside of Hanford, said P.K. Brockman, the firm's general manager. And \$150,000 of that is expected to be nongovernmental work.

In another matter, Dabrowski praised the landfill operation as a fairly unknown example of privatization working at Hanford.

Bechtel built the Environmental Restoration Disposal Facility, a huge landfill for contaminated soils and debris.

Bechtel hired subcontractors to haul the debris to the landfill, and hired Rust — now Waste Management — to operate the dump. Waste Management is finishing the first year of a 7-year contract with four 1-year options to renew.

Waste Management provides all the people, equipment and maintenance — while getting paid for the actual volume of debris handled. Waste Management officials estimate the 1997 revenue at \$4 million to \$5 million.

The landfill costs \$1.15 per cubic foot of debris to operate — which is six to 10 times cheaper than similar DOE and government sites elsewhere, according to company officials.

Safety increased after Hanford accident

By KIM BRADFORD
Herald staff writer

A May accident that left an ironworker with a crushed pelvis has spurred more supervision of Hanford construction sites, the Department of Energy announced Monday.

The May 7 accident happened during the construction of a spent nuclear fuel storage building near the center of Hanford. A man working for Mowat Construction Co. of Kirkland was trapped between two 16,000-pound steel beams.

The man, whose name has not been released, is expected to make a full recovery, but will not return to work for several months.

A DOE investigation concluded the accident

happened because construction employees were attempting to turn 50-foot beams in an area that was too small. In addition, the injured worker was assigned to the task at the last minute and was not given the proper safety training.

Charles Hansen, DOE's assistant manager for waste management, said Mowat had an excellent safety record before the May 7 accident, which forced DOE to review the way it supervises construction sites.

For example, DOE has extended its practice of holding monthly safety meetings for its operations departments to construction sites. It also is doing more thorough daily briefings, Hansen said.

The goal is to get everyone thinking about potential safety hazards and learning from each other's experiences, he said.

"There were some safety problems that were just being taken care of on the spot," Hansen said. "We are now documenting safety problems and doing more trend analysis."

A May 6 accident in which another worker at the site fell off a scaffold 24 feet above the ground was not included in DOE's investigation because it was determined the employee was following safety procedures. He hit his head but a safety belt broke his fall.

Mowat Construction is a subcontractor of the Fluor Daniel Hanford team. Fluor Daniel's investigation reached identical conclusions about the accident, according to DOE.

No one at Fluor Daniel was available Monday afternoon for comment.

Ecology reviewing Hanford lab fine

By JOHN STANG
Herald staff writer

State ecology officials expect in a few weeks to trim, eliminate or uphold a \$90,000 Hanford fine.

The Department of Energy, Fluor Daniel Hanford and what now is Waste Management Federal Services of Hanford have asked the Washington state Department of Ecology to reconsider the fine levied against Hanford's 222-S lab.

The state fined the three agencies in early May for procedural flaws found in Hanford's main waste analysis lab that the state believed should have been corrected after a February inspection.

Waste Management runs the lab for Fluor, which manages Hanford for DOE. Before Monday, Waste Management Hanford was known as Rust Federal Services of Hanford.

Three 1996 lab accidents prompted the Department of Ecology inspection that found six violations of safety procedures.

Missed si

By JOHN STANG
Herald staff writer

When Hanford inspectors stopped checking the potentially volatile chemicals in Tank A-109 in October, they thought there was too little of the mixture left to merit concern.

But May 14, their flawed reasoning apparently allowed conditions to develop that led to a violent explosion. Water evaporating

Hanford hailed as site for plutonium processing

Risk of transporting nuclear fuel makes Hanford top pick, say supporters

By DON McMANMAN
Herald staff writer

Supporters of plans to dispose of Cold War bomb plutonium at Hanford took a new tack Tuesday, pointing to problems in transporting the stuff.

If anything will stop a national program to deal with surplus weapons material, it's the vision of plutonium-packed trucks careening through downtown America, said state Sen. Valoria Loveland, D-Pasco.

But not at Hanford.

The building where the plutonium would be turned into fuel is next door to one reactor where the fuel could be burned, and about four miles from another.

"The Hanford site has the best capability to limit risks in transportation," said Pasco Mayor Charles Kilbury.

Not only are things close together at Hanford, but most facilities also are sewn in tight behind fences, other speakers said.

And Hanford is surrounded by a community sophisticated about nuclear issues and friendly to jobs in the nuclear industry.

The potential payoff in jobs drew about 120 people to a Department of Energy hearing Tuesday afternoon. Fabricating nuclear fuel from plutonium could produce 500 jobs alone. And such fuel, if burned in the commercial nuclear power station north of Richland, would be cheap, helping to ensure another 1,100 jobs of those who work there.

The federal government has about 55 tons of surplus plutonium scattered at sites across the country. About 14 tons are at Hanford.

The government has proposed



The Department of Energy held two public sessions Tuesday to discuss an upcoming study on the disposal of the nation's surplus plutonium. The Fuels and Materials Examination Facility (FMEF) at Hanford is one of four sites being considered.

Herald/Bob Brawdy

mixing about 33 tons of the weapons-grade plutonium with regular uranium fuel and using it in commercial nuclear reactors, like the one the Washington Public Power Supply System operates north of Richland.

The rest of the plutonium — either in nonmetallic forms or contaminated with other elements — would be turned into glass or ceramic logs and buried.

There are several processes required along two paths, and the Department of Energy has named four sites where one or all of the processes could be performed.

Only Hanford and Savannah Riv-

er could accommodate all the processes.

To have processing plants scattered across the country would increase transportation as the plutonium ricochets from one region to another in varying degrees of refinement, several Mid-Columbia leaders said during Tuesday's hearing. By concentrating most of the processing steps at Hanford, the Department of Energy would limit its exposure to criticism, they said.

But the building where most supporters want the processing done cannot be used for all steps, said Dave Nulton of the DOE Office of Fissile Materials Disposition.

The Fuels and Materials Examination Facility — only about three miles from the WPPSS plant — seems ideal to supporters for plutonium work.

It was designed and built to produce plutonium-uranium fuel but never was used.

It cost taxpayers \$350 million to build in the early '80s. It would cost about \$750 million today.

To use the facility could save as much as \$200 million over proposals for other sites, according to a DOE study.

But if all steps were consolidated at Hanford, additional buildings would be needed.

"The Hanford site has the best capability to limit risks in transportation."

— Charles Kilbury,
Pasco mayor

The reason: The Energy Department wants the fuel-making portion of the process licensed by the Nuclear Regulatory Commission, said Nulton.

That requires many documents that are open to the public.

But other portions of the process — such as grinding the bomb cores into powder — are classified, and the government doesn't want information about them to go public.

The Nuclear Regulatory Commission has said it will license only entire facilities — not a portion, while other sections are devoted to classified work, Nulton said.

While most of those testifying Tuesday enthusiastically supported plutonium work at Hanford, there were two voices of caution:

■ Dirk Dunning of the Oregon Department of Energy said his state was disappointed that a hearing wasn't scheduled in Portland. "This is an issue of great importance to us as over 1 million Oregonians live downriver from Hanford," he said.

The Oregon department will hold its own hearing and send a videotape of it to the federal Department of Energy.

■ Tim Takaro, a physician with the School of Public Health and Community Medicine at the University of Washington, said if plutonium work comes to Hanford, the site "must account for long-term, on-site storage."

The federal government has yet to make much progress on a final storage repository in Nevada, he said.

Any waste from the plutonium work — especially that ending up in ceramic or glass logs — will remain at Hanford for decades, Takaro said.

DOE draft report outlines clues operators missed

from the chemical solution had concentrated the remainder to dangerous levels.

A draft report of the Department of Energy's investigation into the explosion also suggests the tank's stainless steel and the rising outdoor temperatures of a warm spring week may have acted as extra catalysts to spark the explosion. Iron, nickel and chromium in the stainless steel perhaps

also was dissolved by nitric acid in the tank, creating a chemical reaction and heating the tank.

The draft report — which the Herald obtained Tuesday from outside DOE — lists several missed signals and unrecognized clues that had surfaced months and even years previously.

"It's clear we missed some opportunities

to prevent this from happening," said Lloyd Piper, DOE's acting Hanford manager.

A DOE investigation team is working on its final report on why the 400-gallon chemical tank exploded on the fourth floor of Hanford's Plutonium Finishing Plant complex. A summary of that final report is expected to be finished next week.

The team "is looking at documents that go

in between — trying to connect the dots, even if the dots don't connect. ... Maybe someone should have connected them before," Piper said.

There are three investigations into May's explosion:

■ The DOE probe into the cause, which is covered by the draft obtained by the Herald.

Basin/Northwest

Hanford firm's future tied to safety

By JOHN STANG

Herald staff writer

DE&S Hanford has ordered a subcontractor to study a recent series of accidents and devise a way to stop them by July 21.

At stake is whether Mowat Construction Co.'s contract with DE&S will be terminated.

Greg Hudson, director of DE&S's spent nuclear fuel project, declined to say if this is likely.

"We want to give them the opportunity to assess the situation and understand our concerns," Hudson said. He added that Mowat is taking the matter seriously.

The appropriate Mowat official could not be reached for comment Monday.

Until the review is complete, DE&S has ordered a halt to Mowat's mobile crane work. Of five Mowat accidents in the past two months, two involved cranes.

There have been four mobile crane accidents at Hanford in the past two months, which prompted Fluor Daniel Hanford to also order a shutdown of mobile crane operations. The Fluor safety review

was to last through Monday, with individual managers allowed to restart mobile crane operations beginning today as they see fit.

DE&S is in charge of moving spent nuclear fuel from the K Basins next to the Columbia River to central Hanford, where a "Canister Storage Building" is being constructed to hold the fuel.

DE&S is a subcontractor of Fluor, which manages Hanford for the Department of Energy.

DE&S hired Kirkland-based Mowat as the prime subcontractor to build the Canister Storage Building. Mowat's contracts on this project total about \$28 million, with a target of having the facility ready by May 31, 1998.

Until last May, Mowat posted a good safety record on this project, with about 50,000 hours worked without a lost-time accident, Hudson said.

But on May 6, a Mowat worker fell off a scaffold and cut his head. On May 7, a worker was pinned by a rolling metal beam held by a mobile crane. His pelvis was fractured.

And there have been two minor accidents since then — a worker dropped a pallet on his foot and a cement truck backed into a utility pole.

Then last Wednesday a Mowat mobile crane's

rigging touched a 13,800-volt power line, which briefly interrupted power to several 200 East Area facilities.

That incident prompted DE&S to order Mowat to review its safety actions, Hudson said.

"Construction is a dangerous business. People can never let their guard down. ... (The recent incidents) raise the question in our minds whether or not Mowat has let their guard down," he said.

The incidents also worry Fluor and DOE. "Two of those accidents could have been fatal. It is truly unacceptable to us," said Mike Yates, executive vice president of Fluor Daniel Hanford.

A DOE investigation into the metal beam accident cited several causes: inadequate safety inspections and analysis, inadequate training and the highly experienced injured worker showing poor judgment by putting himself into a dangerous position.

The same report also briefly addressed the May 6 accident in which a worker slipped off a scaffold 25 feet high and fell five feet to hang by a safety line. He cut his head and lost consciousness. The report concluded no prior action could have prevented the accident.

Hanford contractors give CBC \$12,000

A dozen Columbia Basin College students will benefit from a scholarship donation the Project Hanford Management Contractor team plans to make Thursday.

Officials will present a \$12,000 check at 2:30 p.m. at the CBC board room, 2600 North 20th Ave. in Pasco.

The PHMC, which operates the Hanford site for the U.S. Department of Energy, includes Fluor Daniel Hanford, Waste Management Services of Hanford, B&W Hanford Company, DE&S Hanford, Numatec Hanford Corp. and Lockheed Martin Hanford Corp.

PFP medical tests faulty after blast

By JOHN STANG

Herald staff writer

SPOKANE — Some of the initial medical checks were inadequate on the workers exposed to a chemical gas plume from a May 14 explosion at the Plutonium Finishing Plant, Hanford officials said Wednesday night.

Samples taken from the noses of eight to 10 exposed workers were not tested until about a month after the explosion to see if plutonium was present, said Mike Yates, executive vice president for Fluor Daniel Hanford, and Steve Moore, head of the state Department of Ecology's investigation into the explosion.

Also, there are doubts about how effective some of the other early medical tests were because of how they were conducted, said Paul Kruger, head of the Department of Energy's investigation into how Hanford responded to the explosion.

These acknowledgments came after several Hanford Advisory Board members voiced critical questions and remarks — often angrily — about how Hanford has checked the health of the exposed workers. The board met Wednesday night.

A DOE report on the medical aspects of the explosion will be made public soon as part of the investigation into how Hanford responded to the explosion.

Some tests for particles were not done the night of the explosion because the right material was not available for the swabbing, and the technician had to improvise with another material.

The error should have been caught in the next few days but was not spotted until mid-June, Yates said. Then the tests were done with no contaminants found.

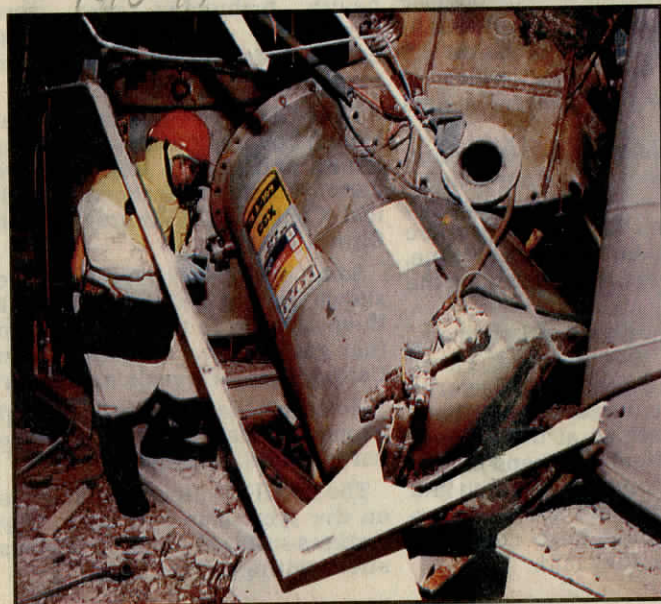


Photo courtesy of the Department of Energy
Hanford worker Reynaldo Bocanegra inspects Tank A-109, which exploded May 14. Bocanegra is a member of a Department of Energy team investigating the explosion.

Hanford faulted for blast

Report blames DOE, contractors for May 14 explosion

By JOHN STANG

Herald staff writer

The chemicals that caused May's Hanford explosion should have been removed from their tank long before, a Department of Energy investigation has concluded.

The investigation also found continuing management lapses in identifying the hazard of and the monitoring of the volatile chemicals.

And it determined there was, in fact, a small amount of highly radioactive plutonium that escaped from the Plutonium Finishing Plant after the explosion.

Hanford officials Wednesday unveiled the conclusions of an almost two-month investigation into why a 400-gallon tank containing 20 gallons of chemicals exploded May 14 at PFP.

■ AID: Officials say medical checks for workers weren't done right. Page A3.

The report spreads blame among DOE, former lead contractor Westinghouse Hanford Co., current lead contractor Fluor Daniel Hanford and B&W Hanford Co., which is Fluor's subcontractor for the PFP.

"The findings of this investigation

are troubling to me," said Lloyd Piper, DOE's acting Hanford manager.

DOE and the contractors will review the report to see if any disciplinary actions or penalties should be assessed, said Piper and Mike Yates, Fluor's executive vice president.

DOE also has not determined yet if it can pursue any sort of penalty against Westinghouse, which managed Hanford before Fluor and B&W took over Oct. 1, Piper said.

The final report on the explosion's cause is due out in a couple weeks, but it will mirror what was discussed Wednesday, Hanford officials said.

Conclusions of two other investiga-

tions also are expected to be unveiled this month. Those are:

■ A DOE investigation into why it took some three hours after the explosion to notify local emergency officials. But investigators offered some preliminary answers to why delays occurred.

■ A Washington Department of Ecology investigation into whether any state laws or regulations were violated, and whether any penalties should be assessed.

The explosion resulted from hydroxylamine nitrate and nitric acid being mixed in a water-diluted solution for a

Please see **BLAST**, Page A2 ►

Bill gives Hanford money for tanks

By KIM BRADFORD
and JOHN STANG

Herald staff writers

Hanford could get \$190 million to remove radioactive wastes from its underground tanks under a budget bill headed next week for the Senate floor.

The money would come from \$343 million set aside in the Senate Appropriations Committee's bill for all Department of Energy sites.

The committee approved an amendment offered Thursday by Sen. Patty Murray, D-Wash., increasing the pot from \$300 million. The money is intended to create a fund to ensure if firms enter a contract with DOE to treat and dispose of the wastes, they will be able to recoup costs expected to total hundreds of millions of dollars.

At Hanford, the money would be used to hire companies to build plants for converting Hanford's 55 million gallons of radioactive wastes into glass logs. Congress set aside \$170 million for Hanford during the current budget year.

DOE wanted \$1 billion set aside in fiscal 1998 for all of its privatization projects — with \$427 million for Hanford. It may have to fight for even the \$343 million in the Senate proposal.

DOE wanted \$1 billion set aside in fiscal 1998 for all of its privatization projects — with \$427 million for Hanford. It may have to fight for even the \$343 million in the Senate proposal.

This coalition would compete against a seven-corporation coalition led by Siemens Power Corp. and which includes the Washington Public Power Supply System and Battelle Memorial Institute.

A third consortium is led by Ontario Hydro.

The Department of Energy is looking at ways to dispose of nearly 50 metric tons of excess plutonium, and it is considering three methods. These are:

■ **CUTS:** Hanford 1999 budget could be sliced. Page A7.

■ **TRAINING:** Laid-off Hanford trainers start company. Page A7.

■ **LEAVING:** Fluor Daniel Northwest president to retire. Page A7.

A4

TRI-CITY HERALD

SATURDAY, JULY 12, 1997

Board urges U.S. to fund two Hanford plants

By JOHN STANG

Herald staff writer

SPOKANE — The Hanford Advisory Board is pushing the federal government to fully pay for two Hanford waste glassification plants through 2007.

The board adopted that stance Friday in Spokane to prepare for a Hanford-related brainstorming meeting July 29-30 in Salt Lake City.

At Salt Lake City, DOE officials from Richland and Washington, D.C., will meet with officials with the U.S. Environmental Protection Agency and Washington Department of Ecology to discuss Hanford, including budget needs.

Hanford board chairwoman Marilyn Reeves of Oregon and vice chairman George

Kyriazis of Kennewick also will attend.

That prompted the board to send Reeves and Kyriazis armed with written stances on upcoming budget issues, backed essentially by every Northwest constituency involved with Hanford.

Board members worry DOE and Congress won't provide enough money for fiscal 1998 and 1999 to keep Hanford's cleanup on track with the Tri-Party Agreement, the pact governing cleanup.

Those worries include whether Congress will set aside enough money each year to pay for converting wastes in Hanford's underground tanks into glass. DOE plans to hire two corporate teams to build two glassification plants and not pay them until they actually produce glass logs between 2002 and 2007. The eventual price could be at least \$4 billion.

The Hanford board concerns revolve around if Congress will set aside enough money for two plants, or just one. The board wants enough money to pay for two plants through 2007.

The board also wants to review the two corporate proposals after they are formally submitted in January and before DOE makes its decisions by May 1998.

The board also called for DOE to request and Congress to approve enough money to meet all Hanford's Tri-Party Agreement obligations in fiscal 1999. DOE calculates \$1.144 billion would be needed.

Every funding scenario currently being studied by DOE falls short of that amount.

The board's statement argues delaying cleanup projects will increase their eventual costs as the years pile up. Also Thursday and Friday in Spokane, the board learned:

■ Eight of the 10 Hanford workers still are actively employed, of those who were exposed to a gas plume from a May 14 Hanford explosion. One is on a medical leave, and another volunteered to be laid off when routine end-of-project reduction occurred, said Mike Yates, executive vice president for Fluor Daniel Hanford.

Board members voiced concerns the workers could face corporate retaliation for expressing concerns about their health. Yates said workers told managers the same concern. "We will tolerate no repercussions on these workers," Yates said.

■ A 130-foot-deep test bore hole at central Hanford's SX tank farm will be extended down to 210 feet to the ground water by September to better track the spread of radioactive cesium from leaking waste tanks.

Hanford confirmed cesium reaching down

to 130 feet, but has no handle on how far it has seeped beneath that on its way to the ground water.

This information is needed to chart how radioactive substances are oozing through the ground from Hanford's tanks.

And Hanford needs that to put together a plan by a 2004 deadline on how to permanently close its 149 single-shell tanks by 2018. The liquid waste currently are being removed, but solid, crusty wastes remain in the tanks.

Hanford is researching ways to remove those solid wastes for eventual glassification, with a strong possibility being sluicing the solids out with water.

Sluicing would cause contaminated water to leak into the ground from possibly 68 tanks.

Firms look at possible Hanford venture

By JOHN STANG

Herald staff writer

Four corporations with Hanford ties have formed a consortium to convert the nation's surplus weapons-grade plutonium into reactor fuel.

This bumps up to three the number of consortiums — including another with Tri-City ties — interested in this possible venture.

The new consortium announced Friday consists of British Nuclear Fuels Inc., Babcock & Wilcox, Bechtel National Inc. and Westinghouse Electric Co.

This coalition would compete against a seven-corporation coalition led by Siemens Power Corp. and which includes the Washington Public Power Supply System and Battelle Memorial Institute.

A third consortium is led by Ontario Hydro.

The Department of Energy is looking at ways to dispose of nearly 50 metric tons of excess plutonium, and it is considering three methods. These are:

High levels of radiation found under Hanford tanks

By The Associated Press

Radiation has been found 230 feet below a group of old nuclear waste storage tanks on the Hanford nuclear reservation and may be threatening ground water.

The radiation was discovered in May under the BX Tank Farms, where a dozen single-walled tanks were built to store uranium and plutonium wastes in the 1940s and 1950s. The radiation apparently comes from an old leak discovered in 1969 that has now traveled much deeper than previously thought.

"We are using new detection equipment to get a handle on the situation," said geophysicist John Brodeur.

Brodeur works with a team of U.S. Department of Energy drilling experts from Grand Junction, Colo. They also found cesium contamination below a tank in the 200 West area in 1995. Cesium has seeped at least 130 feet below the SX tank farm, and scientists are studying how much closer the radioactive substance may have gotten to ground water.

The latest radiation, which includes long-lived cesium and uranium, is from one of the old tanks, BX102. The 530,000-gallon tank was built in 1946, and it leaked an estimated 70,000 gallons of its uranium-laden contents. The leak wasn't detected until 1969, said Guy Schein, a U.S. Department of Energy spokesman.

The tank was pumped in the 1970s

to remove the rest of its dangerous liquids. It now contains mostly solid sludge.

Scientists have long known the leak spread a plume of radiation at least 300 feet to the northeast of the tank located in the 200-East area. But it wasn't previously known the leak went so far into the ground.

The contamination is "at least" 230 feet under the tank, where the test hole stopped, Brodeur said.

"Our guy in the field was logging the hole," Brodeur said. "He found his (radiation) detector was swamped all the way to the bottom, just above the ground water."

The radiation may have reached ground water at 255 feet, but additional work is necessary to verify that, Brodeur said.

"We have cesium to at least 140 feet. But the contamination levels are so high we don't know what all the elements are yet because they are swamping our detection equipment," Brodeur said.

The BX tanks in Hanford's 200 East area are about seven miles from the Columbia River.

The BX tanks contained uranium, which is far more mobile than cesium.

Hanford managers already are doing a ground water study in the BX tank farm, said David Shafer, manager of DOE's program to study the ground under the tanks.

"We are most concerned about the implications for ground water," he said.

FFTF privatization proposal put on hold indefinitely by DOE

By JOHN STANG

Herald staff writer

A proposal to privatize the Fast Flux Test Facility has been put on a back burner indefinitely.

The Department of Energy sent a July 9 letter to Advanced Nuclear & Medical Systems to tell it that the company's unsolicited proposal to privatize FFTF is "premature."

That means ANMS will wait until DOE decides some time in 1998 whether to permanently shut down the dormant FFTF or order additional studies for reviving the reactor.

After DOE makes up its mind, ANMS will then decide whether if it wants to resurrect the proposal, said Bill Stokes, the company's president.

"I don't think ANMS is out of the FFTF picture. We never received a warm reception from DOE. We will reevaluate our options," Stokes said.

The appropriate DOE officials in Washington, D.C., were unavailable late Monday afternoon to comment on the decision.

ANMS had sent an unsolicited proposal wanting to raise its own money to lease FFTF from the federal government, then contract out the actual operations — believing the economics of that proposal

"I don't think (Advanced Nuclear & Medical Systems) is out of the FFTF picture. We never received a warm reception from DOE. We will reevaluate our options."

— Bill Stokes, ANMS president

would eventually persuade DOE.

But Terry Lash, director of DOE's office of nuclear energy, wrote to ANMS that "it is premature" to consider the company's proposal until the DOE knows what it wants to do with FFTF, Stokes said.

FFTF currently is being studied to see if reviving it as a short-term tritium producer until a longer-term medical isotope mission is phased in, makes technical and economic sense. Tritium is a radioactive gas used to boost the explosive power of nuclear bombs.

If the initial analysis says yes, then DOE would order more thorough studies — including an environmental impact study.

If initial studies say no, FFTF would be shut down.

Stokes said ANMS would be interested in reviving its proposal only for a short-term tritium mission providing a bridge to a long-term isotope program.

ANMS does not want to be involved with a tritium-only mission or a traditional operating contract, Stokes said.

Even if ANMS never revives its FFTF proposal, the company plans to stay alive by tackling other medical isotope production projects, including proposals to create isotopes out of radioactive wastes, Stokes said.

ANMS leaders earlier asked federal officials in Washington, D.C., to meet to discuss the privatization concept with them. Gov. Gary Locke — without endorsing ANMS or any other company — had sent a letter in April to DOE supporting such a discussion.

No discussion ever took place, Stokes said.

Meanwhile, a joint office managed by Battelle-Northwest and Fluor Daniel Hanford is supervising the standby operations and studies at FFTF. B&W Hanford Co. is handling the actual operations.

Battelle earlier said it may consider trying to become one of FFTF's managers — alone or as part of a team — if DOE decide to revive the reactor.

7-16-97
**Hanford sirens to
blare Thursday, Friday**

Hanford's emergency sirens are to be tested between 8 a.m. and 6 p.m. Thursday and Friday between the Vernita Bridge and the old Hanford town site.

Newly installed sirens near the Fast Flux Test Facility also will be tested. Boaters on the Columbia River do not need to respond to the sirens, according to the Department of Energy.

7-18-97
**Business group to
discuss FFTF**

The Franklin County Democrats on Tuesday will hear from an association of businesses that wants to run the Fast Flux Test Facility.

Officials from Advanced Nuclear and Medical Systems will talk about the medical, defense and economic benefits of privatizing the FFTF. The association wants to produce tritium, a substance used to boost the power of nuclear weapons, and medical isotopes at the reactor.

The meeting is at 7 p.m. at the Franklin County PUD building, 1411 W. Clark St., Pasco.

7-17-97
**Senators want
another audit
of tank farms**

By JOHN STANG
Herald staff writer

Two United States senators have requested an audit on whether Hanford has done an inadequate job of studying radioactive wastes seeping beneath the site's tank farms.

Sens. John Glenn, D-Ohio, and Ron Wyden, D-Ore., called for the audit by the General Accounting Office, which is the investigative arm of Congress.

■ **IT'S YOUR
CALL:** Has the
Department of
Energy mis-
managed
monitoring of
ground water
at Hanford?
Page A3.

“Despite years of monitoring and hundreds of boreholes into the vadose zone and the ground water beneath this zone, DOE has a poor understanding of the extent of contamination in the vadose zone and whether the contamination is migrating,” Glenn and Wyden wrote last month to the GAO.

This will be the third GAO audit of the “vadose zone” program since 1989.

The vadose zone is the ground between central Hanford's 177 underground radioactive waste tanks and the ground water, which is at least 210 feet beneath the surface.

No deadline has been set for the audit's completion, said Jack Sparks, Glenn's press aide.

Sixty-eight of Hanford's waste tanks leak or are suspected of leaking radioactive substances. The wastes then seep toward the ground water, where they can flow toward the Columbia River.

The major questions are how much of which contaminants are seeping how fast.

Sparks said the audit request was prompted by recent findings that contamination may be spreading faster than predicted under the SX Tank Farm — as well as the general desire of Glenn and Wyden to see if the vadose program has improved since a 1992 GAO audit.

Glenn and Wyden want to know:
■ Has DOE improved its vadose zone monitoring, studies and equipment since 1992.

Please see **AUDIT**, Page A2▶

7-19-97
**Mid-Columbia
finds friends
in PILT battle**

By JOE HARWOOD
Herald staff writer

The four Mid-Columbia school districts fighting the state to keep millions of dollars they received from the Department of Energy gained two important allies this week.

Rep. Doc Hastings and DOE Chief Financial Officer Elizabeth Smedley sent letters to state officials politely insisting the districts be allowed to keep the more than \$5 million dedicated to mitigate Hanford's affect on schools.

The information will help decide

■ **IT'S YOUR
CALL:** Should
the state get to
keep PILT
money meant
for Mid-Colum-
bia schools?
Page A3.

whether the districts are allowed to keep the money or if they will have to turn it over to the state.

Under a settlement signed with Benton, Franklin and Grant counties last year, the department agreed to pay out about \$17 million to a variety of local government entities to compensate for lost property taxes when the government created Hanford.

Known as “payments in lieu of taxes,” or PILT, the money is an attempt to help out local governments that provide services and infrastructure near a federal reservation without having the benefit of taxing that federalized land.

The Richland, Prosser, North Franklin and Wahluke school districts were supposed to receive

Please see **PILT**, Page A2▶

7-23-97
**DOE finds
new firms
average in
pay levels**

By JOHN STANG
Herald staff writer

The pay and benefits packages of Hanford's six new “enterprise” companies roughly equal the averages of similar companies, a study concluded.

But the comparisons vary from company to company.

The Department of Energy hired a consulting firm, Watson Wyatt World Inc., to study pay and benefits after Hanford workers complained about the fairness of the compensation packages when the six enterprise companies were created last fall.

DOE received the study report last week. When Fluor Daniel Hanford and its major subcontractors took over Hanford's operations Oct. 1, 1997, they transferred about 2,200 Hanford workers “outside the fence” to six new enterprise companies.

These companies exist outside of the official Hanford work force, even though they do primarily Hanford work. The idea is that they eventually wean themselves from Hanford.

Many transferred workers found themselves with significantly different and often leaner benefits packages than they had before the change.

7-23-97
HAMTC to vote on Fluor contract

By JOHN STANG
Herald staff writer

Members of the Hanford Atomic Metals Trades Council are scheduled to vote Thursday on a proposed five-year contract with Fluor Daniel Hanford.

“In my opinion, it's a fairly good contract. The negotiating committee recommends that we approve the contract,” said Gary Muth, HAMTC president.

HAMTC represents 2,300 to 2,400 people in 15 locals. HAMTC's negoti-

ating team reached a tentative agreement several weeks ago with Fluor Daniel Hanford, which also covers Fluor's six major subcontractors.

The proposed contract calls for a 3½ percent pay raise in the first year. Pay raises are set for subsequent years, but information on those was unavailable Tuesday.

Muth said the medical coverage packages would remain roughly the same. However, the deductibles will be smaller or the same, depending on specific cases, he said. Workers still will be able to pick their own doctors, he said.

No major changes were made regarding overtime pay. But some changes were made in the grievance procedures.

HAMTC members have been working under the terms of an old contract with Westinghouse Hanford Co., which Fluor replaced last October. The Westinghouse contract would have expired in April.

HAMTC still is negotiating new contracts with Battelle-Northwest and Bechtel Hanford Inc. Muth expects tentative agreements to be reached in those talks in several weeks.

Public goes critical on DOE plan to burn plutonium

By DON McMANMAN

Herald staff writer

PORTLAND — A proposal to make plutonium unusable for weapons met loud objection here Tuesday night.

The reason: The program would be a vast corporate welfare scheme for a nuclear power industry that is on its last legs, many said.

However, the Department of Energy plan received almost universal praise on July 1 during a hearing that drew about 175 in Richland.

Small wonder. In the proposal, Tri-City officials see up to 700 new jobs in making plutonium fuel for reactors and 1,100 jobs with the continued operation of the commercial nuclear power plant north of Richland.

But the 50 Oregonians who attended Tuesday's hearing seemed unanimously against the portion of the plan that would have some of the nation's surplus plutonium burned in commercial nuclear reactors.

They preferred melting the plutonium with glass into logs and then

“I’m damn tired of providing welfare and continuing to subsidize the people in the Tri-City area.”

— Bill Bires, Portland

burying the waste in the Nevada desert.

Lloyd Marbet, a longtime foe of the now-defunct Trojan nuclear station near Rainier, Ore., said the plan to burn plutonium in reactors was “incestuous means to further the interests of the commercial nuclear industry.”

Marbet led three initiative drives that asked Oregonians to shut down Trojan through the ballot. He failed each time, but Trojan's owners eventually closed the plant because it faced costly repairs.

In June, the Oregon Legislature agreed surplus plutonium should be turned into glass logs, rather than into fuel for nuclear reactors.

By a near unanimous vote, both legislative houses asked the Clinton administration to honor the long tra-

dition of keeping the commercial nuclear industry and the nuclear weapons complex separate.

Chuck Johnson, a member of the activist Hanford Action group, said the Legislature had good reasons.

When commercial plants start burning Defense Department waste, they will become part of the U.S. national security system, Johnson said.

“We’ll come to the point we’ll have to run them (commercial plants) whether they’re economic or not,” Johnson said. Johnson believes commercial nuclear power plants are uneconomic and soon will sputter to a stop if left to their own devices, strangled by increasing costs and cheaper competition. Besides, the process of producing plutonium to burn in commercial reactors is far

too costly in itself, Johnson said.

Not only is it more expensive to burn plutonium, rather than glassifying it, the endeavor presents more danger to the public, Johnson said.

Several of those testifying Tuesday believed that, once hooked, the commercial nuclear industry couldn't wean itself from plutonium.

They also seemed to indicate there was a conspiracy hidden by silence between the U.S. Energy Department and the commercial nuclear industry.

“All the incentives will be in place to promote the continuation of a ... plutonium recycling program which can then embody such proposals as reliance on breeder reactors or plutonium separation from backlogged commercial nuclear wastes,” Mabton said. But at least one man who testified not only saw corporate welfare in the proposal, but also taxpayer support for a single region in the Northwest.

The Tri-Cities.

“I’m damn tired of providing welfare and continuing to subsidize the people in the Tri-City area,” said Bill Bires of Portland.

DOE has 2 plans for scrapping plutonium

By the Herald staff

PORTLAND — The federal government wants to make about 60 tons of plutonium unusable as part of a disarmament agreement with Russia.

The federal Department of Energy has come up a two-path proposal for dealing with the material which, at one time, was arguably the most valuable stuff on Earth.

■ Melt about 27 tons of scrap and nonmetallic plutonium into glass logs that will eventually be buried in a federal repository in Nevada.

The process, called vitrification, could occur at Hanford or at Savannah River.

■ Mix about 33 tons of bomb-grade

plutonium with traditional uranium reactor fuel and burn it in commercial power plants across the nation.

The Washington Public Power Supply System reactor 10 miles north of Richland is a leading site to test such fuel assemblies and to eventually burn part of the rest.

The mixed fuel would be cheaper for reactors than straight uranium fuel, because the federal government presumably would provide plutonium for free.

Cheaper fuel would allow the WPPSS reactor to lower its price of electricity and become more competitive in the market.

The Fast Flux Test Facility, a Hanford research reactor, also could burn mixed fuel.

Crane work stopped at Hanford 100K Area

Fluor Daniel Northwest on Wednesday suspended mobile crane work in the 100K Area to review how to prevent crane accidents.

The company expects to resume crane operations soon, said Fluor Daniel Northwest spokesman Jerry Holloway.

The suspension was prompted by a mobile crane rolling six inches Tuesday to hit the side of the 105KW Building. The parking brake had not been set.

There were no injuries, no radiation releases and no damage to the crane. The building's exterior suffered slight damage, which is being repaired.

It was Hanford's fifth mobile crane accident within the past three months.

And Fluor Daniel Northwest participated a few weeks ago in a short shutdown of all crane operations being supervised by Fluor Daniel Hanford. That shutdown's purpose was to review safety procedures after four mobile crane accidents in May and June at Hanford.

Fluor Daniel Northwest was not involved in any of the previous four accidents.

Budget falls short, advisers tell cleanup czar

By JOHN STANG

Herald staff writer

Hanford's proposed cleanup budget for fiscal 1999 falls short of what's needed, Hanford Advisory Board members told the Department of Energy's cleanup czar Thursday.

The board members repeated a stance the Hanford board already has taken and which is backed by budget calculations from DOE's Richland office.

“We are very concerned about the level of funding,” said board member Pam Brown, Richland's Hanford issues coordinator.

She spoke during a Thursday telev-

ideo conference linking DOE's Washington, D.C., headquarters with the public in Richland, Portland, Oakland, Calif., and Idaho Falls.

The conference's purpose was for Al Alm, DOE's assistant secretary for environmental management, to listen to public concerns about DOE's preliminary figures for a fiscal 1999 cleanup budget.

Thursday's conference discussed cleanup at Hanford, the Idaho National Engineering and Environmental Laboratory and the Lawrence Livermore Laboratory.

A handful of Hanford board members attended at Richland and Portland.

They voiced concerns the largest fiscal 1999 budget DOE has proposed for Hanford falls \$99 million short of what is needed to keep up with the Tri-Party Agreement, the legal pact that governs Hanford cleanup.

And the most likely budget scenario falls \$185 million short of DOE's legal cleanup obligations at Hanford.

So far, DOE's Washington, D.C., headquarters proposes a \$1.17 billion Hanford cleanup budget for 1999.

And the federal Office of Management and Budget, which can overrule DOE, is proposing a \$1.08 billion Hanford cleanup budget,

But DOE's Richland office believes Hanford needs \$1.26 billion in 1999 to meet its obligations.

These numbers will be crunched and rerunched until President Clinton submits his fiscal 1999 budget proposal to Congress in early 1998.

Brown is worried the probable budget cuts would take away money being set aside to pay for privatization of converting Hanford's radioactive wastes into glass.

And she is worried budget cuts could hurt DOE's ability to deliver wastes in the right forms at the right times at the right places for the privatized glassification plants, which are supposed to start up in 2002.

PFP blast to cost \$500,000 to repair

By JOHN STANG

Herald staff writer

It will probably cost about \$500,000 to clean up and repair the Hanford Plutonium Finishing Plant room where a chemical tank exploded in May.

The fix-it work probably will last through the end of October, Hanford officials said in a Wednesday briefing.

The \$500,000 price tag is a combination of repair costs and the work delayed elsewhere while people are diverted to the PFP's Plutonium Reclamation Facility's Room 40, said Fred Crawford, director of recovery operations for B&W Hanford Co.

B&W Hanford handles most of the work at the PFP for Fluor Daniel Hanford.

A 400-gallon tank containing about 20 gallons of chemicals exploded May 14, blowing off the tank's lid and tipping it over.

The room, which contains several other chemical tanks, was damaged. Holes were punched in the roof.

And a waterline was cut in the fourth-floor Room 40, with water flowing down to the first floor and out some doors to end up on concrete or in the ground several feet from the building.

Some repair work is done in the room, but much remains.

Asbestos, chemicals and debris still have to be removed. And the roof needs repairing. The chemicals remaining in the room include residue on two tanks and some bulk chemical. All are in safe condition, Crawford said.

Meanwhile, results of a Department of Energy investigation into the emergency responses and health aspects of the explosion are expected to be made public soon.

Hanford alert after PFP blast a concern

By JOHN STANG
Herald staff writer

If it weren't for persistent Mid-Columbia emergency agencies, Hanford officials might not have alerted anyone on the night a chemical tank exploded.

Tri-City officials worry the only reason Hanford told them May 14 about the Plutonium Finishing plant explosion was because they specifically asked for information from Hanford that night.

And they might be right, a Department of Energy investigator told local government officials Thursday.

Hanford and Mid-Columbia government and emergency officials met in Kennewick to discuss why it took three hours for local agencies to learn about the explosion. Even the media knew about the explosion before Tri-City police or fire agencies.

Local officials played excerpts from the Benton County emergency dispatch center's 911 tape to illustrate why they wonder if they would have been informed May 14.

Benton County's emergency dispatch center logged the first call from Hanford at 10:46 p.m. — almost three hours after a chemical tank exploded at the PFP.

A Hanford patrol officer told the dispatcher a Benton County sheriff's detective was needed at the 200 West Area.

"If he calls me, I can explain what's going on," the Hanford officer said on the 911 tape.

The dispatcher asked the Hanford Patrol what was happening.

■ **BUDGET:** DOE official hears pleas for more money. Page A7.

Contract OK, HAMTC council thinks

By the Herald staff

The Hanford Atomic Metals Trades Council believes a five-year contract with Fluor Daniel Hanford and its six major contractors was approved Thursday.

"We don't have any percentage rates. We won't have those until Monday," HAMTC President Gary Muth said at about 9:20 p.m. "We know it passed and that it's guaranteed, but we don't know the percentages."

HAMTC represents 2,300 to 2,400 people in 15 locals. About 1,500 people voted, Muth said. The polls were open from 8 a.m. to 8 p.m.

The proposed contract calls for a 3.5 percent pay raise in the first year and some changes in the grievance procedures.

HAMTC members have been working under the terms of an old contract with Westinghouse Hanford Co., which Fluor replaced last October. The Westinghouse contract would have expired in April 1998.

HAMTC still is negotiating new contracts with Battelle-Northwest and Bechtel Hanford Inc. Muth expects tentative agreements to be reached in those talks in several weeks.

Mistake after mistake piled up as Hanford reacted to a May 14 chemical tank explosion, the Department of Energy concluded in its accident report unveiled Friday.

Conflicting instructions. Poorly checked equipment. Exposed workers' medical concerns left unaddressed. Security gaps. Ignored procedures. Overall chaos.

All show up in DOE's preliminary conclusions, which were discussed in a briefing by DOE and Fluor Daniel Hanford, the contractor managing the federal site.

The final written report on how Hanford responded to the explosion and handled exposed workers is due in mid-August. Unless new information surfaces, it is expected to mirror Friday's briefing.

"The findings of this report are not good. If fact, they're downright ugly," said Lloyd Piper, DOE's acting Hanford manager.

Mike Yates, Fluor Daniel Hanford's executive vice president, agreed with the numerous deficiencies identified by the investigation — especially mistakes made in looking after 10 workers exposed to a chemical gas plume.

"We're not happy with this report. In fact, we're very angry about it, not because we question its facts and conclusions, but because we know they're as accurate as we can make them," he added.

"We offer our apologies to the workers who were not cared for properly," he said.

DOE has publicly shared its findings as they emerged during the past two months. New information unveiled Friday included:

- The most worrisome chemical gas plume emerged from holes punched in the Plutonium Finishing Plant's roof, not from a 200-foot-tall stack as originally thought. Ten workers were exposed to the gas. Their health still is being monitored.
- Several violations occurred of the safety-driven order for everyone to stay inside and to venture outdoors only with respirators. Many available respirators also were not properly certified or inspected. Eight months ago, an inspection incorrectly concluded the respirators were up to snuff.
- People arrived at the PFP complex after passing through four security checkpoints without learning they had to stay inside.

The explosion occurred on the fourth floor of a PFP building inside a 400-gallon tank holding about 20 gallons of leftover nonradioactive nitric acid and hydroxylamine nitrate.

The blast spawned three investigations.

By JOHN STANG
Herald staff writer

Hanford workers may face more layoffs

By the Herald staff

About 100 more Hanford workers are expected to get layoff notices by Sept. 30.

The layoffs will be scattered among the seven companies in the core Fluor Daniel Hanford team, said Fluor spokeswoman Penny Phelps.

Those 100 would join the at least 211 people laid off so far this year by Fluor Daniel.

The total of 300-plus layoffs will fall short of Fluor's worst-case estimate of 500 by Sept. 30.

However, Fluor still is doing budget calculations for fiscal 1998, which begins Oct. 1 — and has made no employment projections beyond then.

Currently, the seven companies in Fluor Daniel Hanford's core team employ about 5,600, including the 100 expected to receive 60-day warnings of their impending layoffs.

That total does not include other primary

Hanford contractors or the six "enterprise" companies spun off last year with Hanford employees.

Some volunteers are being sought for the layoffs.

These would be people who may already have lined up jobs elsewhere and would volunteer to be laid off to save someone else's job, Phelps said.

But this would be allowed only in certain job classifications.

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TRI-CITY HERALD

SATURDAY, JULY 26, 1997

House OKs bill trimming Hanford programs

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — The House on Friday approved a \$15.2 billion energy and water appropriations bill that trims funding for several key programs at Hanford, including tank waste privatization and a worker retraining economic development program.

The legislation, approved by a 418-7 vote, provides \$70 million for the Department of Energy's effort to turn over to private contractors the cleanup of radioactive waste stored in underground tanks at Hanford. The administration had requested \$300 million. Congress provided \$170 million for privatization during the current fiscal year.

Despite the cut, Rep. Joe McDade, R-Pa.,

chairman of the energy and water appropriations subcommittee, reassured Rep. "Doc" Hastings, R-Wash., that appropriators are committed to cleaning up the tank waste and are not necessarily opposed to privatization.

"We understand that in less than six months two private companies will submit their proposals to deal with the waste problem," McDade said. "The (appropriations) committee is not prejudging this process, and we look forward to reviewing the proposals when they are presented to Congress in 1998."

"We believe the committee has provided adequate funding to ensure the bid process is fully supported..." The Senate earlier approved its version of the energy and water appropriations bill, which includes up to

\$190 million for Hanford privatization. Sen. Patty Murray, D-Wash., had offered an amendment increasing the Senate level.

The bills now move to a conference committee, where senators and representatives will try to resolve differences between them.

The House bill also provides \$56 million for the so-called 3161 program, which supports worker retraining and economic development programs at DOE sites and communities where defense production has been phased out.

The administration had sought \$70.5 million for the 3161 program and the House defense authorization bill provided for \$66 million — the current spending level.

Overall, the House bill contains almost \$5.2 billion for environmental management and

cleanup at DOE sites, up slightly from current levels.

Funding for other Hanford projects and programs:

to offer an amendment that would have terminated funding for FFTF and forced its permanent closure, but decided not to at the last minute.

Hastings, along with other members of the Washington congressional delegation, had been lobbying their colleagues over the past several days to oppose a Furse amendment on FFTF.

The state's lawmakers wrote two letters pointing out the experimental reactor could be used to produce tritium, a radioactive gas used to boost the power of nuclear weapons.

They also quoted doctors and researchers at the Fred Hutchinson Cancer Treatment Center in Seattle as saying FFTF could be a valuable source of medical isotopes used to combat cancer and other diseases.

Software hits the road

Hanford program being sold to industry

By Melissa O'Neil

Herald staff writer

Computer software that lets the Department of Energy track transportation costs may soon help cut shipping charges for everything from sweet corn to sofas.

The government is going commercial with its 5-year-old computer program. And royalties from software sales will go back to DOE's technology transfer efforts — a bit of a return on the \$7 million investment taxpayers made in the software.

The Automated Transportation Management System was designed to better oversee freight shipment costs, starting at DOE's Hanford and Oak Ridge, Tenn., sites. DOE now uses it at 14 of its major cleanup sites and national laboratories.

The program tracks cost and schedule options for land or air shipments, inbound or outbound, of anything from paper towels to hazardous chemicals.

"Freight usually is a hidden cost," software project manager Rand Weidert said this week during an interview at Science Applications International Corp.'s north Richland office. "Shipping and handling can sink a company."

Weidert coordinates the effort to market the software with David Greenslade, the intellectual property administrator in Fluor Daniel Hanford's Office of Economic Transition.

Without a computer to crunch all the variables, finding the cheapest shipping alternative can be daunting, Greenslade said.

"In the past, with the Department of Transportation's regulations and DOE's regulations, there were mountains of paperwork," he said. "There were forms to be filled out to meet the regulations, to determine our best freight carriers, what rates are the best and so forth."



DynCorp's Mike Beavers, stores delivery supervisor, left, and storekeeper Bill Antler write information about a spent nuclear fuel stainless steel cask. The information will be used by the Automated Transportation Management System, a computer software program developed for the Department of Energy and now being offered to private industry. The DynCorp employees work at Hanford's Central Stores and Warehouse on Stevens Drive in Richland.

Herald/Bob Brawdy

Deadline set for ruling on future of PILT funds

By the Herald staff

OLYMPIA — A decision will come by the end of the month on whether the state will distribute money earmarked for Mid-Columbia school districts to districts throughout the state, the Superintendent of Public Instruction office promises.

The money is part of a multimillion-dollar settlement with the federal Department of Energy to repay Mid-Columbia taxing agencies for property taxes lost when the government seized lands to build Hanford.

Mike Bigelow, executive director for SPI's budget and school business services, said the office is considering the argument from four Mid-Columbia school districts on how the "payment in lieu of taxes," or PILT, money is distributed.

Area school officials argue the more than \$5 million in PILT money involved should be distributed between Prosser, Richland, North Franklin and Wahluke school districts.

DOE supported that argument, saying it intended the money to go to Mid-Columbia agencies that had lost taxes.

The money is part of a \$17 million settlement between DOE and Benton, Franklin and Grant counties. The PILT money is to go to compensate a variety of local government entities for lost property taxes.

State education officials in Olympia, however, said the \$5.4 million earmarked for local schools could be dispersed to districts throughout Washington under state equalization rules.

"We've got to make sure all schools are treated equally," Bigelow said.

DeWayne Gower, former interim superintendent of the Richland School District, said the Mid-Columbia school districts still are working to win the battle over the PILT money.

"We remain optimistic," he said after meeting with Bigelow on Friday. "It was just another in a series of meetings. We felt good about it."

Murray letter targets Hanford management

By JOHN STANG

Herald staff writer

U.S. Sen. Patty Murray wants the Department of Energy to take a hard look at how Hanford's new management system is working.

"I believe it is time to undertake a comprehensive review of the Project Hanford Management Contract so we can ensure the contract is a success," Murray wrote July 25 to Energy Secretary Federico Pena.

The Project Hanford Management Contract refers to the 5-year, seven-company, performance-based contract supervised by Fluor Daniel Hanford.

Murray's staff said her request is prompted by several concerns and events that have surfaced in the

past several months, including the May explosion at the Plutonium Finishing Plant.

No timetable was requested in her letter, but her staff said the senator wants the review soon.

Hank Hatch, Fluor Daniel Hanford's president, said: "I see this as an understandable example of appropriate Congressional oversight. ... We welcome a review of this sort. I think it's fine."

In her letter, Murray, D-Wash., praised the completion of several projects ahead of schedule and under budget, citing cleanup of the Plutonium Uranium Extraction plant, progress on the spent nuclear fuel and other projects.

"However, these great successes become overshadowed when an

Please see HANFORD, Page A2 ▶

Reports starting to clear questions of contamination

By JOHN STANG

Herald staff writer

Subterranean Hanford is crisscrossed with dozens of layers of water, radioactive substances and hazardous chemicals.

These wastes are only partly charted and partly understood, though the mixture of radioactive and hazardous chemicals has leaked and seeped from hundreds of sources for decades.

But now, a series of reports are emerging that give a better view of the substances oozing toward the ground water under Hanford's tank farms, which contain a mixture of highly radioactive wastes and hazardous chemicals left over from years of producing plutonium.

And indications are the wastes

are trickling through the soil faster than predicted.

That means the wastes will contaminate Hanford's ground water — if they haven't already — and reach the Columbia River faster than earlier predicted.

However, no one has a solid enough grasp on how the contaminants are traveling to say how severe a contamination problem they will cause.

So far, three reports on the problem have been released, and a fourth is due soon.

The studies are important not only because they provide clues to potential health risks, but also because they will point the way for cleanup of the wastes from Hanford's leaking single-shell tanks.

The reports will dictate how the tanks are cleaned up without further spreading their contaminants, how fast the work must be done

Please see CLEAR, Page A2 ▶

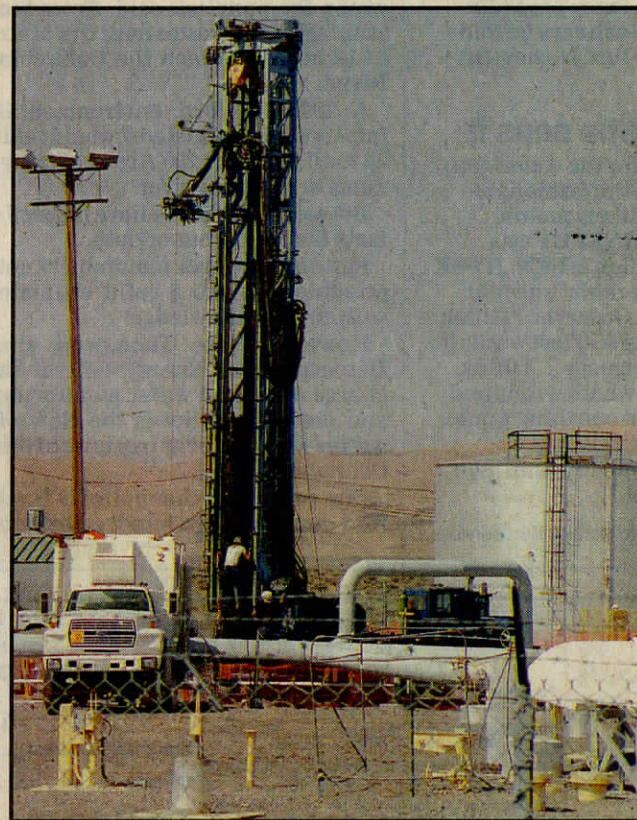


Photo courtesy Lockheed Martin Hanford Co.

Work is being done on a sampling bore hole in December at Hanford's SX Tank Farm. The SX Farm is one of central Hanford's 12 single-shell tank clusters, which have 67 leaking tanks among them.

Health risks still unknown

By JOHN STANG

Herald staff writer

Hanford is saturated with plumes of seeping radioactive contaminants that will reach the Columbia River if nothing is done.

It's not an isolated problem: Ground water under about a third of the 560-square-mile federal reservation is contaminated.

So what's the risk to human health?

Until Hanford officials figure out how the underground vadose zone works, no one can make a valid guess on health risks, said two members of an independent expert panel that is critical of Hanford's vadose zone studies.

"We know almost nothing about the vadose zone in that area. We can't make predictions on what is going to the river until we know what is in that area," said panelist Ralph Patt, a hydrogeologist with the Oregon Department of Energy.

"The question is how big of a cancer risk is being presented to individuals. ... There's a lot of work to be done before one can make forecasts on the health impacts," said panelist John Matuszek, an independent hydrogeological consultant from New York.

Please see HEALTH, Page A2 ▶

New book follows new Hanford path

By JOHN STANG

Herald staff writer

A new chapter has been written in Hanford's history — literally.

The second edition of Michele Gerber's book *On The Home Front* is due to hit book stores in mid-August.

The first edition hit the streets in 1992 and charted Hanford's history from its beginning in 1943 to 1990, when the reservation was switching from a plutonium production mission to cleanup.

The second edition adds about 25 pages and six more years, stretching the history to October 1996, when Fluor Daniel Hanford took over operation of the site.

The publisher, the University of Nebraska Press, asked Gerber early last year for the update.

Gerber, a historian who works in Fluor Daniel Hanford's communications department, did the research and writing on her own time.

Her book tells the story of Hanford's key and controversial role in the birth of the Atomic Age and its consequences.

"I don't think you can make judgments about Hanford until you understand it," Gerber said.

The atmosphere at Hanford has changed drastically between the first and second edition of the book.

When Gerber researched the first edition, declassification of much Hanford material had just begun.

Photos routinely shown today of Hanford's plants and tanks still were viewed by some officials back then as security breaches, even though they had just been declassified, Gerber remembered.

Now in the 1990s, spent nuclear fuel and plutonium storage and disposal issues openly are discussed, she noted.

The changes really hit Gerber when she guided her first group of Russian officials and scientists in 1994 on a tour of the Plutonium Finishing Plant — a place that once operated under strict secrecy.

"They were remarkably well informed," she remembered of their detailed questions.

Gerber views the history book as a way for people to learn from the often secret decisions made in the Cold War — whether they agree with them or not.

Leaking waste tanks contaminating ground water

By the Herald staff

Hanford's 200 Area contains 18 "tank farms" holding 55 million gallons of radioactive wastes.

Each farm is a cluster of two to 19 huge tanks filled with liquids and sludgelike or solid radioactive wastes.

Twelve farms hold 12 million gallons in 149 old single-shell tanks, of which 67 leak. Ecology Department officials believe two more tanks also leak, a question DOE plans to study in fiscal 1998.

Six more tank farms contain 28 newer, safer double-shell tanks with the remainder of the wastes. None of these is known to leak.

Hanford officials plan to move all single-shell tank wastes into the double-shell tanks. Eventually, all of the waste would be converted into glass.

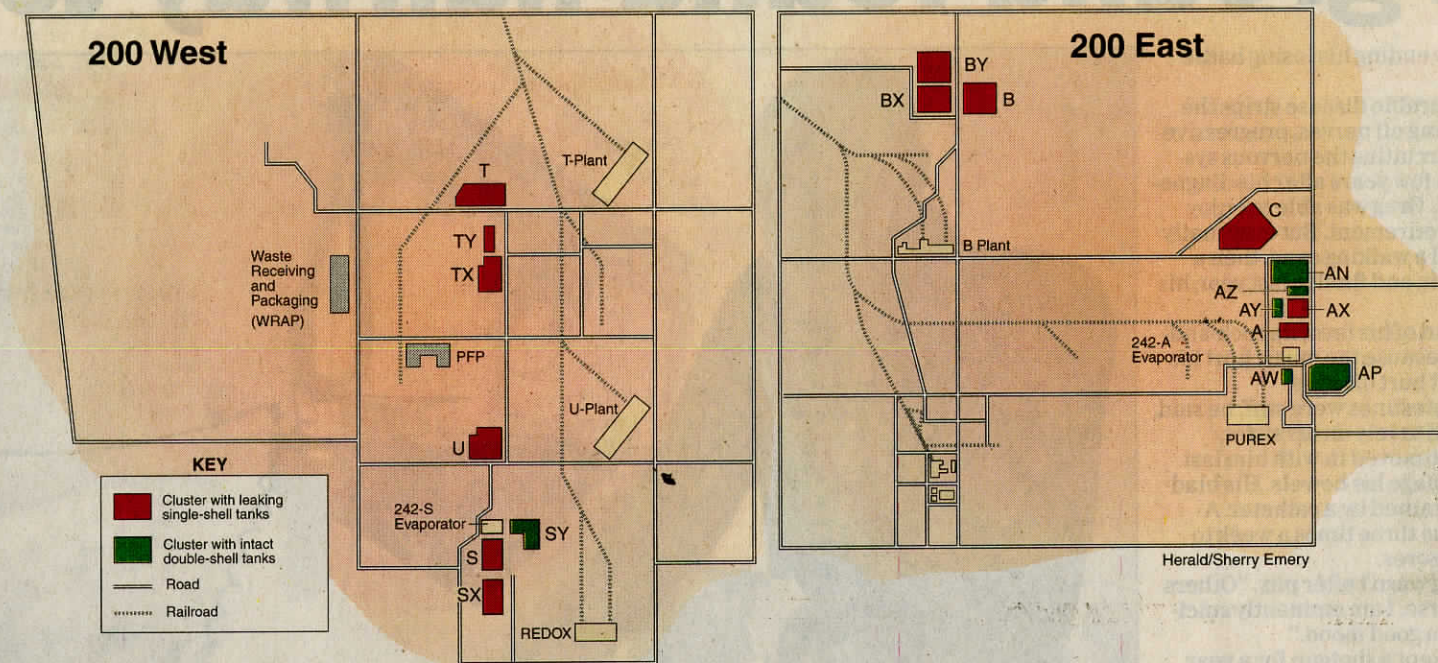
But the 200 Area also contains 45 waste trenches and 100 "cribs," which are essentially open pits where wastes were dumped.

About 121 million gallons of wastes were dumped into these cribs and trenches between 1946 and 1966, though the total radioactivity was a fraction of that found in the tank wastes.

This waste also is seeping down and mingling with wastes that have leaked from the tanks.

And even more radioactive and hazardous wastes are sinking from other cribs, trenches and spills outside the 200 Area.

So far, hydrogeologists have confirmed radioactive technetium and tritium and non-radioactive chromates and nitrates from the



tanks have reached the ground water.

Researchers also know radioactive uranium, strontium, cesium, plutonium and other substances from the tanks are somewhere in the vadose zone, heading toward ground water.

A big problem is most of the monitoring bore holes — where sensors to detect radioactive substances can be inserted — stop far short of reaching ground water.

This means there are few clues to what is happening in the bottom third of the vadose zone.

"We don't know what's in the vadose zone underneath what we've drilled," admits Ralph Patt, a hydrogeologist with the Oregon Department of Energy and a member of the expert panel.

So far, studies have been released on the SX Farm in the 200 West Area, and the BY

Farm and AX Farm in the 200 East Area.

A report on the U Farm in the 200 West Area is expected to be released soon, and analytical work is under way on 200 East's BX Farm. Sampling has begun on 200 West's T Farm, which includes Tank T-106 that leaked at least 115,000 gallons in the 1960s.

Ecology Department and DOE officials expect the biggest spreads of contaminants will be found under the SX, BX and T Farms.

Response to leaks concerns state

By the Herald staff

State officials believe the Department of Energy has been slow to recognize and act on evidence that contaminants are spreading underneath Hanford's waste tanks faster than predicted.

And the Washington Department of Ecology also worries how Hanford can successfully tackle studies of the underground vadose zone with what the state maintains is an underfunded tank waste program.

In the 1997 fiscal year that ends Sept. 30, the Department of Energy expects to spend about \$4 million on the vadose zone program.

DOE also estimates it needs \$4 million each in fiscal 1998 and fiscal 1999 to meet minimum vadose study requirements.

However, an independent panel of experts has recommended additional bore holes, sampling and improved analyses be done to determine the extent of underground contamination at Hanford from hazardous and radioactive wastes.

To meet that recommendation, DOE calculates it would need \$8.3 million each in 1998 and 1999. And a "Cadillac" vadose zone program would cost \$12.3 million both years, said Jackson Kinzer, head of DOE's tank program.

DOE is considering all three scenarios as it tackles budget debates for 1998 and 1999.

But Suzanne Dahl, the Ecology Department's tank program manager, said DOE's overall tank program already falls short of the basic tank farm

cleanup needs in fiscal 1998, which begins Oct. 1.

Congress is looking at a \$312 million tank program budget for 1998 — which is \$70 million short of what DOE says it needs to meet the minimum cleanup obligations.

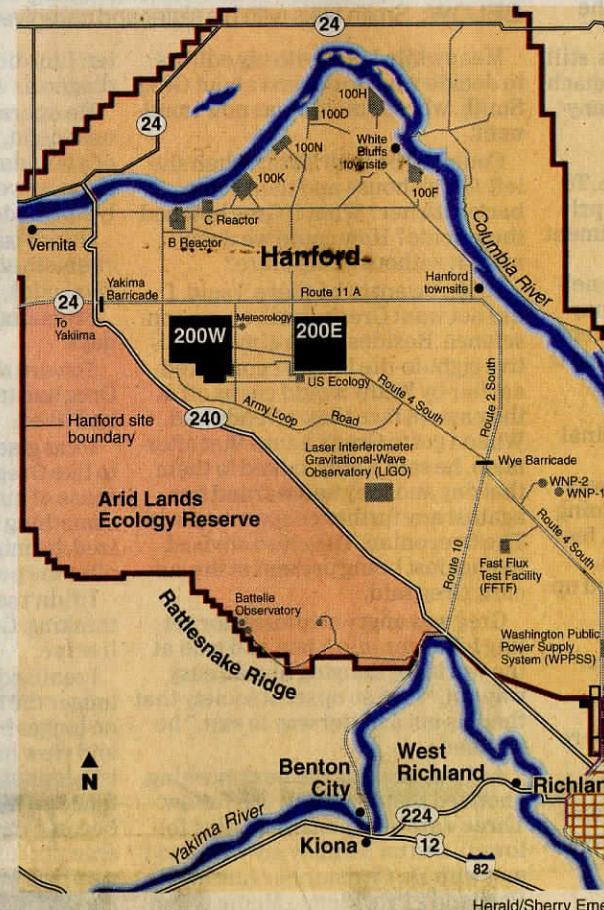
And when DOE gets 1998 money, vadose zone studies will have to compete with other tank programs for those funds.

The state also believes DOE has been slow in recognizing the extent tank contaminants are reaching ground water. Ecology officials contend that is partly because of older scientific techniques that didn't identify the problem earlier — but also DOE wanting to minimize another costly burgeoning cleanup problem.

Mike Thompson, the DOE official in charge of ground water cleanup and monitoring, admits DOE was reluctant in the early 1980s to concede the tank contaminants had reached the ground water. But he said the department told the state in 1993 that there was evidence contaminants from one tank farm might have reached ground water.

However, Dahl contended Ecology later had to nudge DOE to follow through on determining if more tank contaminants had reached the ground water from elsewhere in the 200 Area.

Thompson contended DOE has no reason to minimize the vadose zone and ground water contamination because it has to make a case to Congress to get funding for Hanford. But he said the agency also has to be careful not to overstate a problem and lose credibility with Congress.



Contamination studies becoming more organized

By the Herald staff

No subterranean chunk of Hanford is an island.

Yet, until recently that was how Hanford researchers approached the study of how contaminants flow underground.

Hanford has hundreds of tanks, cribs, trenches, wells and dumps that have leaked wastes into the ground.

But often scientists charting underground contaminants studied only their own piece of Hanford without considering how substances from other waste sources might have mingled with and affected the subterranean flow of wastes toward the Columbia River.

For example, leaking contaminants from the 200 Area's tanks were studied by the Tank Waste Remediation System program. But leaking contaminants from nearby cribs and trenches in the 200 Area were studied by the Environmental Restoration program.

For years, study results were rarely crunched together to produce a better picture of the vadose zone.

That lack of coordination was criticized by the Defense Nuclear Facilities Safety Board and Washington's Department of Ecology.

The Department of Energy recognized the flaw and now is making sure individual underground contamination studies across Hanford also look at the bigger picture, said Mike Thompson, the DOE official in charge of ground water cleanup and monitoring.

Hanford whistleblowers file complaint with Labor

By ANNETTE CARY

Herald staff writer

Seven former Hanford pipefitters filed a whistleblower discrimination complaint Monday with the Department of Labor.

They allege they lost their jobs June 6 with Fluor Daniel Northwest after they complained about safety and health violations at Hanford.

The seven pipefitters, each with seven to 22 years of experience, were helping install a pipe system to transfer radioactive wastes from the

200 West Area to safer tanks in the 200 East Area.

Their concerns listed in the complaint include:

- Being told to install allegedly underrated valves in pipes that were to be used to carry high-level nuclear waste liquids from the tanks. The valves were not rated to handle the pressure that could be used in test procedures, which could cause them to break and injure nearby workers, the pipefitters said. A break also could have broken a protective wall and sent water into nearby tanks holding high-level

nuclear waste, they said.

- Working in an area where another crew allegedly was performing X-ray testing of materials without posting signs to warn of radiation or marking off a boundary of the area as required.

- Working in an enclosed area that allegedly included improperly sealed bottles of the gas argon. A leak could have led to blackouts and suffocation, they said.

- Being unable to easily reach safety officials during dangerous situations because they allegedly had

turned off their cellular telephones during the day.

Complaints were made in March and April, and the valve problem coming up in late May.

After the workers refused to install the underrated valves, management allowed them to install a valve with a higher pressure rating, they said in their complaint.

The next day, some of the pipefitters were notified they would be laid off. A few days later, all seven were laid off.

According to their complaint filed

with the Department of Labor, five or six other pipefitters have been assigned to do the work of the laid-off men.

Fluor Daniel Northwest, an enterprise company that has taken over much of the work of ICF Kaiser Hanford Co., declined to discuss the case while it is under investigation.

But Spokesman Jerry Holloway said, "Fluor Daniel does take safety matters seriously and does work hard to maintain an environment in which safety issues can be raised and resolved."

The complaint was filed by the Government Accountability Project, a nonprofit organization that represents whistleblowers. The former workers are asking for their jobs to be reinstated, back pay and an end to a hostile working environment.

The Labor Department has 30 days to investigate and issue an initial ruling.

The pipefitters listed in the complaint are Terry Holbrook, Clyde Killen, Pete Nicacio, Shane O'Leary, Dan Phillips, James D. Stull and Randall J. Walli, who was the foreman.

Pena addresses PFP explosion

By ANNETTE CARY

Herald staff writer

Secretary of Energy Federico Pena sent a sharply worded memo to managers of Department of Energy sites Monday telling them to take steps to prevent any more accidents like the May 14 explosion at Hanford.

He is requiring managers to report progress to him in four months.

"This explosion was a serious event and a warning of the potential for more serious accidents," he wrote. "If personnel were in the room when it occurred, there could have been fatalities. If the explosion had been more forceful, it could have released much more nuclear material."

On May 14, 20 gallons of hydroxylamine nitrate and nitric acid stored in a 400-gallon tank exploded at Hanford's unused Plutonium Reclamation Facility. As water had evaporated from the mixture since 1994, the chemicals had been concentrated to dangerous levels.

The explosion blew two holes in the roof of the building and broke a water line, washing trace amounts of plutonium out of the building.

"The fact that the event occurred in an inactive facility only further emphasizes that hazards still exist as we move from production to deactivation and decommissioning," Pena wrote.

The explosion raises concerns whether DOE and its contractors are "maintaining the level of vigilance, knowledge and inquisitiveness" needed, he said.

Engineers who had been monitoring the tank that exploded had decided in 1996 that too little of the mixture remained for the chemi-

cals to be dangerous after some of the mixture was drained off. They apparently had not realized the risks of the chemicals to start with, DOE officials said.

The explosion calls into question the adequacy of safety systems, Pena said.

He is requiring site managers to implement four initiatives and report progress at year's end.

"We have already undertaken a number of activities that will significantly improve the safety of our employees and neighbors," said Lloyd Piper, acting manager of DOE's Richland office. "We are aggressively and methodically reviewing our procedures and practices."

Pena's requirements include:

- DOE site contractors must scrutinize the storage or use of chemicals that may be dangerous. Unneeded chemicals that could cause an explosion, fire or poisonous release should be discarded.

- DOE sites must reassess possible chemical and radiological dangers at facilities that are no longer being used.

At Hanford, workers have conducted a chemical inventory of 21 chemical storage tanks at the Plutonium Finishing Plant, which includes the building where the explosion occurred.

- DOE managers must better use programs that share information about safety problems between sites.

Somewhat similar incidents had occurred at Savannah River in December and at Hanford in 1989.

Pena's memo did not address emergency response to the explosion, but mentioned "results to date reveal deficiencies and lessons that may be applicable at other sites."

Port-a-potty truck zaps Hanford power

A truck picking up portable toilets Tuesday at Hanford's 200 West Area hit a power line, causing an outage.

At 11:05 a.m., the truck snagged a support wire to a power pole, pulling it down and cutting an electrical line that supplied power to about 40 percent of the area, said John Britton, a Fluor Daniel Hanford spokesman.

Emergency power systems kept critical equipment, such as ventilation systems for waste tanks, operating.

The Hanford utility and fire departments responded. Much of the power was restored quickly, with work to restore the rest continuing until late afternoon. The truck belonged to Able Tank and Toilet of Pasco.

Hanford waste tanks safe in power loss

By DON McMANMAN

Herald staff writer

Hanford waste tanks remained in a safe condition when a power failure stopped ventilation in them Tuesday, officials said.

And nearby radioactivity monitoring equipment continued to operate because it is battery-powered, Jim Wicks, director of tank farm operations for Lockheed Martin Hanford Co., said Wednesday.

No workers were exposed to radiation, he said. "The real hazard was the heat," he said of midday temperatures that reached about 100 degrees at Hanford.

Electricity failed at the SY Tank Farm when a truck picking up portable toilets snagged a support wire and dragged down a power pole at 11:05 a.m.

From that moment, workers had two hours to get air blowing through the tanks again to comply with Hanford safety rules. If the work took longer, engineers would have been required to come up with a specific, written plan to restart the system, Wicks said.

Ventilation was working after one hour and 45 minutes, Wicks said. Workers brought in a "portable exhaust" to move the air. It ran off a large extension line stretched to a nearby tank farm that had electricity.

The tank ventilation system captures outside air, filters it, pushes it into the upper portions of the tank, recaptures it and filters it again before venting to the atmosphere.

The system keeps concentrations of potentially explosive hydrogen gas low, Wicks said.

Just before the power failure, the hydrogen concentration inside the tanks was 23 parts per million. After power was restored, the hydrogen concentration remained at 23 ppm.

Hydrogen becomes explosive when it reaches 40,000 ppm, Wicks said. Hydrogen has been a problem in Hanford tanks, especially in 101-SY. That tank captured hydrogen under a thick crust and occasionally burped it in relatively high concentrations.

Hanford officials solved the burping problem four years ago by installing a mixing pump in the tank. It kept the tank's contents stirred up, so hydrogen emerged at a continuous rate at low concentrations.

The mixing pump at 101-SY runs only three times a week, for 10 minutes each time. It was not operating when the lights went out Tuesday, nor was it required to operate, Wicks said.

Workers completed repairs by about 8:30 p.m. Tuesday. Sections of the system were electrified individually. Work lasted past nightfall.

Hanford pipe leaks at plutonium plant

A water pipe leaked for almost three hours Thursday night at Hanford's defunct plutonium processing plant, sending 1,000 gallons of water washing through the building and contaminating the hands of one worker.

At 5 p.m., a worker noticed water leaking from a pipe in a second-floor room at the Plutonium Finishing Plant in the 200 West Area, said Penny Phelps, a spokeswoman for Fluor Daniel Hanford.

The worker apparently tried to shut off the water but wasn't able to, Phelps said. Radioactive contamination on his hands was scrubbed off and he was fine, Phelps said.

After Hanford firefighters arrived, the water apparently shorted some wiring, setting off the fire alarm. That forced the firefighters to leave the building. By 7:45 p.m. workers determined the source of the alarm and reentered the building to turn off the water.

Fluor subpoenaed in fund-raising probe

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — A U.S. Senate committee may investigate whether Fluor Daniel gave \$100,000 to the Democratic National Committee to influence the selection of a new Hanford contractor.

Fluor Daniel, the parent company of the firm that holds a \$5 billion contract at Hanford, along with its former lobbyist who went on to head President Clinton's re-election campaign, have been subpoenaed

by the Senate committee investigating campaign finance abuses.

A spokesman for the Senate Government Affairs Committee refused to discuss details of the subpoenas or whether they involved the awarding of the prime management contract at Hanford.

But Fluor Daniel contributed \$100,000 in so-called soft money to the Democratic National Committee just weeks before the Hanford contract was awarded late last summer, according to Federal Election Commission records.

The contribution came as Peter Knight, a

■ CLEANUP:
DOE speeds
waste cleanup
at Rocky Flats.
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lobbyist whose clients included the Fluor Corp., prepared to take a leave of absence from his law firm and run the Clinton campaign.

The subpoenas for Fluor and Knight were among 39 issued by the committee late Wednesday as it shifted its attention from foreign campaign contributions to the domestic side.

The panel is studying whether large contributors to the Democratic Party received increased access to the Clinton administra-

tion or preferential treatment in the awarding of government contracts in exchange for their donations.

The information gathered through the subpoenas could become the basis for additional committee hearings in September when the Senate returns after its August recess. Knight and Fluor were required to produce documents by the middle of August, though the deadline could shift.

Paul Clark, a spokesman for the committee, said the subpoenas were issued because the committee wants to determine whether the contributions had any "rela-

tionship to access and whether any policy or contract may have resulted from a contribution."

Asked Thursday whether the Hanford contract was at the center of the committee's interest in Fluor and Knight, Clark said, "I can't say at this point. We are not going to get specific."

Fluor and Knight declined comment.

"We have just received it, and our lawyers are reviewing it," said Lee Tashjian, Fluor

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DOE projects \$318 million Hanford cut

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — Hanford's budget could drop by \$318 million over the next two years, but officials are hoping that trimming fat will keep cleanup work on schedule.

The projected deficits for fiscal years 1998 and 1999 were included in a report the Department of Energy issued Friday.

Despite the anticipated budget cuts, reg-

ulators said they were optimistic "efficiencies" could be found to ensure deadlines are met in the Tri-Party Agreement, which governs cleanup schedules.

"I'm cautious, I'm concerned, but I'm not going to declare war over a train wreck that hasn't happened," said Randy Smith, director of the environmental cleanup office in the Seattle regional office of the Environmental Protection Agency.

Dan Silver, deputy director of the Washington state Department of Ecology, said no one at the Energy Department is

suggesting an overhaul of the agreement.

"They (DOE) are clearly oriented toward staying in compliance," Silver said. "There was no talk, *nada*, of renegotiating."

The new report stated the cleanup budget for fiscal 1998, which starts Oct. 1, will fall \$98 million short of current forecasts of the cost to comply with the agreement. And in fiscal 1999, the gap at Hanford could reach \$150 million if DOE's overall cleanup budget is \$6 billion, and as much as \$220 million if the national cleanup budget is set at \$5.5 billion.

DOE hopes to cut cleanup costs at Hanford by \$75 million in fiscal 1998 and \$160 million in fiscal 1999, the report stated.

Overall, Hanford currently gets a little more than \$1 billion yearly for cleanup.

The numbers are based on a meeting last month in Salt Lake City to discuss cleanup spending with regulators, tribes, contractors and members of the Hanford Advisory Board. No specific details were outlined for how Hanford would trim costs.

"These efficiencies cover infrastructure, waste management, indirect costs, tank

wastes, facilities stabilization, environmental restoration and other areas," the report stated.

"If all these efforts at efficiencies do not accomplish the objectives of meeting Tri-Party Agreement compliance, then additional budget monies will be pursued."

Al Alm, DOE assistant secretary for environmental management, said cost savings already have been made at Hanford.

I blamed in latest PFP mishap

By MARINA PARR
Herald staff writer

Nitric acid that ate through a water pipe is to blame for Thursday's mishap at Hanford in which hundreds of gallons of water spilled onto floors at a defunct plutonium processing plant, Hanford officials said Friday.

■ REPORT:
Hanford
'Smurf' building
deemed safe.
Page A3.

water in the was not tive, but it ave washed concrete at contained um particles embedded during s of nuclear materials produc- he Plutonium Finishing Plant. concerns Hanford officials, who he water may have carried tivity to parts of the plant cleaned up.

incident also brought to light lin- problems over how Hanford here and what kinds of chemi- kept throughout the vast project. rs have just begun updating old blueprints in the wake of a May explosion in the nearby Pluto- clamation Facility.

s another example of the type of is that led to the May 14 accident.

It's a legacy of hazardous chemicals, corrosive acids, left over from the old defense processing days," said John Britton, a spokesman for Fluor Daniel Hanford. "We have to go out and find these problems and clean out these pipes."

The acid ate its way out of a steel pipe, dripping the corrosive chemical onto a waterline that flows to two large air-conditioning units. The acid was left over from the days when it was used to help process plutonium, from 1951 to 1989.

Workers discovered the leak about 4:30 p.m. Thursday. Radioactive contamination was detected on the hands of one worker, who was helping put up caution tape to warn others to stay away from the area. His name was not released.

Hanford officials said they believed the worker may have been contaminated by radon when he touched something in the building. Radon, a radioactive gas, is emitted as a byproduct of uranium decay. He scrubbed it off with soap and water, officials said.

It took workers about three hours to find where the leak was coming from, consult plant drawings and shut the water off.

"The drawings aren't up to date,"

Please see **ACID**, Page A2 ▶

Hanford 'smurf' building safe but closed anyway

By ANNETTE CARY
Herald staff writer

The sagging second floor of the 3-year-old "Smurf" building at Hanford is not putting workers in danger, an Illinois consultant concluded this week.

But Fluor Daniel Hanford has closed the three conference rooms in the bright blue building because of the cost of making repairs. The building in the 200 East Area officially is called the 2704 HV Building, but Hanford workers have called it the Smurf building since it was painted an eye-catching

shade of blue, making it an oasis of color among the browns of the desert.

The second floor of the building has sagged slightly since the building was finished in 1994, causing damage to architectural elements, Hanford officials said. Tom Anderson, director of technical management at Fluor Daniel Hanford said three windows have cracked, plasterboard has cracked, partitions have separated, screws holding plasterboard to studs have backed out of the wall and hairline cracks have appeared in the concrete decks of the floor.

"It was an ongoing maintenance problem

to patch and repair," Anderson said.

Wiss, Janney, Eistner Associates Inc. of Illinois has been hired for \$81,000 to study how much load the second floor can hold and propose ways to repair the building. The company also will make sure the building can meet standards for withstanding wind and earthquakes.

A preliminary look at the 120,000 square-foot building found nothing to indicate a danger of structural failure. But Fluor Daniel Hanford does not want to continue making repairs to the second floor when other space is available. As offices become vacant, they will not be reassigned.

Fluor Daniel Hanford inherited the federal government's building last fall when it won the contract to operate Hanford. It was built in 1993 and 1994 by United Engineers and Constructors Catalytic, a subsidiary of Raytheon. Raytheon acted as construction manager and subcontracted out the design and building work.

A Raytheon spokesman at corporate headquarters in Massachusetts said Raytheon received a letter this week from Fluor Daniel and was looking into work records to help determine who will be responsible for any repair costs.

Hanford waste tank blasted by group

Toxic vapors from Tank C-103 raise concerns

By JOHN STANG

Herald staff writer

Hanford endangered workers by inadequately addressing toxic vapors coming out of a radioactive waste tank, a Hanford watchdog group charged Monday.

However, the Department of Energy said appropriate precautions have been taken with workers facing no immediate risks.

But a Battelle-Northwest draft study on the health risks concludes too many unknowns exist to say if the fumes are hazardous.

The site in question is Tank C-103, one of central Hanford's 177 underground waste tanks.

The Government Accountability Project on Monday released a report that says DOE installed a poorly conceived and functioning ventilation system on Tank C-013 over the protests of its engineers in order to meet a Tri-Party Agree-

ment milestone and avoid paying a fine for falling short.

GAP compiled the 18-page report from Hanford documents, and other information passed to it from Hanford workers.

The ventilation system replaced a poorly functioning older system to stop vapors wafting out of the tank from the radioactive liquids and sludges within. The problem is that the new ventilation system filled with condensate after about 20 hours of operation in 1995, which greatly decreased its efficiency, DOE officials said.

The ventilation system has not been fixed since.

GAP says the vent unit is simply an exhaust system and does not filter out toxic vapors.

DOE officials said the vent system has filters meeting the requirements for that area. Workers within 30 feet of the ventilation system are currently required to wear respirators, which is an adequate precau-

tion, said Jackson Kinzer, DOE's assistant manager for the tank farms.

The GAP report said a Battelle study showed a worker's chances of contracting cancer increase dramatically if he or she is exposed to these vapors, especially downwind away from the tank.

The Battelle study was done a few months ago to specifically look at health risks posed by Tank C-103.

Tank C-103 contains 221 chemical compounds. And no information exists on the toxicity of "a large fraction" of those 221, said Jim Droppo, Battelle's technical group leader for that study. Consequently, Battelle substituted chemicals with the closest characteristics for the compounds with the unknown toxicities, and calculated conservatively.

If real life duplicates the worst-case calculations, then a significant cancer risk exists, and a portable air supply would be needed, he

said. The problem is no one can say if the worst-case scenarios are applicable, he said.

"You can't say it's safe. You can't say it's unsafe," Droppo said.

Kinzer said DOE has independent experts reviewing Battelle's data — a prelude to DOE deciding how great the risk is.

The Battelle draft study's numbers apply to people spending 40 hours a week at the tank site for 25 years.

"People are only in there about 10 minutes a week," said Carolyn Haass, DOE's tank farms planning manager.

About 20 workers were exposed to Tank C-103's vapors in the past 10 years, the GAP report said. DOE officials said that figure appears correct, although no exposures were reported in at least the past 2½ years.

GAP's report linked the exposures to one worker losing 40 percent "of his pulmonary functions."

GAP slammed DOE changing the vent system's specifications without

fully informing the state departments of health and ecology of all the pertinent facts. GAP attorney Tom Carpenter alleges this violated state regulations.

Haziness exists in what DOE communicated and did not communicate to state officials in formal and informal settings — and what it was obligated to do.

DOE says it has been upfront with the state on everything it was required to do.

But even if DOE met its legal obligations, the Ecology Department feels it was kept out of the loop on some decisions, especially on the vent system's reliability and health ramifications, said Suzanne Dahl, the department's farms programs manager.

The additional information could have influenced some state decisions on this matter, she said. If safety concerns had surface, the state would "not have pushed to make a paper milestone" in meeting a Tri-Party Agreement timetable, she said.

Hanford sells sodium to Ohio chemical plant to avoid disposal fees

By the Herald staff

Hanford is preparing to ship 48,000 gallons of nonradioactive sodium to a private firm in Ohio.

Liquid sodium is used as a coolant at the Fast Flux Test Facility, which holds slightly radioactive liquid sodium in the dormant reactor's pipes.

Most of the 48,000 gallons awaiting shipment in three rail cars at Hanford came from a tank in the 300 Area; the rest came from the 100 Area. It was used for developing FFTF equipment, fire studies and training and therefore is not radioactive.

RMI Environmental Services of Ashtabula, Ohio, paid about \$70,000 for the metal, which will be used to

make industrial chemicals, according to the Department of Energy.

The actual shipping date is being set.

DOE is selling the sodium to avoid paying for its treatment and disposal.

The sale covers about 95 percent of the nonradioactive sodium at Hanford, said Doug Chapin of DOE and Bill Brehm of B&W Hanford Co., the officials in charge of sodium disposition.

To transfer the sodium from the tank to the rail cars, it had to be heated to 300 degrees — far above its melting temperature of 208 degrees. Then the sodium solidified again in the cars and will be melted again to be removed in Ohio.

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Hanford manager back from N.Y. lab

SATURDAY, AUGUST 16, 1997

TRI-CITY HERALD

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Idaho troubles haunt Hanford tank waste plans

By JOHN STANG

Herald staff writer

The specter of Idaho's troubled Pit 9 haunts efforts to turn Hanford's tank wastes into glass.

It haunts Hanford so much that when the first Pit 9 question was posed at a Friday briefing, Hanford official Bill Taylor instantly pulled out overhead slides to illustrate the differences between Pit 9 and Hanford's privatized glassification venture.

Taylor, head of the Department of Energy's tank waste privatization effort, and other Hanford officials briefed 16 congressional aides who toured the nuclear site Thursday and Friday.

The talks addressed DOE's plan to hire two corporate teams to build plants to convert at least 6 percent of Hanford's 55 million gallons of highly radioactive liquid wastes into glass by 2007.

The new wrinkle over conventional gov-

ernment contracts is that neither team would be paid a cent until the wastes are glassified, beginning in 2002.

What haunts Hanford is DOE's other huge privatization project — Pit 9 at the Idaho National Engineering and Environmental Laboratory.

Lockheed Martin Advanced Environmental Systems (LMAES) was hired to clean a waste-filled acre at the Idaho site under a \$179 million privatization contract. But the price nearly doubled to \$337 million, spooking Congress on the privatization concept.

On Friday, Taylor outlined what DOE believes are the differences between the Hanford and Pit 9 project. These include:

■ Pit 9 was a subcontract to INEEL's main contractor, which is Lockheed. Hanford's two privatized teams — led by Lockheed and British Nuclear Fuels (BNFL) — would contract directly with DOE.

■ Pit 9 was set up so Lockheed received payments as the project was built and tested.

The Hanford contract won't pay anything until glass logs are produced.

■ DOE financed Pit 9. The Hanford projects would be privately funded, to be eventually reimbursed by DOE. Taylor said that means Wall Street investors would bring extra pressure on the two teams to keep cost down.

■ Steps will be taken to ensure better coordination between DOE and the teams at Hanford than what occurred at Pit 9. That includes knowing when to step back and let the businesses run their own affairs, DOE officials said. Craig De Bremer, special assistant to DOE cleanup czar Al Alm, said DOE micromanaged at Pit 9, and must avoid that mistake at Hanford.

■ Hanford's wastes are supposedly better analyzed and understood than Pit 9's wastes. "We have learned some very serious lessons (at Pit 9), and so has DOE," said Bill Dixon, director of regulatory affairs for Lockheed's Hanford team.

The challenge at Hanford will be on the

business side, Dixon added. "The business and financing aspects of this are what's going to make or break it" he said.

Leanne Smith, BNFL's regulatory licensing manager, echoed Dixon's comments. "Some of the toughest parts are the financing," she said.

That's why DOE, Lockheed and BNFL are trying to convince key congressional aides that plans for dealing with Hanford's tanks wastes should work.

Wall Street looks at how Congress is planning to pay the eventual \$4 billion price tag through 2007, and uses that as a measure on how it wants to invest in the Lockheed and BNFL teams.

Congress is financing the projects at much less than what DOE thinks it needs.

For fiscal 1998, DOE originally requested \$427 million to set aside for future payments. But the U.S. House leans toward setting aside \$70 million in fiscal 1998, while the Senate is considering \$190 million.

Mike Jarvis, aide to U.S. Rep. Lindsey Graham, R-S.C., complained DOE's estimates of how much it needs for the project appear to change constantly.

De Bremer said DOE works with two levels for the so-called set-aside funds.

The lower level for each year covers Lockheed's and BNFL's expenses for that year, which DOE must eventually reimburse. The higher level — such as the \$427 million — is sought so the allocations would be steady through 2007, eliminating the need for huge appropriation requests down the road, De Bremer said.

David Cherington, aide to U.S. Rep. Joe Knollenberg, R-Mich., said Congress has trouble funding a program where many details are still up in the air.

DOE expects to have detailed glassification proposals from Lockheed and BNFL in January, and to have studied those proposals enough to discuss them with Congress a few months later.

Wagoner's absence, Hanford's duty manager, Lloyd Piper, was acting manager.

"I am happy to be back in the office at Richland," Wagoner said in a press release.

The experience at Brookhaven is rewarding to me because we solved the immediate problems, established corrective actions to prevent recurrences in the future prepared the way for a new contractor," Wagoner said.

Wagoner's temporary reassignment was expected to end sometime this summer.

Barbara O'Toole, DOE's assistant secretary for environment, safety and health, said in May that Wagoner was paid for his extensive experience at Hanford, one of the toughest cleanup sites in the world.

During his reassignment, Wagoner kept tabs on what has happened at Hanford — periodically flying back to the Tri-Cities.

Brookhaven is one of nine national laboratories, a group that includes Pacific Northwest National Laboratory operated by Battelle-Northwest.

17-AUG-97
Hanford program set for national award

A Department of Energy worker-involvement project is scheduled to receive a "Hammer Award" at a conference Tuesday in Idaho Falls, Idaho.

Hammer awards are presented by the National Performance Review Committee, which was created by Vice President Al Gore to boost his "reinventing government" effort.

The Hanford project set for the honor is DOE's "Enhanced Worker Planning" program, which started at the nuclear site in 1995.

The program seeks employees' participation into safety and work planning. It began in the tank waste program in the 200 West Area and has spread to several other Hanford projects.

8-18-97
Hanford system tempting for city

By MARINA PARR

Herald staff writer

No city has felt the economic pinch of Hanford layoffs more deeply than Richland.

But city officials are hoping to cash in on what's left behind: a broad, up-to-date, under-used communications system.

That system, valued at between \$30 million and \$40 million, links faxes, phones and computers at the sprawling site north of Richland. It's built to serve 30,000 users but typically logs just 15,000 in a day, according to Department of Energy estimates.

"They're sitting on an asset," said Larry Dunbar, project manager for Richland's telecommunication plan. "It's an opportunity for both DOE and the community."

In fact, Richland officials are pinning much of their hopes on acquiring Hanford's extensive, high-tech information highway.

It's a key part of a plan that would plow new electronic lines under the city through a potential partnership with other public agencies and possibly private enterprise.

But the city's interest in acquiring Hanford's electronic connections is apparently far from well-known at Hanford.

Bill Rutherford, DOE director of site infrastructure, hadn't heard of the city's plans.

DOE spokesman Guy Schein said, "If the city wants to talk to us about something like that, we'd be more than happy to sit down and discuss it with them."

Dunbar acknowledged the city hasn't formally approached DOE about acquiring its telecommunications infrastructure. However, he said talks had taken place between some lower-level DOE officials and city staff.

Should the city and any of its potential partners take over Hanford's telecommunication infrastructure, it could account for as much as a third of the planned network.

And if DOE says no?

"I think that will be detrimental to the project going forward," said Don Carter, Richland's deputy city manager in charge of utilities. "I don't know that the project would die at that point. It would depend on what the partners would pursue. What gives this project a lot of potential life is if we can secure those assets."

8-19-97
Pena may make 1st Hanford visit

By JOHN STANG

Herald staff writer

Energy Secretary Federico Pena is expected to visit Hanford for the first time next week.

He is expected in "the middle of the week," and he plans to stay one day or parts of two days, said Department of Energy spokeswoman Karen Randolph.

A timetable and what he will see have not been set yet, she said.

Also, there is the possibility schedule constraints could delay his trip, she cautioned.

President Bill Clinton nominated then Transportation Secretary Pena in December for the energy secretary post. The U.S. Senate confirmed his appointment in March.

Pena, a former Denver mayor, has been involved in issues pertaining to the DOE's Rocky Flats site in Colorado, but this would be his first visit to Hanford.

Leaders in the Hanford Advisory Board and the Tri-City Industrial Development Council heard Pena may show up next week, but neither had official confirmation Monday.

Both groups want to talk to Pena,

said Marilyn Reeves, chairwoman of the Hanford board, and Sam Volpentest, executive vice chairman of TRIDEC.

"We're trying to arrange a few minutes with him. We know the time will be short," Volpentest said.

But neither group has planned an agenda because Pena's visit is not confirmed, and neither is certain whether it will meet with Pena or how much time it will get.

The Hanford Advisory Board — which represents 32 constituencies across the entire Hanford political spectrum — hoped to get Pena to one of its meetings, Reeves said. But the board's next meeting is Sept. 4-5 in the Tri-Cities — about a week after the expected visit.

Volpentest credited U.S. Sen. Patty Murray, D-Wash., for pushing Pena to visit Hanford.

Volpentest said the Tri-Cities need to convince Pena the Hanford site has so much invested in it that new missions should be considered.

"We believe we can be used for new missions that come up. We feel we're entitled to do more than just be a cleanup program. We know missions are offered to other (DOE) sites," he said.

8-19-97
Full PILT money goes to schools

By DORI O'NEAL

Herald staff writer

Mid-Columbia school districts — not the state — will get to keep \$5.4 million handed over by the Department of Energy for Hanford's land being taken off the tax rolls.

On Monday, the state superintendent of public instruction announced the news to officials at Richland, Prosser, North Franklin and Wahluke school districts.

"We can all breathe a lot easier now," Richland Superintendent Rich Semler said.

The battle between the school districts and the state heated up this spring. The state thought it should get the "payment in lieu of taxes" money, also called PILT, to spread around Washington schools.

However, Mid-Columbia districts thought they should get the money because they serve the children of Hanford employees.

Semler said Terry Bergeson, the state superintendent of public instruction, had been apologetic about the state's actions throughout the process.

"(Bergeson) said that this never should have gone as far as it did," Semler said. Semler credits the assistance of U.S. Sen. Slade Gorton, R-Wash., former superintendent DeWayne Gower and attorney Bill Coates for interceding on the districts' behalf.

In a letter to Bergeson, Gorton urged the state not take such action

Plutonium likely to begin moving soon at PFP

By JOHN STANG

Herald staff writer

Hanford officials hope to begin moving plutonium again in the Plutonium Finishing Plant in a few weeks — ending a delay of about six months.

Safety concerns caused B&W Hanford Co. to stop moving plutonium within the PFP complex early this year.

Then, a Department of Energy evaluation in July showed safety training wasn't satisfactory.

In two weeks or a little longer, remedial work should be to the point where plutonium can be moved again within the complex, said Bill Heer, B&W Hanford's president, and Jim Mecca, DOE's director of the transitions programs division.

The situation drew criticism from Al Alm,

DOE's assistant secretary for environmental management, in a July 24 memo to Hanford.

"These situations are indicative of deeply rooted problems with getting work done safely at PFP. ... No work should be done at PFP without the assurance of working safely," Alm wrote.

PFP contains four metric tons of Hanford's 11 metric tons of plutonium. The other seven metric tons are mingled with spent nuclear fuel that is to be stored in the 200 Area.

About 3½ metric tons are held in a vault. The rest is scattered among the PFP's ducts, lab areas, gloveboxes and among leftover substances stored there from the deactivation of the Plutonium Uranium Extraction Plant.

The Defense Nuclear Facilities Safety Board has set a 2002 deadline for all four metric tons of plutonium to be heated in PFP furnaces to more than 1,000 degrees Centi-

grade to make the material safer. Then that plutonium — as a glassy powder — is returned to the vault await eventual disposal.

The vault's plutonium is contained in triple-layered cans about the size of a juice can and transported on special carts from the vault through about 100 feet outdoors to the main building where the furnaces are.

About six to eight of these moves to and from the vault, ducts or lab areas are done daily. A major concern is coordinating those movements with the guards, technicians and furnaces.

B&W Hanford, the Fluor Daniel subcontractor in charge of PFP, has stricter plutonium transfer procedures and standards than the previous contractor, Westinghouse Hanford Co., and was not comfortable with what it saw last winter, said Pete Knollmeyer, DOE assistant manager for facility transition.

Heer said B&W Hanford decided to stop all plutonium transfers and take time to upgrade training and procedures to head off problems.

B&W Hanford believed it was ready for DOE to evaluate its training. But the May chemical explosion at PFP stalled DOE's evaluation until July.

What tripped up B&W in July was that the evaluation was a hands-on test with the workers, guards and technicians, Mecca said. Previously, such tests were "tabletop" exercises where officials pretended to go through the motions in an office setting.

For the test, a plutonium container was supposedly dropped and broken. The correct procedure called for everyone to evacuate immediately to at least one room away, and for health physics technicians to check everyone out. Then a crew was supposed to re-enter the area in breathing gear and extra

protective clothing to handle the problem.

The test should have lasted about one hour, but it took about three hours, Mecca said.

"People were not used to doing this to the degree that we wanted it practiced. ... That's the reason you run drills," he said.

Workers were not used to acting out every step in detail, and therefore did not complete all required actions properly, he said. And mistakes were made, such as test equipment being set on a potentially contaminated surface.

The hold on plutonium transfers put the PFP about six months behind on interim milestones set by the Defense Nuclear Facilities Safety Board, Mecca said.

But the overall timetable is flexible enough that DOE is confident the 2002 deadline will be met, he said.

Hanford, DOE discussing future of enterprise firms

By JOHN STANG

Herald staff writer

Hanford's six "enterprise" companies usually are referred to as "outside the fence." But their status is more like "straddle the fence."

And the Department of Energy and Fluor Daniel Hanford are wrestling with how and when to kick the six companies totally outside of Hanford.

That was topic discussed at a video conference Friday between DOE's cleanup czar Al Alm in Washington, D.C., and the Hanford Advisory Board's financial affairs committee in Richland.

Committee members told Alm about their concerns with a 13-company team led by Fluor running Hanford. Alm promised to take up the group's concerns with DOE Hanford Manager John Wagoner.

Fluor has six main subcontractors under it. And those firms

formed another six "enterprise" companies with about 2,200 former Hanford workers.

The six enterprise companies currently do mostly Hanford work, but are supposed to gradually shift to mostly non-Hanford work, eventually becoming permanent Tri-City corporations independent of the federal government.

But in the meantime, these firms are nurtured by some Hanford-related advantages, while being shielded from some requirements faced by full-fledged federal contractors.

One criticism made Friday was that the shift is too slow. Advisory board member Bob Larson, of the Benton-Franklin Regional Council, said indications are that 3 percent of the enterprise firms' work is now outside of Hanford.

Mike Yates, Fluor Daniel Hanford's executive vice president, said the enterprise companies "haven't grown as quickly as we'd like. But it's more than 3 percent."

Numbers on non-Hanford growth were unavailable Friday, but Fluor expects to collect figures soon.

The success of that weaning is expected to affect the long-term viability of the enterprise companies, because they are now almost one year into two-year agreements with the core Fluor team.

That means Fluor could have to put those contracts up for bid in by early next year, Yates said.

In fact, Fluor is trying to convince DOE to extend the two-year agreements to three years to give the companies more time under Hanford's umbrella.

But Wagoner said DOE is leery of such an extension because Tri-City firms already are complaining the enterprise companies enjoy competitive advantages because of their semi-independent status.

Hanford board members said there also is a danger of enterprise employees becoming "gypsies" by having to move from company to

company every two years — or leaving the Tri-Cities altogether dissatisfied.

Wagoner noted the work would require about the same number of workers even if outside companies eventually take over the contracts.

"No one thing is going to protect every interest each one of us might have. The problem is to get the best balance," Wagoner said.

The advisory board members voiced concerns earnings and costs for the enterprise companies are not publicly disclosed, even though the companies still depend mostly on public money. And they criticized the 13-company system for not having uniform financial procedures so overall costs can be tracked.

The enterprise firms' indirect costs are considered confidential for competitive reasons, said Alice Murphy, Hanford's DOE chief financial officer.

The fee picture is fuzzy because DOE pays Fluor, which funnels

some of its money to the subcontractors and enterprise firms.

However, the enterprise companies are working under interim agreements, with full-fledged contracts still being negotiated, including performance fees.

Also Friday, Wagoner said DOE will prepare an assessment of the first year of Fluor's contract. The document will be available to the public.

And on a separate issue, advisory board member Madeleine Brown, representing nonunion Hanford employees, said workers are becoming more worried about accidents, especially in the vast network of subcontractors and those firms' subcontractors.

"We're having more near misses. I think we could have a fatality. That scares me," she said.

Wagoner said all subcontractors must follow the same safety rules. Yates said overall accident rates have dropped in the past year.

to PFP blast in May

By JOHN STANG

Herald staff writer

A long list of fix-it work is needed to get Hanford's emergency response capabilities up to snuff, a Department of Energy investigation report concluded.

DOE released a 151-page report Monday on how Hanford reacted May 14-15 to a chemical explosion at the Plutonium Finishing Plant.

The report reflects what DOE has publicly discussed in the past 3½ months, and contains no major surprises.

The report is available on the Internet.

"This final report confirms our initial findings," said Paul Kruger, DOE's Hanford director for environment, safety and health.

He added: "We are confident that the actions we have taken to correct the problems we found will enhance and improve our ability to protect the work force and environment, and that we will be responsive to offsite agency needs for timely, accurate and complete information."

On the evening of May 14, about 20 gallons of 4-year-old leftover chemicals exploded in a 400-gallon

al instances. Breathing equipment was not properly checked and not properly used. Gaps occurred in site security.

It took more than three hours to notify Mid-Columbia government and emergency officials, when it was supposed to take 15 minutes.

It took more than four hours to begin sending exposed workers to Kadlec Medical Center in Richland in their own cars. It took another 35 hours after they left the hospital before Hanford medical personnel did their own checks.

Also, the proper material was not on hand that evening to collect nasal and mouth swabs to see if anyone inhaled dangerous particles. Also, an order to do "whole body frisks" with radiation detection equipment was not followed.

And a message got garbled, resulting in a month-long delay before the nasal smears were tested. No contamination showed up in the tests, but the long delay greatly decreased the reliability of those results.

The report spreads the blame among DOE and about every contractor with people involved in the accident.

The list of fix-it measures is as long as the list of problems.

A couple of recommended corrective measures include:

■ Overhauling the emergency procedures in great detail, including those pertaining to medical checks and respiratory equipment. Those new plans should be clear, concise and consistent, the report said.

■ Fixing the coordination and off-site notification problems.

The text of the entire DOE report can be found at http://www.hanford.gov/safety/accident/prf_a109/doe-97-62/ on the World Wide Web.

Metro/Northwest

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Tuesday, Aug. 26, 1997 Tri-City Herald

Briefly

Car plows into Benton City diner

BENTON CITY — Four diners suffered minor injuries Monday afternoon when a car crashed through the picture window of a cafe here during the noon hour.

No one was seriously hurt, but one woman was taken to the hospital complaining of back and rib pain after the car, driven by 71-year-old Beulah Barton of Benton City, drove through the side of the Tumbleweed Cafe at 516 Ninth St., according to a sheriff's news release.

The injured diner, Glenna J. Cline, 68, of Newport, Wash., was treated and released from Kadlec Medical Center in Richland. Three other people were treated at the restaurant for cuts and scrapes. Barton was not hurt.

Mid-Columbians await Peña visit

By JOHN STANG

Herald staff writer

Mid-Columbia government leaders and a fledgling Hispanic Hanford Coalition are tentatively scheduled to discuss a variety of concerns this week with Energy Secretary Federico Peña when he visits the Tri-Cities.

Peña is scheduled to visit Hanford for the first time Wednesday and Thursday.

His itinerary still is tentative and could change, according to the Department of Energy.

On Wednesday, Peña is set to fly in about noon from Seattle with U.S. Sen. Patty Murray, D-Wash.

They, U.S. Rep. Doc Hastings, R-Wash., and DOE Hanford Manager John Wagoner are tentatively scheduled to hold a press conference at Battelle Northwest. Then Peña is to

visit the Plutonium Finishing Plant, where a chemical explosion occurred in May.

He also is lined up to tour the plants and tank farms in the 200 Area, the Fast Flux Test Facility and the soon-to-open Hazardous Materials Management and Emergency Response training center.

Then he is scheduled to talk with the Tri-City Herald editorial board.

On Thursday, he has scheduled a breakfast meeting with the Hispanic Hanford Coalition, an organization of Hispanic Hanford officials and others interested in site issues.

The coalition wrote to Peña in January to invite him to the Tri-Cities to talk with its members. Last week, Peña sent the coalition a letter accepting that invitation, said Chuck Marrero, president of the coalition and president of the board of the Columbia Basin Minority Economic Development Association.



Peña

Management Science Program awards. These are grants for environmental cleanup research. In the past, Battelle has won some awards. This year, Battelle does not know yet if it will win any.

Then Peña is scheduled to meet a delegation of mayors and officials from Richland, Kennewick, Pasco, Benton City, West Rich-

land, Benton County and possibly the Tri-City Industrial Development Council to discuss various matters.

Pam Brown, Richland's Hanford issues coordinator, said topics will include keeping Hanford's funding steady over the next several years.

She said that includes getting adequate funding for pay for both a long-range privatized tank waste glassification program and to pay for the shorter-term preparations to get the wastes ready in time for glassification.

These are in separate DOE budgets.

FFTF will be a topic with Tri-City leaders planning to pitch for its revival, arguing it is also a prime site to burn weapons-grade plutonium as fuel to help nuclear disarmament.

Also, the Tri-City leaders are expected to discuss worries about how the year-old Fluor Daniel Hanford main operating contract is working.

Benefit packages at Fluor Daniel Hanford reflect national trend

Meetings for retirees set for Thursday in Richland

By JOHN STANG

Herald staff writer

The mix of health benefit packages for employees of the Fluor Daniel Hanford team reflects national trends now that reshuffling is nearly complete, said Joel Sorensen, manager of the benefits administration office for Fluor Daniel Hanford.

As a cost-cutting measure, Fluor Hanford overhauled the health benefits offered to the 5,717 people in its seven core companies.

By the Aug. 20 deadline, 5,492 selected their new packages.

Now, Fluor is contacting the remaining 225 to try to get them to enroll.

The new coverage goes into effect Sept. 15.

Currently, employees are covered by one of three plans.

These are a traditional fee-for-services plan by CIGNA, a health maintenance organization plan by Group Health Northwest and a Group Health "Options" plan that has elements of fee-for-services and an HMO.

About 70 percent of the Fluor team's employees are in the traditional fee-for-services plan, 13.3 percent are in the combined plan and 16.5 percent in the HMO.

Four new packages are going into effect next month.

These include switching CIGNA's fee-for-services plan to a CIGNA Preferred Provider Organization, or PPO.

Under a PPO, an employee still chooses his or her doctor but is reimbursed more if the doctor is on the insurance company's list of preferred medical providers.

Two other choices are new versions of Group Health's HMO and Options plans. A fourth choice is a "catastrophic" plan by CIGNA, in which a worker would pay his or her own bills up to \$2,000 a year, with the insurance company paying costs above that.

Of the 5,492 employees, 35.1 percent went with the PPO, 33.9 percent went with the revised Group Health options plan, 25.4 percent went with

the revised HMO, and 1 percent went with the CIGNA "catastrophic" plan.

This was the mix that Fluor Daniel Hanford expected, Sorensen said.

Group Health's proposal to contract with just one of the three Tri-City hospitals apparently was not a significant factor in people picking their new health benefits packages, Sorensen said.

All three Tri-City hospitals, plus Spokane's Sacred Heart Medical Center, have agreed to work with Fluor's new benefits packages.

Fluor's contract with the Department of Energy calls for it to trim health costs by 15 percent next year. Health costs for Fluor's current work force totaled about \$52 million last year.

But that was with a bigger work force than today's 5,717. So, Fluor and the Department of Energy will have to calculate what dollar figure to shoot for to get an "apples-to-apples" 15 percent reduction.

That calculation has not been made yet.

Those reductions also will help Fluor reach a goal of trimming indirect costs to \$278 million in fiscal 1998.

Fluor and DOE originally predicted indirect costs in 1997 at \$324 million, but the latest Hanford figures revised that estimate to \$295 million.

Indirect costs include overhead and other shared sitewide costs. Hanford has been criticized for high indirect costs.

Meanwhile, Fluor inherited Westinghouse Hanford Co.'s responsibility for health benefits for about 4,000 people who have retired since 1987.

On Thursday, Fluor has scheduled three meetings at Richland's Doubletree Hotel to brief retirees on the changes. Meeting times are 10:30 a.m., 1 p.m. and 2:30 p.m.

U.S. Chamber of Commerce figures show medical costs in the Tri-Cities are 30 percent above national averages, another reason Hanford wants to reduce health costs.

Peña to focus on PFP, reserve

By JOHN STANG

Herald staff writer

Hanford's troubled Plutonium Finishing Plant and its most prominent wildlife reserve are expected to occupy much of Energy Secretary Federico Peña's attention today when he makes his first Hanford visit.

"The No. 1 thing is to see the progress made after the explosion," said John Wagoner, the Department of Energy's Hanford manager, referring to a May chemical tank explosion at the PFP.

The Energy Department and Hanford contractors are trying to fix a long list of problems that led to the blast and poor response from emergency officials.

Also during today's visit, Peña is expected to make an announcement regarding the Fitzner-Eberhardt Arid Lands Ecology Reserve, Hanford's 120-square-mile wildlife study area dominated by Rattlesnake Ridge.

DOE and U.S. Fish and Wildlife Service officials were mum Tuesday on what the announcement would be.

But DOE and the federal wildlife service have been negotiating all summer for the wildlife service to take over management of the site.

On the PFP issue, the Washington Department of Ecology is in the final stages of determining if any state fines or penalties should be levied.

Wagoner and Hank Hatch, Fluor Daniel Hanford's president, said the explosion and its aftermath will be calculated into DOE's review of Fluor's performance — and would likely affect the performance fee Fluor will collect for its first year at Hanford, which ends Sept. 30.

Any losses in performance fees could ripple to Fluor's subcontractor, B&W Hanford Co., which is in charge of the PFP, Hatch said.

"The companies will be held accountable, and that would be appropriate," Hatch said.

Meanwhile, B&W has replaced its PFP manager Eric Vogt with longtime B&W manager Fred Crawford, Hatch said. No individual disciplinary actions currently are planned, he said.

U.S. Rep. Doc Hastings, R-Wash., sent a letter to Peña Tuesday asking the DOE to speed up cleanup at PFP and remove any remaining hazardous and radioactive materials at the Plutonium Reclamation Facility — the PFP building where the explosion occurred — by August 1999.

Hastings wrote the reclamation

building currently does not have a specific schedule for closure. He cited safety risks and high annual maintenance costs as further reason for the proposed deadline.

Wagoner said he would be willing to try to meet Hastings' challenge but wasn't sure if the 1999 deadline for the reclamation building is realistic.

Wagoner noted the PFP complex would be on an accelerated cleanup schedule under a proposed DOE plan to speed up and finish cleanup of much of Hanford and other DOE sites by 2006. Work on the PFP could go faster if Hanford had more money for that project, he said.

Peña's agenda for today includes visiting the PFP, the Fast Flux Test Facility, a soon-to-open hazardous materials emergency training center and the 200 Area.

On Thursday, he is scheduled to meet with Mid-Columbia government leaders, the Hispanic Hanford Coalition, tribal leaders, and DOE's Richland employees.

He also is scheduled to visit the new Environmental and Molecular Sciences Laboratory in Richland and to announce the Environmental Management Science Program grants for cleanup research.

O'Leary charity favored by DOE firms

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — Two of the Department of Energy's major contractors, both of which have connections to Hanford, have contributed thousands of dollars to former Energy Secretary Hazel O'Leary's favorite charity.

Over the past three years, Lockheed Martin has given \$25,000 to Africare, and Westinghouse has donated \$5,000 to the group, according to the organization's records.

O'Leary's relationship with Africare already has drawn attention from a House committee and Justice Department task force, both looking at campaign finance irregularities, as well as DOE's inspector general. They are investigating allegations by a Democratic donor that he was asked to contribute to Africare in order to set up a meeting between O'Leary and a Chinese businessman.

The donor, Johnny Chung, has claimed he paid \$25,000 for a table at an Africare fundraiser in 1995 honoring O'Leary. Chung said an O'Leary aide picked up his check late one night.

O'Leary, who now serves on Africare's board of directors, has denied any pressure was put on Chung to contribute.

Both Lockheed Martin and Westinghouse bought tickets to the Africare dinner honoring O'Leary in 1995, with Lockheed Martin contributing \$10,000 and Westinghouse \$5,000. Lockheed Martin also bought \$5,000 worth of tickets to Africare's 1996 dinner and \$10,000 to this year's dinner.

Both corporations have been listed among the major donors to the 26-year-old organization, which provides human and economic development assistance to 27 African countries.

"People give to charities for a lot of reasons — humanitarian, for their own self-interest, for business reasons," said Joseph Kennedy, a senior vice president for Africare. "We have thousands of donors, and we accept their money in good faith."

Although Kennedy said Africare is a multiethnic organization, it is primarily black, and he added it isn't "unnatural" for O'Leary, who is black, to support Africare.

Over the years, the group has raised about \$200 million. The annual fund-raising dinners, which have honored such people as South African President Nelson Mandela and Bishop Desmond Tutu, raise about \$1 million.

Murray pressing Fluor contract review

Peña visit seen as preliminary step in process

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — Energy Secretary Federico Peña's visit to Hanford could be the first step in convincing him to launch a comprehensive review of Fluor-Daniel's \$5 billion contract to manage the site, Sen. Patty Murray, D-Wash., said Tuesday.

Murray, who will accompany Peña on his Hanford tour today and Thursday, requested such a review more than a month ago, citing concerns over safety issues at



Peña



Murray

the nuclear reservation after a chemical explosion and questions about Fluor Daniel's performance.

"I haven't received an answer to my request," Murray said in a telephone interview. "His (Peña's) visit is a preliminary step toward what I want."

■ **IT'S YOUR CALL:** Should Fluor's Hanford contract be reviewed? **Page A3.**

■ **PEÑA:** Energy secretary's visit to focus on Plutonium Finishing Plant. **Page A3.**

Murray's call for a review of Fluor's Hanford contract comes at a time when the company and one of its lobbyists have been subpoenaed by a Senate committee investigating campaign financing irregularities.

While the Senate Governmental

Affairs Committee has refused to say whether the subpoenas are related to the Hanford contract, Fluor Daniel contributed \$100,000 in so-called soft money to the Democratic National Committee weeks before the contract was announced last summer.

Simultaneously, Peter Knight, a lobbyist whose clients included Fluor, was preparing to take over as manager of President Clinton's reelection campaign.

Hank Hatch, Fluor Daniel Hanford's president, bristled at the suggestion Fluor tried to politically

influence the Department of Energy's decision to award the Hanford contract to Fluor last year.

"There is no doubt in my mind that (awarding of the contract) was based on the merits of our proposal and nothing else," Hatch said.

Hatch is a retired lieutenant general and former head of the Army Corps of Engineers, which awards a huge number of contracts to corporations. In that context, Hatch said, he found "the whole idea

Please see **MURRAY**, Page A2 ▶

DOE gives Battelle \$7.17 million in research grants

By JOHN STANG
Herald staff writer

The Department of Energy gave Battelle Northwest \$7.17 million Thursday to tackle six research projects addressing Hanford's cleanup.

Energy Secretary Federico Peña announced the grants Thursday after he toured the William R. Wiley Environmental Molecular Sciences Laboratory.

This is the second year DOE's Environmental Management Sciences Program has awarded grants to labs and universities for environmental research.

In both years, Battelle received the most funds of the nine national laboratories.

"That's a terrific testimony to our staff," said Battelle Director Bill Madia.

Roy Gephart, Battelle's co-leader for the Environmental Management Sciences Program, praised the lab's tally because of shrinking DOE research funds.

In 1996, DOE awarded 138 Environmental Management grants totaling about \$112 million to be spread across three years. Battelle got \$16 million of that.

On Thursday, DOE awarded 66 grants totaling \$46.4 million spread across three years. Of that amount, \$25.34 million went to

the nine national labs, with Battelle's projects capturing \$7.17 million.

Here are the new grants:

■ \$1.8 million will go to researching the chemistry of plutonium, which will help determine how to treat wastes. The lead scientist is Xiangdong Feng.

■ \$901,000 will go to research that would help increase the percentage of radioactive wastes that can be mixed with glass particles to form a glass canister. A major Hanford project is to convert radioactive waste into glass. The lead scientist is B. Peter McGrail.

■ \$1.132 million to examine some relations between gas bubbles and fluids in Han-

ford's tank wastes. The scientists are Phillip Gauglitz and Guillermo Terrones.

■ \$1.25 million to research how cesium 137 migrates through the ground. Cesium is one of the substances that has leaked from Hanford's tanks. Scientists are John Zachara, R. Jeffrey Serne, Paul Ellis and Paul Bertsch.

■ \$1.2 million to research new forms that some wastes can be converted into for easier disposal. The scientist is Mari Lou Balmer.

■ \$891,000 to study parts of the proposed drying-out process for 2,300 tons of spent nuclear fuel that are to be removed from Hanford's K Basins. Steven Marschman is the scientist.

Scientists' keen eyes find new micromoths at Hanford

By JOHN STANG
Herald staff writer

Birds do it. Bees do it.
Even teeny-weensy little moths do it.
This is a story of sex and science.

It's all about how scientists have found out Hanford is home to nine previously undiscovered species of micromoths.

Those nine critters bump the total number of new species of insects discovered at Hanford so far to 27.

Those 27 insect species join two new species of plants found at Hanford since 1994 in an ongoing survey of the site's plants and animals that is being supervised by the Nature Conservancy of Washington.

By early 1996, the tally was 18 previously undiscovered insect species, the two plant species and a previously undiscovered variety of a third plant species. But the survey had not yet tackled micromoths, which haven't been studied much in the Northwest.

Micromoths are usually one-eighth of an inch in length, eat plant roots and are small

enough to crawl between the layers of a leaf.

Richard Zack, one of Hanford's insect surveyors and curator of the state's main entomological research collection at Washington State University, decided to concentrate on micromoths.

He brought in a Canadian expert in May to give the survey collectors some pointers on tracking down micromoths.

Overall, survey members collected about 250 species of moths — most in central Hanford and around the old Hanford town site.

The moths were either examined at WSU or shipped to micromoth experts elsewhere to determine what species they are.

So how do you tell what species of micromoth you have — especially when you can probably line up two end to end on a pencil eraser.

Well, you check the genitalia. Male micromoths are preferred — for reasons that are obvious or soon will be.

First, a scientist cuts off the moth's bottom half and puts it under a microscope.

What the scientist is looking at is maybe a couple of millimeters long. And it varies

from species to species.

"On the genitalia, there will be a tremendous array of spines and knobs and angles. The number of varieties on these moths is tremendous," Zack said.

The right female micromoth will be built in an accommodating manner.

Zack expects five or six new species of micromoths to be confirmed among the Hanford moths.

Overall, the Nature Conservancy's survey of Hanford has confirmed the site contains more than 200 species of birds, at least 450 species of plants and about 2,000 species of insects.

Zack said the number is constantly increasing as Hanford insect species are identified. That number could reach several thousand insect species, he said.

Most already are known to science, but Zack said the likelihood of finding more previously undiscovered species is good. Several groups of Hanford insects have not been examined yet — including parasitic wasps, many groups of bees and beetles, grasshoppers and additional micromoths.

The 18 new insect species confirmed earlier include six bee species, six flies, four leafhoppers, one new species of wasp and a new species of beetle.

The two new plant species were a buckwheat plant and a bladderpod plant. Botanists also found a previously unknown variety of a known species of milkvetch plant.

Each new type of insect or plant is a distinct species because they cannot mate or cross-pollinate with another similar species to reproduce.

"There are a lot of new species waiting to be discovered at Hanford," Zack said.

The new Hanford species come from a 560-square-mile chunk of shrub-steppe habitat, where entomologists can look at the overall picture of insects and their biological surroundings, Zack said.

Similar habitats elsewhere are much smaller than Hanford and are more vulnerable to outside influences.

"That's what's exciting about Hanford," he said. "A scientist could spend a lifetime out here."

Peña considers concerns

DOE leader discusses Hanford with Tri-Citians

By JOHN STANG
Herald staff writer

Safety concerns, budget planning and a community review of the revamped Hanford were among issues Energy Secretary Federico Peña discussed Thursday with Tri-Citians.

Peña met with about 20 Tri-City government and economic leaders in Richland on the last stop of a two-day visit.

Tri-Citians want to know how Fluor Daniel Hanford and the Department of Energy view the first year of Fluor's five-year contract to manage Hanford, Pasco Mayor Charles Kilbury told Peña.

Peña, at the request of U.S. Sen. Patty Murray, D-Wash., ordered Fluor to review its performance. DOE plans to analyze Fluor's review by late October, and Murray plans to double-check that as well.

Such a self-review is standard procedure for Fluor, said Ron Peterson, president of Fluor Daniel's Government Services Operating Co., which oversees Fluor Hanford.

DOE performed the same type of supervisory review at its Fernand, Ohio, site, where Fluor is the lead contractor, Peterson said.

He noted the Hanford contract is radically different from any Fluor has had before with the government and Fluor wants to evaluate its strengths and flaws.

He said Fluor has 251 performance goals for its first year. "Most are pretty black and white

and well defined," he said.

"We believe we are making good progress toward those," he said.

The contract's features also are radically new to Hanford, with performance-based fees, 12 sub-contractors and an emphasis on individual projects.

Peña suggested Tri-City mayors meet with Fluor's leaders.

DOE's Hanford Manager John Wagoner said DOE and Fluor could meet with community leaders or the community in general to discuss Fluor's first year.

Kilbury and Richland Mayor Larry Haler told Peña that Mid-Columbians have concerns about Hanford's safety record.

"People are not happy about Fluor Daniel's declining safety culture," Kilbury said.

Haler agreed: "There are concerns about worker safety, and safety in general."

The May chemical explosion at the Plutonium Finishing Plant, delays in notifying emergency officials of that explosion, a rash of crane accidents and other complaints have plagued Fluor.

In a separate interview, Peterson repeated what Fluor has said other times — the high-profile accidents are masking an overall decline in accident rates.

Fluor routinely tracks accidents in three or four categories — and all show significant drops since Fluor took over in October, Peterson said.

For example, Fluor statistics show a 63 percent drop in lost work days and a 40 percent drop in accidents that meet the threshold to be reported to the Occupational Safety and Health Administration.

■ HISPANICS:
Tri-Citians urge more opportunities at Hanford. Page A3.



Herald/Bob Brawdy
Energy Secretary Federico Peña, right, says goodbye to Doug Olesen, left, chief executive officer of Battelle, and John Wagoner, Department of Energy Hanford manager, after a press conference Thursday at the Environmental Molecular Sciences Laboratory in Richland. An unidentified staff member of Peña's follows them.

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Saturday, Aug. 30, 1997 Tri-City Herald

Private group backing out of FFTF plan

By the Herald staff

A group that has sought a private-sector agreement to operate a Hanford research reactor to make tritium and medical isotopes is on the verge of ending its efforts.

Officials of Advanced Nuclear & Medical Systems say the Department of Energy isn't giving their "privatization" proposal serious review.

"Our proposal no longer is on the table at the Department of Energy," said Bill Stokes, president of ANMS.

FFTF currently is in standby mode, employing 280 people, while DOE studies options for its use.

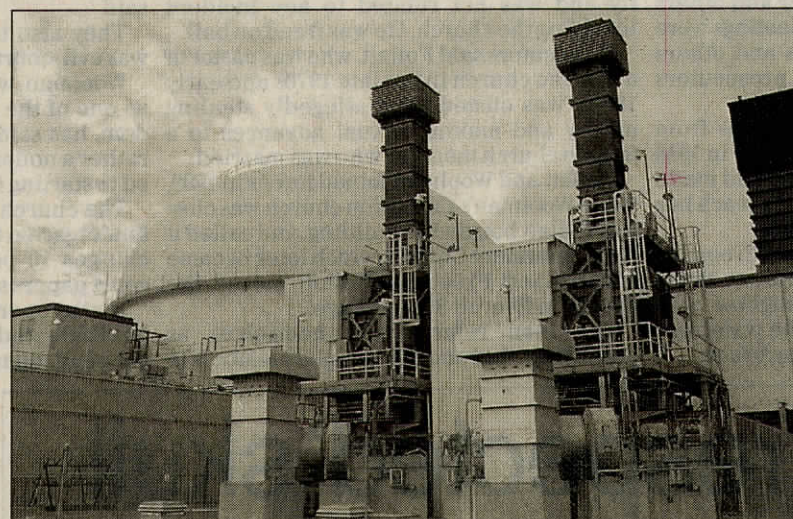
Advocates of restarting the reactor envision a site employing 600 people, first producing tritium for the nation's defense, then making medical isotopes to fuel some of the most exciting advances in medicine.

Their dream includes a medical community coalescing at the Tri-Cities, drawing sufferers from around the world to be treated for fatal cancers and other ailments with "smart bullet" isotopes produced in FFTF.

"It's a missed opportunity for cost-savings and for life-savings," Stokes said.

But ANMS' plan hasn't been rejected by DOE, two officials say. The proposal simply was premature, said Walt Apley, project director at the FFTF standby office for Battelle, which also has expressed interest in operating the reactor under DOE contract.

The DOE's Al Farabee, FFTF program manager in Richland, agrees.



Herald file photo

A group that has sought a private-sector agreement to operate the Fast Flux Test Facility says DOE hasn't given their proposal a serious review.

"Until they (DOE officials) make a policy decision to start FFTF for tritium and isotopes, it's premature to decide how that policy will be carried out," he said.

There have been two options proposed for reviving FFTF:

■ **Privatization:** The ANMS plan would spend \$450 million in private money to start the plant. The company would produce tritium and sell it to the government.

Later, as a market for medical isotopes increases, the company would shift emphasis away from tritium.

Selling tritium to the government is key to the plan. Such transactions would produce bridge financing until medical isotopes start producing sufficient income.

Tritium is a short-lived isotope of hydrogen needed to make nuclear bombs work properly.

■ **Government operation:** The government would hire a maintenance and operations contractor — possibly a consortium put together by Battelle — to run FFTF and turn tritium over to the Pentagon.

But there are other proposals to produce tritium. One would be to spend about \$9 billion to build and run a particle accelerator in politically powerful South Carolina. The other would be to pay commercial nuclear power plants to collect tritium in their reactors.

The commercial reactor option would cost about \$3.9 billion. The FFTF option would cost the gov-

ernment about \$3 billion.

Any scenario is a long shot, even supporters agree.

"There are still hurdles to overcome, but we are working hard to make it happen," said Sam Volpentest, executive vice president of the Tri-Cities Industrial Development Council. He's the region's point man in Washington, D.C., for nuclear issues.

"If they go to South Carolina, who's going to pay for it?" he asked. "We don't have the money."

Volpentest doubts DOE would ever allow ANMS to privatize FFTF.

Producing tritium is a matter of national security, and the government would never allow a private company to make decisions about manufacturing tritium, Volpentest said.

Plus, Russia and the United States could soon agree on a new nuclear disarmament treaty. If that happens, "We won't need as much tritium over 30 years," Volpentest said.

But a reduced tritium requirement would make FFTF an even more viable option, Farabee said.

FFTF alone could then produce enough tritium for the nation's nuclear arsenal, eliminating the need for other — and perhaps more costly — production alternatives.

Yet, an FFTF-alone option faces stiff political opposition: Politicians who have endorsed a temporary tritium role for FFTF might not want Hanford to become a long-term production site. Others oppose even a temporary role.

And there are sources of tritium outside U.S. borders.

"They can buy all the tritium they want from Russia," Volpentest said.

That the United States would buy bomb material from its arch foe of a half-century was too much for Apley.

"I would be stunned if that option is selected by anyone," he said.

Energy Secretary Federico Peña during a Tri-City visit this week said he will view FFTF proposals objectively. He also said he was "intrigued" with the possibility to manufacture medical isotopes in the reactor.

He didn't endorse any plan.

Farabee said even if there is a traditional maintenance and operations contractor for FFTF, medical isotopes would be produced and could be marketed by a private company.

Yet ANMS maintains that plan won't work. Federal rules would limit isotope-supply contracts to one year, and no medical institution will begin a nuclear medicine program with such a shaky source for its main requirement.

Farabee said contract limitations could be addressed when an operating plan for FFTF is written.

As of this week, however, ANMS believes its concept for FFTF is dead.

The firm has moved on to other endeavors, trimming its payroll from 25 to about 10.

"If the community became outraged at the lost opportunity, we might be able to do something. Now, it looks like (our proposal for) FFTF is lost," said Jean McKenna, ANMS spokeswoman.

Sagebrush Games looking for comeback

3 SEP. 97

By JOHN STANG
Herald staff writer

The annual Sagebrush Games — a 15-year-old Tri-City rite of fall and a celebration of physical fitness — is on injured reserve.

Federal budget cuts and a big drop in 1996 participation prompted the Hanford Environmental Health Foundation to decide a month ago to postpone the games this year.

In the next several months, HEHF plans to figure out how to conduct the games without federal money, which has provided the bulk of the budget, said HEHF President Sandra Matheson.

"We are going to have to go for all private sector money," Matheson said.

HEHF plans to look at how to raise money, who would want to participate, how big the event should be and what sort of games could attract enough people to make the event cost-effective, she said.

The Sagebrush Games have been around since 1981.

"It was a way to get everyone out and raise awareness of physical fitness," Matheson said.

New vice presidents added to staff at Fluor Daniel Hanford

3 SEP. 97

By the Herald staff

Fluor Daniel Hanford recently added two new vice presidents as it revamps part of its upper chain of command.

The purpose of the shift is to make the top layers of Fluor more manageable, said company President Hank Hatch.

Until recently, 20 department heads reported directly to Hatch and Mike Yates, the company's executive vice president.

The reshuffling has three of the department heads reporting to Sheila Little, the new vice president in charge of external communications, economic transition, and performance improvement.

Another four department heads now report to Ed Penn, the new vice president for project control. Those

department heads are in charge of financial operations, contracts and acquisition, internal information resource management, and project planning.

That trims to 13 the number of department heads reporting to Hatch and Yates.

Penn and Little are in charge of any internal changes in the departments they oversee, Hatch said. He does not expect any major overhauls.

Penn has more than 20 years of financial and accounting experience. His last position was as senior manager for the power and government group at Fluor Daniel in Irvine, Calif.

Little has at least 18 years of experience in public relations, government sales and marketing — including 7½ years with Fluor Daniel. She also has moved to the Tri-Cities from Irvine.

Handling of reserve concerns coalition

By JOHN STANG

Herald staff writer

A coalition of Columbia Basin governments object to a 120-square-mile Hanford wildlife reserve being managed by the U.S. Fish and Wildlife Service.

That plan is "usurping the authority of local elected county officials," said the Northwest Council of Governments on Wednesday in a press release.

However, the Fitzner-Eberhardt Arid Lands Ecology Reserve is in Benton County, and the Benton County commissioners never applied to own the ALE.

In fact, the Northwest Council of Governments never consulted with the Benton commissioners prior to issuing that press release, said Benton commissioners Max Benitz and Claude Oliver.

Benton County is not a member of that coalition, Benitz said.

The Northwest Council of Governments is based in Moses Lake and is an alliance of officials from several county and town governments in the Columbia Basin area. The appropriate Northwest Council officials could not be reached Wednesday for comment.

The Department of Energy owns the ALE, which is a restricted wildlife study area, and recently put the U.S. Fish and Wildlife Service in charge of managing it for 25 years. The wildlife service plans to hold public meetings this fall to get feedback on putting together a management plan.

The Northwest Council's press release contended:

■ An environmental impact study is required before the wildlife service can take over.
■ DOE's decision affects Benton County's tax base and will raise taxes "upon every citizen in the county." The group did not explain how taxes would go up because of the transfer from one government agency to another.

■ The argument the ALE's "shrub steppe habitat being a rare plant community is a false one." The Northwest Council's "planners have identified tens of millions of acres of arid sagebrush and low shrub habitat in the Northwest that will never be

Basin/Northwest

DOE out to cut budget shortage

By JOHN STANG

Herald staff writer

The Department of Energy thinks it can trim a predicted \$98 million Hanford cleanup budget shortfall to \$23 million.

Hanford officials recently met in Salt Lake City to identify numerous small streamlining measures that DOE believes will add up to \$75 million in savings in fiscal 1998, which begins Oct. 1.

More streamlining could trim most of a bigger predicted budget shortfall in fiscal 1999, according to DOE figures. But these measures are not locked in, the Hanford Advisory Board was told Thursday in Richland.

And DOE needs to review the proposals and get the blessings of the U.S. Environmental Protection Agency, the Washington Department of Ecology, and others by late September before approving any of these measures.

The action is being taken to make sure Hanford meets its legal cleanup obligations.

The Ecology Department and the

EPA already are pondering what they should do if DOE cannot meet the timetables of the Tri-Party Agreement, the pact governing Hanford's cleanup.

"We're still of the mind that the lack of funds is no reason for missing milestones," said Mike Wilson, director of the state's nuclear waste program.

Wilson and Doug Sherwood, the EPA's Hanford site manager, said they worry about how much DOE should be penalized for missing cleanup milestones. That's because fines could take away money that might go to cleanup, Wilson said.

Here is how the budget calculations are shaping up:

■ DOE's Richland office believes it will take \$1.086 billion to meet all its cleanup obligations in 1998—which is \$98 million more than the \$998 million Congress appears ready to appropriate. The \$75 million in streamlining is to trim that \$98 million deficit to \$23 million.

■ DOE's Richland office believes \$1.14 billion is needed to meet its cleanup obligations in fiscal 1999, which begins Oct. 1, 1998.

However, DOE's Washington, D.C., headquarters proposes a \$993 million budget for that year, which is \$150 million short of the cleanup obligations. And the federal Office of Management and Budget wants a \$923 million Hanford cleanup budget, which is \$220 million short.

DOE's Richland office believes additional streamlining could save \$160 million in fiscal 1999, which would eliminate the shortfall in the best-case scenario, and drastically trim it in the OMB scenario, said DOE's Hanford Manager John Wagener.

Sherwood said any missed savings in 1998 will ripple into 1999 to hurt chances to save money then.

Meanwhile, Madeleine Brown, the Hanford nonunion workers representative on the board, said site employees worry about the trimming because potentially dangerous or counterproductive shortcuts are inevitable.

"We really wonder how we can do more with less. We are stretched really thin," she said.

Also Thursday, the Hanford Advisory Board agreed to formally vote

today on a resolution to support expanding a huge hazardous debris landfill in central Hanford—if it is only used for Hanford wastes.

That Hanford-only clause is prompted by fears Hanford could become the waste disposal site for other DOE locations speeding up their cleanup under a proposed 10-year plan.

DOE is considering speeding cleanup at all its sites to finish the jobs at its smaller locations by 2006, while making serious progress at the bigger sites such as Hanford.

But that plan has the small sites shipping wastes to other DOE sites including Hanford or commercial sites. Sherwood said no commercial site is qualified to accept many of the radioactive and hazardous waste that could be shipped from the smaller sites.

The Hanford board is using the landfill-for-Hanford-only resolution as signal to Washington, D.C., it does not want Hanford to accept out-of-state wastes as part of the 2006 plan. The deadline for public comments on the first draft of that plan is Tuesday.

Rehire whistleblower, Hanford firm told

By DON McMANMAN

Herald staff writer

The U.S. Department of Labor on Thursday told a Hanford subcontractor to take back a whistleblower.

Geologist Jerry D. Davis "was removed in retaliation for his protected activities," which were safety-related complaints, the decision stated.

He must be reinstated, the department said.

But Bruce Morson, president of SGN Eurisys Services Corp., said Davis was laid off because his company had no work for the geologist.

"I didn't have any other employment for him," Morson said Thursday afternoon.

Davis and the Department of Labor disagreed.

"I'm very concerned about public health and safety, and the biggest safety issue is the final disposition of the underground tanks at Hanford," Davis said.

When Davis brought his fears to managers at Hanford, they didn't want to listen, he said.

Then, they laid him off, Davis said. Here's what bothered Davis:

The Department of Energy and Hanford contractors plan to empty the 177 underground storage tanks at Hanford. Each contains a mixed brew of toxic solvents and radioactive material—a soup so mysterious scientist have yet to identify exactly what it contains.

After most of the liquid is pumped out, solids—salt cakes—will remain. Scientists want to then use high-pressure hoses to knock this crust apart and sluice it out to a plant where waste will be turned into glass logs.

But Davis says the high-pressure liquid might tear the tanks apart.

"The contaminated water that leaks will flow into the soil below the tanks," Davis said.

Radioactive material mixed with deadly acids eventually could reach the Columbia River, Davis said.

Hanford management has computer models indicating the tanks will stand up to high pressure scrubbing, but those models are flawed, Davis said.

"I said that to a manager, and he

indicated in many different ways that he disagreed," Davis said.

"Once I started making some of these complaints, my work was reduced by about 60 percent," said Davis, who worked at Hanford for nearly 20 years.

He was laid off July 29. On Thursday, the Labor Department ordered the SGN Eurisys Services Corp. and Numatec Hanford Inc. to reinstate Davis with back pay, to pay him \$10,000 in damages and \$3,650 in attorney fees. SGN Eurisys is the enterprise company spinoff of Numatec, a main Hanford subcontractor.

Tom Carpenter, a Seattle attorney with the Government Accountability Project, handled Davis' case.

Carpenter contended when the company laid off Davis and fellow complainant Leonard Collard, a civil engineer and computer modeling expert who agreed with him, that was an attempt to "manipulate scientific opinion."

Davis and Collard were laid off at about the same time, but no one else was, Carpenter said. Collard reached a settlement with SGN

Eurisys a couple of weeks ago and withdrew his complaint, Carpenter said.

Morson declined to comment specifically Thursday about the decision.

"We've just received it today. We are looking at it. We are offered the option of appeal, and that is being evaluated," Morson said.

"Dr. Davis is a geologist with extensive skills and knowledge on vadose zone work, and vadose zone work isn't in SESC's scope," Morson said.

The vadose zone is that area below the surface of the ground under the waste tanks but above ground water.

Morson said he was certain Davis was laid off because of a lack of work, not because of retaliation for an impolitic stand.

"My company is always interested in safety on the site and for employees," Morson said.

SGN Eurisys Services provides engineering at Hanford and other Energy Department sites, as well as for non-DOE customers. It has about 120 employees at Hanford.

Hanford allegedly ignored critiques

By JOHN STANG

Herald staff writer

Dr. Ross Ronish watched several emergency drills at Hanford during his four-year stint as medical director of the Hanford Environmental Health Foundation.

He says he and others spotted problems and tried to pass recommendations to the Department of Energy and former lead contractor Westinghouse Hanford Co.

Those critiques were ignored, he told the Hanford Advisory Board on Friday in Richland.

"It was clear that the only goal of the drills was to get good grades. Honest critiques were suppressed," Ronish said.

Board member Pam Brown, representing Richland, remembered the board telling DOE two years ago that it believed Hanford took some drills too lightly—and a since-departed senior DOE official "jumped down my throat."

Ronish left the HEHF in 1996 to become a regional medical director for Group Health, and he is an alternate Hanford board member representing health interests.

His remarks came as DOE and Fluor Daniel officials discussed with the Hanford board May 14's chemical explosion at the Plutonium Finishing Plant. Two DOE investigations have found long lists of mistakes pertaining to the explosion's cause and the emergency response afterward.

Ronish said problems that showed up in emergency drills he saw from 1992 to 1996 included:

■ Command-and-control setups were too complex.

■ Emergency equipment and procedures were set up for radiological accidents, not chemical accidents.

■ Industrial hygienists should have played bigger roles in checking out chemical and radiological health problems.

■ Coordination with local hospitals was poor.

All these problems showed up May 14.

Fuel removal from K Basins faces likely delay

By JOHN STANG
Herald staff writer

One of Hanford's top-priority projects — removing spent nuclear fuel from cement ponds near the Columbia River — faces a likely 14-month additional delay.

That's on top of another five-month delay approved in January.

Extra design and safety work are needed, and that will likely bump completion of the K Basins' fuel removal and processing to July 2001, said Charles Hansen, the Department of Energy's assistant manager for waste management.

Hansen briefed the Hanford Advisory Board on Friday about the delay, which could add several tens of millions of dol-

“Fluor Daniel tried to put some reality into a schedule that in some sense was unrealistic.”

— Charles Hansen,
DOE assistant manager for waste management

lars to the final cost.

The so-called K Basins are two indoor pools containing 2,300 tons of spent nuclear fuel. Both pools are a few hundred feet from the Columbia River, and one has leaked in the past.

One of DOE's top priorities is to move the fuel from the basins to central Hanford, where it would be put in canisters and

stored in a building that's currently under construction.

Originally, DOE planned to begin moving the fuel in December and to finish the processing and storage within two years.

DOE's former cleanup czar Tom Grumbly pushed for that timetable in 1994. But some interim targets and the equipment designs were not thoroughly planned out, Hansen said.

Fluor Daniel Hanford and its subcontractor DE&S Hanford sought the initial five-month delay shortly after Fluor took over Hanford operations in late 1996.

Fluor officials complained they were dealing with more corroded fuel than expected, having to seal fuel containers so internal pressures would not blow off tops, and redesigning the Canister Storage

Building to meet tornado-proof standards set by the Nuclear Regulatory Commission.

“Fluor Daniel tried to put some reality into a schedule that in some sense was unrealistic,” Hansen said.

But further studies showed some of the proposed processing equipment — a vacuuming procedure that would remove moisture from the fuel — needed more design work and testing.

And safety measures needed to be thought out and tested.

Designers and workers at the one-of-a-kind project are nervous about safety in light of May's explosion at the Plutonium Finishing Plant, Hansen said.

“We have to do it right. We have to be concerned with worker safety,” he said.

That has DOE, Fluor and DE&S considering moving the timetable back another 14 months so fuel removal would begin July 1999 and the processing and storage would be done by July 2001.

They plan to decide on the proposed delay later this month. But they still will have to discuss the delay with the U.S. Environmental Protection Agency, the state Department of Ecology, and the Defense Nuclear Facilities Safety Board, all of which enforce deadlines on the spent fuel project.

The project's original price tag was \$814 million. The five-month delay added about \$10 million a month to the cost.

But Hansen said efforts will be made to trim that rate for the 14-month delay.

DOE devising plan to test tank leakage

By JOHN STANG
Herald staff writer

The Department of Energy is working on a master plan to sample and analyze the chemicals and radioactive isotopes that have leaked into the soil and ground water beneath Hanford's tank farms.

A draft plan should be ready in a few weeks, said Dave Shafer, DOE's manager for issues affecting Hanford's vadose zone — the subterranean region between the surface and ground water issues.

The document will go through a couple of months of review and revisions, he speculated.

The plan is emerging among heavy criticism DOE does not have a comprehensive master plan for studying contamination under the tank farms.

Hanford's 177 underground waste tanks contain 55 million gallons of radioactive wastes, and 67 tanks are suspected leakers. High-level radioactive wastes are seeping toward the ground water, and in some cases have reached it to eventually head to the Columbia River.

The major problem is the wastes and their underground movements are only partly understood and incompletely charted.

At Friday's Hanford Advisory Board meeting in Richland, criticism was aimed at DOE for tackling the problem in a piecemeal manner.

Suzanne Dahl, the Washington Department of Ecology's tank program manager, described each effort to look at the wastes “as a pinball bouncing from one project to another. What this points to is a lack of an overall plan.”

Casey Ruud, vadose zone coordinator for the state, and John Brodeur, who works for a small subcontractor

doing vadose zone studies, criticized DOE's work Friday. Neither of the former Hanford whistleblowers were representing their employers.

They criticized the computer programs used in the vadose studies, adding that the data gathered and fed into the programs also are poor.

“I'm all for more characterization data, but not for knee-jerk items,” Ruud said.

Ruud noted an independent expert panel backed the assertions that better computer analysis software and data were needed.

Shafer agreed flaws exist but said some of the computer models are solid enough to be useful. “We didn't want to stop the data collection completely,” Shafer said.

Hanford board member Ralph Patt, a hydrogeologist with the Oregon Department of Energy, agreed with most of Ruud's technical criticisms.

“My main concern when (DOE) comes up with a characterization plan is it won't have enough money to do it. The \$4 million proposed by (DOE for fiscal 1998) won't come close to solving the problem.”

Jackson Kinzer, DOE's assistant manager in charge the tank farms, said the 1998 budget does not have enough money to spend more than \$4 million on the vadose zone studies.

DOE has backup plans with price tags of \$8 million and \$12.3 million if more money materializes, but DOE officials doubt that will happen.

DOE has been accused of downplaying vadose zone matters because of pressure to cut cleanup costs.

Kinzer said the vadose zone studies are the second in line if any money cut from the tank farms is restored. Some tank safety work is the top priority.

Richland schools to discuss PILT funds

By the Herald staff

How Richland schools will spend \$1.2 million in federal money will be the topic at Tuesday's school board meeting.

The board meets at 6:30 p.m. at the administration building, 615 Snow Ave., to consider whether to use part of the money for the district's reserves and some to set up special funds for emergencies.

Richland Superintendent Rich Semler said he plans to recommend the board raise the district's budget reserves to 4 percent of the \$50 million annual budget.

DOE gives up 20 boxes of Hanford info

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — The Department of Energy, under threat of a subpoena, has turned over at least 20 boxes of documents to a Senate committee investigating whether political influence figured into last summer's award of a \$5 billion contract to manage Hanford.

The volume of documents is an indication of the breadth of the Senate Governmental Affairs Committee investigation into the award of the contract to Fluor Daniel, a California company whose former lobbyist, Peter Knight, went on to manage President Clinton's re-election campaign.

The committee's request for information focuses on the relationship between Knight and Tom Grumbly, who as a former assistant secretary for environmental management at DOE oversaw the cleanup of Hanford and other sites where highly radioactive wastes are stored.

But the committee's request also seeks to explore possible links between department officials and key contacts at the White House and Democratic National Committee, according to documents obtained Monday by the Herald.

The committee specifically requested all documents relating to “any meetings or communications

Please see DOE, Page A2 ▶

DOE takes Battelle to task in dispute over work hazard

By JOHN STANG
Herald staff writer

Battelle-Northwest did not adequately document potential chemical hazards before sending a work crew into a 300 Area building duct in 1996, a Department of Energy report concluded.

That same investigation found a major communications breakdown between workers and management that escalated the problem to the extent that it took 13 months to sort out.

Some fallout from the incident includes:

- One worker contending he was targeted for firing in retaliation for raising safety concerns. Battelle denies the charge.

- DOE expanding the criteria for which a Hanford worker can stop a job for safety reasons.

DOE issued its report Sept. 5 on the dispute that continued through the summer of 1996 at Building 329, a chemical lab in southern Hanford.

The lab's work areas have hoods to suck chemical fumes into a huge second-floor, pipelike duct, which eventually leads to filtering screens that are supposed to catch potentially dangerous particles before the air goes outdoors.

In May 1996, a small work crew was supposed to clean particles caught in the screens, change parts of the filtering system in the duct and fix a crack in the screen's framework.

be expected, said Jim Bauer, a DOE human resources official.

The investigation concluded:

- The complaint about the incomplete shutting off of the hoods was initially valid, but that was fixed before workers finally entered the duct.

- Battelle determined the duct was safe before the workers entered it, but the company did not put together or provide the documentation to the workers to back up that determination — as required.

- Battelle did a poor job of communicating with the workers about their concerns.

- A dispute exists if a supervisor threatened to discipline a worker for insubordination if the employee did not do a job he believed was unsafe. The DOE investigation did not look into that matter.

Instead, that matter was referred to DOE's Inspector General's office, which is reviewing whether it has jurisdiction on it.

In May 1996, the industrial hygienist did research chemical safety matters before the screen-cleaning project and determined the correct level of safety measures — but did not document that research, said Lynn Eberhardt, Battelle's manager of maintenance services.

Battelle is now more conscientious about documenting checks for chemical hazards but was probably less strict on that a year ago, said David Higby, Battelle's manager for safety and health.

DOE to look at Fluor

Peña decides agency will do its own review

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — The Department of Energy has decided it will conduct its own review of the \$5 billion Fluor Daniel contract at Hanford, Energy Secretary Federico Peña said, adding the move was prompted by concerns about the company's performance to date.

Peña originally hesitated to launch such a review and during a visit to Hanford late last month asked Fluor to take a "look in the mirror" and report back to the department on how it thought it was performing.

Now, the secretary has appointed a three-man team to conduct an independent review.

"There are concerns," Peña said in a telephone interview. "This is why we have taken this step. We expect it to be a comprehensive assessment."

Peña declined to spell out his concerns.



Peña

Hanford pair to lead Fluor contract review

Two Department of Energy representatives from Hanford will be in charge of reviewing Fluor Daniel's performance.

Linda Bauer, the DOE's assistant manager for environmental restoration, and Bob Rosselli, DOE assistant manager for science and technology, will lead the review team, which includes the deputy chief financial officer of DOE's Idaho Falls office.

Neither of the Hanford pair had any involvement in the setting up of the current contract.

That review is expected to be completed later this fall in parallel with a similar Fluor self-evaluation.

Northwest

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Tuesday, Sept. 16, 1997 Tri-City Herald

Whistleblower sues Westinghouse

Ex-Hanford worker not content with award of 7 months back pay

By STEFANO ESPOSITO
Herald staff writer

Fulfilling her promise not to just "walk away" from a long-running dispute with Westinghouse Hanford Co., whistleblower Inez Austin is suing the former Hanford contractor.

In her suit, filed earlier this month in Benton County Superior Court, Austin claims, among other things, that she was wrongfully fired in February 1996 from her job as a tank-farm supervisor.

Westinghouse maintains Austin quit by walking off the job and refusing to apply for a new job once the tank farm division had been

reorganized.

Austin, who could not be reached for comment, also says that she was the victim of unrelenting and escalating harassment because she was a whistleblower.

The suit doesn't list a specific monetary claim but asks for general compensatory damages, special damages and attorney fees.

In October, after a ruling by the U.S. Department of Labor, Westinghouse agreed to pay Austin seven months of back pay plus fringe benefits.

The Labor Department agreed Austin had actually quit and had not been fired, but it also said "working conditions during her last months on the job were intolerable



Austin

in court.

In the suit filed Sept. 5, Austin alleges, among other things that:

- In 1990, when she arrived at the West Tank Farm Operations, she "was subjected to harassment from management, coworkers and supervisors because she was now known as a whistleblower."

- Westinghouse managers ignored her experience and failed to provide her with "substantive engi-

neering projects." Instead, she was given clerical work.

- In 1994, she reported a case of alleged sexual harassment, but Westinghouse's human resources department ignored her request to investigate the complaint.

- That same year, her supervisor "systematically excluded her from all staff meetings and (gave her) only perfunctory tasks."

- Working as an environmental officer, she was required to complete a survey in response to attorney requests in the downwinders lawsuit. That lawsuit is seeking damages for Hanford radiation releases from 1944 to the 1970s that allegedly caused health problems.

- Austin claims during that time, her office was "continually broken into, computer files tampered with and materials were stolen."

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- Austin claims during that time, her office was "continually broken into, computer files tampered with and materials were stolen."

- In February 1996, Austin "identi-

fied a serious environmental hazard in the form of a planned chemical detonation scheduled for the following day. (Austin) informed (Westinghouse) of the potential for public exposure to a high dose of toxic radioactive chemicals. (Westinghouse) management refused to act on (Austin's) warnings. (Austin) contacted the United States Department of Energy at Richland, and it called off the detonation."

Officials at Westinghouse could not be reached for comment, but Glenna Moulthrop, a part-time Richland-based consultant for the company, said she had had not seen the lawsuit and could not comment.

"I am not aware of it at all and have not seen anything official," Moulthrop said.

Austin's attorney, Paul Lindemuth of Tacoma, did not return a phone call from the Herald.

Richland talks focus on development of isotopes

By ANNETTE CARY

Herald staff writer

Medical researchers and nuclear medicine industry leaders from across the country will be in Richland from Thursday through Saturday to discuss speeding development of treatments using medical isotopes.

In addition to the latest medical research, the role the Tri-Cities could play in the growing nuclear medicine field will be discussed. The Nuclear Medicine Research Council, sponsor of the conference, will unveil its new strategic plan for developing a nuclear medicine industry here.

The now dormant Fast Flux Test Facility at Hanford is capable of producing a wide range of medical isotopes, and the Depart-

ment of Energy is considering reviving it with a dual role of isotope and tritium production.

New medical research could increase demand for the isotopes. The Food and Drug Administration is believed to be close to approving new radioactive isotope treatments for cancer. In the therapy, radioactive molecules travel through the body seeking out and killing cancer cells. The treatment minimizes damage to healthy cells and eliminates the painful side effects associated with conventional radiation and other cancer treatments.

The radioactive isotopes already are being used to alleviate the excruciating bone pain experienced by some cancer patients. Research also is under way to treat arthritis with the isotopes and use it to pre-

vent side effects in treatment of heart attacks.

More than half the Richland conference is free and designed for the public to attend. However, Thursday's sessions require a \$330 registration fee. Much of that information will be repeated during free sessions Saturday.

The schedule is as follows:

■ Thursday's sessions will be held at the Washington State University at Tri-Cities Consolidated Information Center in north Richland. At 8 a.m., eight panelists from around the nation will discuss ways to overcome barriers in isotope supply, regulatory issues and treatment of patients.

In the afternoon session, the Nuclear Medicine Research Council will discuss its strategic plan. The nonprofit, volunteer

group received \$30,000 in federal money for economic diversification from the Tri-City Industrial Development Council for the project.

John Wagoner, the Department of Energy's Hanford manager, will speak at lunch, and Ray Hunter, the DOE deputy director of the Office of Nuclear Energy, Science and Technology is scheduled to speak at dinner.

■ Friday, the conference will move to the Doubletree Inn's Hanford House in Richland. From 8 to 11:30 a.m., four leading medical researchers will discuss developments in using isotopes to treat a range of diseases. There is no fee to attend. The afternoon is reserved for tours for those who paid the Thursday registration.

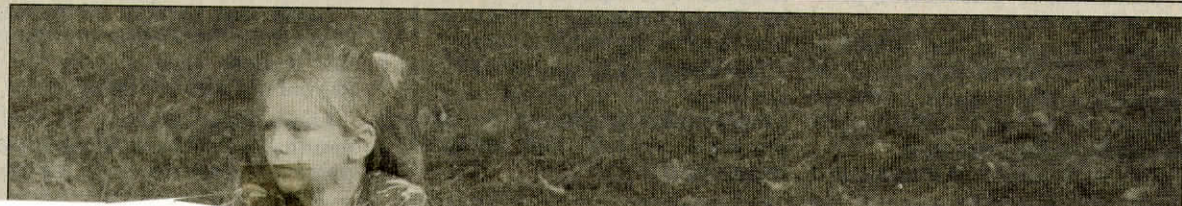
■ Saturday's session will be free and

designed specifically for Tri-City people to attend, repeating much of the information discussed Thursday and Friday. It will be held from 8:30 a.m. to 3:45 p.m. at the Shilo Inn in Richland. Talks will include future demand for isotopes, medical treatments and possible isotope production at the FFTF.

For more information on the symposium, check the Nuclear Medicine Research Council's site at <http://www.cbvcp.com/nmrc> on the Internet.

The medical isotope sessions are being held in conjunction with Kadlec Medical Center's annual High Desert Symposium at the Richland Doubletree Inn. The High Desert sessions are designed for medical professionals. For more information on those sessions, call 942-2600.

Franklin deputies



Franklin County probes rape cases

Hanford not going anywhere

TRIDEC idea to change name not well-received

By DON McMANMAN

Herald staff writer

Hanford would magically cease to exist if a preliminary proposal floated by the Mid-Columbia's premier economic development agency came to pass.

The waste tanks would remain, as would the K Basins, alas.

Only the name would disappear — replaced with this: "Columbia Environmental Reserve."

But don't count on it.

“It's a P.R. thing, as much as anything.”

—Dick Greenberg, TRIDEC president

Hanford buries 500,000 tons of waste

Bechtel Hanford Inc. on Tuesday commemorated the 500,000th ton of contaminated material that was disposed at Hanford's Environmental Restoration Disposal Facility — a superhuge landfill in the site's interior.

The landfill — dubbed the “ERDF” — is to hold slightly contaminated dirt and debris from numerous cleanup projects.

It opened July 1, 1996, and the digging, hauling and maintenance are run by Bechtel and Waste Management Services Inc.

The ERDF currently consists of two huge pits that measure 750 feet wide, 1,000 feet long and 80 feet deep.

Eventually, several pits will be dug and filled to eventually hold another 7 million tons of dirt and debris.

Bechtel layoffs possible

By JOHN STANG

Herald staff writer

Bechtel Hanford expects to lay off up to 220 people in 1998 if the company does not get more money for its environmental cleanup work.

If the layoffs occur, they likely would take place gradually from spring to September 1998.

Bechtel President Steve Liedle said the budget crunch being felt across all Department of Energy sites nationwide is the cause for the probable layoffs.

Bechtel and two subcontractors — CH2M Hill Hanford and Thermo Hanford — are a team managing what's called environmental restoration work at Hanford.

The work includes decontamination, “cocooning” and disposal of Hanford's defunct plutonium reactors.

Environmental restoration also includes several soil and ground water cleanup projects and managing a giant landfill for slightly contaminated debris and dirt.

The three-company team currently employs 961 people — 723 at Bechtel, 143 at Thermo Hanford and 95 at CH2M Hill Hanford.

Isotope supply stymies therapy

By ANNETTE CARY

Herald staff writer

Medical researchers are finding promising new ways to treat diseases using radioactive isotopes, but patients will not benefit unless supply problems are solved, researchers visiting Richland said Friday.

The Fast Flux Test Facility at Hanford, now dormant, is being considered by the Department of Energy for production of both medical isotopes and tritium for atom bombs.

“I think the Fast Flux Test Facility is a significant resource not just for the Tri-Cities, but for the nation,” said Dr. Robert Carretta of Roseville, Calif., the president-elect of the Society of Nuclear Medicine. “We need to do whatever we can to encourage and support the ongoing development of medical isotopes using the Fast Flux Test Facility.”

Bechtel

Continued from Page A1

Any layoffs would be spread among the three, Liedle said.

About a year ago, Bechtel planned about \$145 million worth of work for fiscal 1998, which begins this October.

But Bechtel's fiscal 1997 budget ended up at \$132 million. And in fiscal 1998, the U.S. House and Senate each propose spending \$132 million for Hanford's environmental restoration work — just one segment of the overall proposed Hanford cleanup budget totaling almost \$1 billion.

The 1998 figures should be nailed down soon in a joint conference committee meeting in Congress.

If the environmental restoration budget stays at \$132 million, layoffs likely would begin when some current projects are finished in 1998, Liedle said.

These would include:

■ The “cocooning” of C Reactor. “Cocooning” consists of decontaminating the reactor complex's interior and destroying the outlying buildings. Then the remaining main reactor building is sealed off — with the reactor isolated inside.

C Reactor's cocooning is supposed to be done by September 1998.

The work is a pilot project that is expected to be copied for seven more of Hanford's defunct reactors.

■ Delaying F Reactor's cocooning. Under a \$145 million budget, engineering plans on the project would have begun in late fiscal 1998, with the actual work starting in fiscal 1999.

With a \$132 million budget, the engineering work will begin in late fiscal 1999, with the field work beginning in fiscal 2000.

■ Finishing the deactivation of N Reactor, which is expected in April 1998.

Hanford fined \$110,000 for blast

By JOHN STANG

Herald staff writer

The state has fined Hanford \$110,000 for legal violations that caused May's chemical explosion on the site, and for a poor emergency response to it.

A Washington Department of Ecology investigation noted seven legal violations against the Department of Energy, Fluor Daniel Hanford and B&W Hanford Co.

"This was a very serious accident. Unfortunately, it was the latest in a series of incidents which can be traced to chemical mismanagement at Hanford," said Mike Wilson, head of the state's nuclear waste program Thursday.

The \$110,000 is the biggest fine the Ecology Department has ever slapped on Hanford, and is the second major fine levied this year. Hanford was fined \$90,000 in May for failing to fix problems at an analytical lab.

The previous largest fine was \$100,000 against Westinghouse Hanford Co. a few years ago for failing to identify the contents in 2,000 barrels of waste.

DOE and Fluor Daniel Hanford officials said they generally agree with the state's findings, although they want to examine a few technical points.

They and Steve Moore, the Ecology Department's lead investigator on the explosion, noted two earlier DOE's investigations reached the same conclusions.

"We're pretty much in agreement. There definitely were problems, and we intend to fix them," said Mike Yates, executive vice president for Fluor.

"There are no surprises in this report," said Keith Benguiat, DOE's site operations division director.

The investigation looked at the May 14 explosion of Tank A-109, a chemical tank at the Plutonium Finishing Plant.

The explosion's roots were the mixing of two chemicals — nitric acid and hydroxylamine nitrates — in a diluted solution in the tank for a 1993 training exercise.

But after the exercise, the chemicals were left in the tank for four years with the water evaporating to concentrate the chemicals into an explosive mix.

When the explosion occurred, confusion reigned with conflicting orders, a 3½-hour delay in alerting local emergency officials, 10 workers being exposed to chemical fumes, a five-hour delay in getting those

Please see FINE, Page A2▶

Hanford workers pushing for 'Star' status

By JOHN STANG

Herald staff writer

Several months ago, a bunch of Fluor Daniel Northwest workers and managers huddled to discuss how to deal with the hot and heavy protective clothing needed for working in radioactive and hazardous areas on hot days.

The idea they came up with uses a compressor blowing cool air through a tube to a harness on a worker. The harness has other tubes that circulate the cool air underneath the heavy protective gear.

Fluor Northwest cites this as an example of how Hanford's "Volunteer Protection Program" is working.

The safety program stresses cooperation between managers and workers, and has been nurtured at Hanford since 1994. It's the focus of a two-day conference at the Pasco Doubletree Hotel on Tuesday and Wednesday.

About 900 Hanford workers, about 200 others plus the Department of Energy's cleanup and safety czars, Al Alm and Tara O'Toole, are expected to attend.

Meanwhile, nine Hanford companies are trying for "Star" status — the top ranking for a firm participating in this program that was conceived by the Occupational Safety and Health Administration, and later adopted by DOE.

The seven Fluor Daniel Hanford team companies plus enterprise companies Fluor Northwest and B&W Protec — all of which used to be parts of Westinghouse or Kaiser — are pushing for "Star" ratings.

A "Star" rating means DOE has examined and approved a company's application outlining dozens of programs, procedures and activities to get workers and managers to improve safety. Most programs must have track records of at least one year.

Several Hanford Volunteer Protection Program coordinators said the key to the concept is heavy involvement by employees. When DOE considers an applicant for "Star" status, "they are going to look at the dudes in the ditches to see if everything is implemented," said Dan Palmer, Fluor Northwest's program manager.

Jennifer Smith, a senior radiation protection technician and one of DE&S Hanford Inc.'s program coordinators, said, "We want to identify hazards ahead of time before a job starts."

"Someone sitting in an office won't do as thorough a job of (safety planning) as someone in the field," said Bob Heineman, B&W Hanford Co.'s B Plant manager.

"If a worker has a safety concern, we want him to be part of the resolution process," said Jack Griffith, a millwright who is on the program's coordinating team for B&W Hanford.

So why push for a "Star" ranking?

Heineman said the usual three-year application preparation has the ripple effect of improving a company's safety record before the application is submitted.

Fluor Northwest's Palmer said former Hanford contractor ICF Kaiser Engineers Hanford Co. posted a rate of 8.63 accidents that required more than first aid to handle per 200,000 hours worked in 1993.

Then Kaiser started the Volunteer Protection Program, and Fluor Northwest — which has essentially the same work force as Kaiser had — is posting a rate of 3.54 non-minor accidents per 200,000 hours worked so far in 1997. The national average is 4.9 cases per 200,000 in Fluor Northwest's field.

Hanford's program coordinators said companies seek "Star" status from DOE or OSHA because the ranking shows low accident rates, which mean higher productivity and profits. They said that rating also can help when they are bidding for projects.

Hanford sets safety milestone

By the Herald staff

Hanford recently compiled a record of 10 million hours worked without a "lost work day" accident.

"I don't see this accomplishment as an end, but as a milestone in our continuing improvement of our safety performance at Hanford," said Paul Kruger, Hanford's assistant manager for environment, safety and health for the Department of Energy.

The 10 million-hour goal was set last October when Fluor Daniel Hanford took over as the site's lead contractor.

Each contractor and major subcontractor — totaling 10 companies of various sizes plus DOE — tallied their individual safety records to accumulate hours worked without an accident.

Whenever an accident occurred that would make someone miss a day of work, that company's total dropped back to zero.

On Sept. 12, Hanford managed to break the 10 million mark with 10,034,391 hours worked without a lost-time accident.

The tally is still growing.

However, Kruger noted several incidents — the Plutonium Finishing Plant explosion, plus several crane and electrical accidents — point to the need for more improvements in safety.

"I don't see this accomplishment as an end, but as a milestone in our continuing improvement of our safety performance at Hanford."

— Paul Kruger,
DOE Hanford

The participating companies and agencies and their Sept. 12 tallies are as follows:

Fluor Daniel Hanford, 1,500,199 hours; Lockheed Martin Hanford Corp., 1,312,738 hours; B&W Hanford Inc., 1,567,142 hours; DE&S Hanford Inc., 284,434 hours; Numatec Hanford Corp., 414,421 hours; Waste Management Federal Services of Hanford Inc., 565,398 hours; and DynCorp Tri-Cities Services Inc., 972,700 hours.

Also participating are Bechtel Hanford Inc., 245,553 hours; Hanford Environmental Health Foundation, 260,832 hours; Battelle-Northwest, 455,736 hours; and DOE at 2,455,238 hours.

job safety programs

By JOHN STANG

Herald staff writer

Worker safety programs need constant tweaking and improving, the president of the National Safety Council told about 800 Hanford workers and managers Tuesday.

"If you ever plateau out in (improving) your safety program, and find it difficult to drive (accident) numbers down further, and you don't do something significantly different — a serious accident is going to happen," said council president Gerard Scannell.

Scannell spoke at the first day of a two-day Hanford conference on the "Volunteer Protection Program" at the Pasco Doubletree Hotel.

The conference continues today with Al Alm, the Department of Energy's assistant secretary for environmental management, and Tara O'Toole, assistant secretary for environment, safety and health invited to speak in the morning.

said Gary Muth, president of the Hanford Atomic Metal Trades Council.

Keith Smith, HAMTC's secretary, said he has worked with seven major Hanford contractors since the early 1960s, and several began major safety programs.

"None of those had worker involvement, and they faded away. ... Worker involvement is the key component," Smith said.

Many crowd members supported boosting the Volunteer Protection Program around Hanford. But a few said some groups of Hanford workers don't feel a sense of ownership or belonging to the program.



Alm

Hanford contract awarded

By The Associated Press

Allied Technology Group Inc. has won a \$3.8 million contract to treat and prepare low-level radioactive and hazardous waste for disposal at the Hanford, the site's main contractor said Wednesday.

Allied Technology, a Fremont, Calif.-based company that has had operations in Richland since 1989, will begin processing the waste in 1999, said Fluor Daniel Hanford, Inc. The work is to be completed in 2001.

Fluor selected Allied Technology for the contract through a competitive bidding process.

Allied Technology, a minority-owned company, will be responsible for treating waste stored in drums and boxes at Hanford's Central Waste Complex. The waste includes both radioactive and hazardous materials.

Candidates for the contract submitted proposals to treat the waste at Hanford and off the site.

Allied Technology will transport the waste to its Richland plant, where it will be treated and then returned to Hanford for burial.

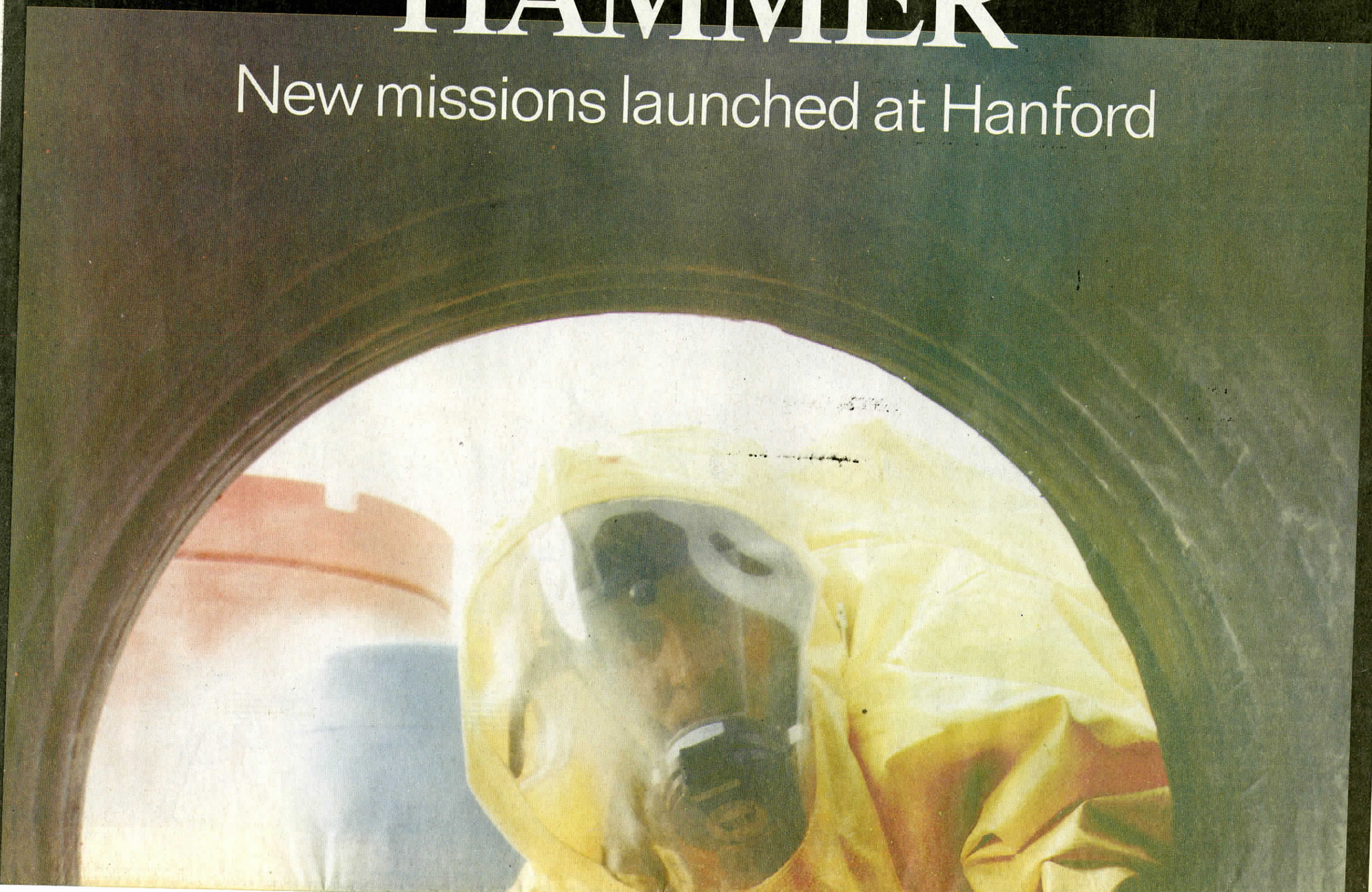
The contract requires that Allied Technologies be compensated only for the waste it processes.

Tri-City Herald

Wednesday, Sept. 24, 1997

HAMMER

New missions launched at Hanford



Safety, productivity tightly linked, Hanford told

By JOHN STANG

Herald staff writer

Two top Department of Energy officials at a Hanford-related safety conference Wednesday claimed a link between good safety records and high productivity.

"I'm convinced good safety is good business," said Al Alm, the Department of Energy's assistant secretary for environmental management.

"Good safety cultures are productive," said Tara O'Toole, DOE's assistant secretary for environment, safety and health. "A strong safety culture is a signal to the outside world of the work ethics of a company," she added.

O'Toole, Alm and several Hanford company presidents spoke to about 800 people at the Pasco Doubletree Hotel during the final day of a two-day conference.

The conference addressed the Voluntary Protection Program, a safety program that stresses extensive cooperation and communications between managers and workers. It has been nurtured at Hanford since 1994, but Hanford leaders are increasing their emphasis on it.

O'Toole and Hank Hatch, president of Fluor Daniel Hanford, stressed the purpose of this program is not to sign off on a series of requirements that look good on paper — but to help build a strong safety culture.

The Voluntary Protection Program "can't

be the flavor of the month or something to put on a wall. It needs to be part of your normal operations," Hatch told the audience.

O'Toole and Alm said safety issues and requirements never stay the same, but continue to evolve. And they noted the complex nature of the contracting teams at DOE sites increases the difficulty creating a "simple and seamless" safety system across each site.

"We need to do a better job of knitting together the prime contractors and (subcontractors) in terms of safety," Alm said.

Several Hanford company presidents said workers need to be involved to make the Hanford program work. "A true safety program comes from the bottom up," Hatch said.

Top DOE safety official resigning

By the Herald staff

Tara O'Toole, the Department of Energy's assistant secretary for environment, safety and health, plans to resign her post in early October.

O'Toole was in Pasco on Wednesday to speak to a Hanford-related safety conference.

O'Toole said she is just ready to leave after four years in that slot.

"I'm weary. This job requires a lot of energy to do," she said.

O'Toole wanted to wait until new Energy Secretary Federico Peña had several months under his belt and to time her resignation for a peaceful period when no major crises or problems were looming.

Peña has not selected a successor.

O'Toole plans to return to her home in Annapolis, Md., to "rest and think, and possibly do some writing about government and safety."

Russians viewing Hanford as model

By JOHN STANG

Herald staff writer

Russians came to Hanford on Wednesday to swap details about cleaning up shutdown nuclear facilities.

Alexandre Dmitriev, deputy director of the Russian version of the Nuclear Regulatory Commission, visited the defunct C Reactor, the Plutonium-Uranium Extraction Plant and other shutdown facilities to see how they have been decontaminated.

Russia has about 25 nuclear weapons processing facilities — including 10 former plutonium producing reactors — that it wants to clean up. That brought Dmitriev, of the Russian agency Gosatomnadzor, to Hanford.

"It is interesting to compare the American approach and Russian approach to decontamination. It is a good opportunity to compare practices," he said through an interpreter.

Dmitriev said some differences include:

■ **Money.** Russian officials have a difficult time getting government funds, especially because decontamination is not a high priority for the government. Like Hanford officials, Dmitriev frets about cleanup delays increasing the long-term costs.

■ **Ground water contamination.** Russia's problem is made worse by something Hanford does not face — lots of snow.

When the snow melts, that increases

the amount of water carrying subterranean contaminants to the ground water. Also, small airborne contaminated particles emitted from smokestacks settle on the snow, adding to the plutonium headed underground when the snow melts.

■ **Temperatures.** Russian temperatures swing from extremely hot to well below zero. To stand up to those extreme changes, Russian nuclear facilities have much thicker walls than their U.S. counterparts, making them harder to tear down.

■ **Workers.** The Russian plants do not hire outside contractors to tackle decontamination work. The existing nuclear plants' workers also will be the staffs tackling cleanup work.

Dmitriev was one of the early architects of a deal signed Tuesday in Russia by Vice President Al Gore. The pact calls for the United States to help convert three Russian plutonium-producing reactors to provide electricity for civilian use.

The \$150 million deal has the United States providing up to \$10 million this year and possibly up to \$70 million later, according to the Associated Press. Russia is to provide the rest.

Dmitriev said the \$150 million is a small part of a much larger, yet-undetermined total cost to convert the three reactors. And he is pessimistic about the chances for the conversions to be accomplished in the near future.

Aging reactors, increased safety standards and the need for new technologies to do the job will make progress slow, he said.

High-tech harnessed for rescuers

FEMA, PNNL workshop prepares emergency workers for wide gamut of disasters

By ANNETTE CARY

Herald staff writer

When the Federal Emergency Management Agency asked emergency managers what was needed to do their jobs better two years ago, 60 percent said technology.

So FEMA turned for help to the Department of Energy national laboratories, including Pacific Northwest National Laboratory in Richland.

This week in Richland, emergency workers, scientists, businesses, doctors and FEMA employees met to come up with solutions and study existing and future technologies for helping rescue workers. The "Technology Partners for Emergency Management Workshop" continues through today.

Participants are considering the sorts of disasters that could require

response by hundreds of rescue workers or by highly trained rescue teams.

They've talked about the relative ease with which terrorists can get their hands on chemical weapons. They've discussed the possibility of an eruption of Mount Rainier and the mud flows that could be triggered and reach Puget Sound.

They've even considered the fault line that runs from Vancouver, British Columbia, down the Interstate 5 corridor to Northern Oregon — a fault line some consider overdue for an earthquake.

And they've had a chance to look at some high-tech equipment that may someday help in those sorts of emergencies.

PNNL in Richland showed off Team Leader, a computerized camera system. A headband holds a videocamera the size of a can of

film that can transmit images back to a command center.

The images can be transmitted over the Internet for analysis and help from experts half a continent away.

The equipment comes with a battery pack and computer strapped to a belt that allows the user to call up any information that would be available in the office, such as maps of the disaster area or blueprints of buildings.

The computer monitor, with a few square inches of screen space is suspended from the headband a few inches in front of the wearer's right eye.

The system also can be used with a global tracking system to pinpoint the wearer's location, both for the rescue worker and those back at emergency headquarters.

It's an example of a system devel-

oped for defense purposes that has applications for rescue workers, FEMA officials said. Team Leader was developed for treaty inspectors investigating nuclear facilities overseas.

At the Oak Ridge National Laboratory in Tennessee, a device is being developed that can detect heartbeats — a useful technology for rescue workers looking for people in a collapsed building.

Some of the technology on display in Richland this week already is being marketed. Emergency workers looked at a satellite telephone system, with a receiving dish the size of a notebook that flips up to transmit and receive signals in remote areas.

The conference, sponsored by FEMA and with PNNL acting as host, has drawn 400 participants from as far away as the former Soviet Union and Taiwan.

Panel sets waste glassification funding

By MIKE LEE
Herald staff writer

A congressional committee decided Wednesday night that Hanford should get \$157 million next year for a program aimed at cleaning up the site's most dangerous wastes.

That amount for the tank-waste glassification program was more than double what

the House wanted to give Hanford, but well under half what the Clinton administration requested.

The money for fiscal 1998, if approved by Congress and Clinton, would be set aside to eventually pay contractors for Hanford's privatized tank-waste glassification program. When a Senate and House conference committee ended debate on the topic late Wednesday evening, the amount stood

at \$157 million, according to U.S. Sen. Patty Murray's staff.

That amount is not expected to change, although Murray press aide Rex Carney noted the allocation could be revisited today.

The House originally proposed \$70 million. The Senate wanted \$190 million, and the Clinton administration proposed about \$400 million.

The money is to be set aside to eventually

pay one or two private corporate teams to build plants to convert the radioactive wastes in Hanford's underground tanks into glass.

As the conference committee convened, staff members for Washington legislators were cautiously optimistic the final amount would be close to \$190 million.

No less hopeful was Sam Volpentest, executive vice president of Tri-City Indus-

trial Development Council, who has lobbied hard for more money. "I feel very confident that in the conference we will probably get the \$190 million," he said earlier in the day.

Congressional optimism was fueled by a Wednesday letter to Joe McDade, chairman of the House appropriations subcommittee

Please see **WASTE**, Page A2

Bechtel cautious of budget surplus

By JOHN STANG
Herald staff writer

An extra \$4 million to keep the "cocooning" of Hanford's defunct reactors on track could end up in Hanford's budget for fiscal 1998, which begins Wednesday.

If that money materializes, it might mean some proposed Bechtel Hanford Inc. layoffs won't materialize in 1998.

But Bechtel said Thursday that details were too uncertain to comment on the still-

evolving budget picture. "We're cautiously optimistic about this funding, but it is important to emphasize that the budget approval process is still under way," Bechtel President Steve Liedle wrote in a memo to employees.

And the overall Hanford picture is hazy and evolving.

A joint Senate-House conference committee agreed late Wednesday in broad strokes on how much money should go the Department of Energy's budget.

On Thursday, a House-Senate joint

INSIDE:

■ **DRILLING:** Ground water checked for contamination under leaking tanks. **Page A10.**

■ **SIEMENS:** New nuclear fuel plant dedicated. **Page A10.**

defense authorization conference committee began tackling how much should go to major DOE programs, which leads to edu-

cated guesses on how much would go to specific programs.

According to the staff of Rep. Doc Hastings, R-Wash., here is how the budget picture is evolving:

■ An extra \$4 million could go to "cocoon" reactors at Hanford.

Cocooning consists of decontaminating the reactor complex's interior and destroying the outlying buildings. Then the remaining main reactor building is sealed off — with the reactor isolated inside.

Bechtel plans to finish cocooning its first

reactor — C Reactor — in September 1998. Then it hopes to cocoon seven more reactors over the next several years — starting with F Reactor.

But Hanford's \$132 million "environmental restoration" budget — a section of Hanford's overall \$1.1 billion cleanup budget that is handled by Bechtel — cannot pay to begin the F Reactor project immediately after the C Reactor project.

That delay and the 1998 completion of

Please see **BECHTEL**, Page A2

DOE drills to ground water below tank farm

By JOHN STANG
Herald staff writer

Drilling recently began on extending a sampling bore hole to the ground water beneath Hanford's SX Tank Farm, the Department of Energy said Thursday.

This will be the second bore hole to reach the ground water since 1989 within Hanford's tank farms complex.

This bore hole originally reached 130 feet beneath the SX Farm, which contains several radioactive waste tanks that leak.

The drilling's purpose is to extend that bore hole to the ground water at 210 feet deep so samples can be collected from the ground water and from the subterranean area above it.

Last year, Hanford experts confirmed the presence of slow-moving radioactive cesium at the bottom of the bore hole when it was 130 feet deep. Now they want to know how much deeper the cesium has seeped.

This bore hole likely will reach the ground water within a few weeks, said Mike Thompson,

the DOE official in charge of ground water cleanup and monitoring.

By collecting samples from the 130-foot to 210-foot levels, scientists hope to get a better grasp on the movement of many other radioactive substances, including technetium 99, which moves the fastest through the ground.

Indications are that radioactive contaminants are moving quicker through the ground than DOE originally believed.

An independent expert panel, which has been critical of Hanford's studies in this field, recommended this bore hole be extended to obtain a better picture of how the contaminants move underground.

About 200 square miles of Hanford subterranean areas contain some contaminants that have leaked from numerous tanks, cribs, and trenches — probably intermingling.

However, the most highly radioactive substances come from central Hanford's 177 underground tanks, which hold 55 million gallons of wastes. Sixty-seven of those tanks leak.

These tanks are divided into 18 clusters dubbed "tank farms."

Meanwhile, the ground water is located 210 to 310 feet beneath these tank farms. The subterranean area between the ground water and the surface is called the "vadose zone."

To track how the contaminated fluids seep from the tanks to the ground water, Hanford has numerous ground water monitoring wells outside of the tank farms complex.

And it has 750 bore holes — which are built to be less permanent than the monitoring wells — to collect samples within the tank farms complex.

The problem is that practically all these bore holes reach only partway to the ground water. That means Hanford's scientists have an incomplete, hazy, and largely theoretical idea of how contaminants move through the vadose zone.

The haziness has created gaps in the background knowledge needed to plan many cleanup projects.

The only bore hole extended to the the ground water since the Tri-Party Agreement was signed in 1989 is at the T Tank Farm in the northern portion of the 200 West Area. The SX Tank Farm is in the southern 200 West Area.

Tank farm rules revised at Hanford

A new safety plan for Hanford's tank farms is scheduled to go into effect Monday.

The Department of Energy and Hanford's contractors spent two year analyzing accidents and procedures at the tank farms.

They consolidated and updated a collection of scattered, outdated, incomplete and inconsistent safety documents into a more centralized, coherent plan, according to DOE.

HAMMER training center dedicated

By ANNETTE CARY

Herald staff writer

A decade ago, volunteer firefighters were thinking small when they asked for a training center so they could learn how to handle spills of hazardous materials.

Two rooms. An outhouse. A fire hose.

But look where that modest idea led. Friday, Hanford's new \$29.9 million Hazardous Materials Management and Emergency Response training center was dedicated.

Stretching over 120 acres, it will provide training for those who respond to emergencies and workers who might be caught in them. They'll train on life-size props — like buildings that can be set on fire or filled with smoke.

Open for just two days, the center got a new name to reflect its growing list of uses Friday, and it got a national Department of Energy mission.

The HAMMER Volpentest Training and Education Center will become responsible for teaching DOE workers to prepare for and respond to transportation emergencies, such as spills of hazardous materials.

But the DOE center also is open to anyone who needs training in emergency response — from Richland firefighters to the Hungarian and Slovakian customs agents who were at the center this week learning to detect smuggled plutonium and other weapons materials.

"I have to admit when we started this effort, I didn't think we'd get beyond Mabton," said Sid Morrison, director of the state Department of Transportation.

A decade ago, he was the con-



Herald/Cary Best

The Hanford Hazardous Materials Management and Emergency Response — HAMMER — training center is dedicated and named for Sam Volpentest, far right, Friday. Clapping for Volpentest are, left to right, Russell Jim with the Yakama Indian Nation; U.S. Rep. Norm Dicks, D-Wash.; state transportation secretary Sid Morrison; Bill Burke with the Umatilla tribes; and June Ollero, HAMMER program director for the Energy Department.

"I have to admit when we started this effort, I didn't think we'd get beyond Mabton."

— Sid Morrison,
director,
state Department of Transportation

gressman who asked firefighters for help in getting hazardous materials training.

In 1986, new laws required more training for those who responded to traffic accidents involving hazardous materials.

Firefighters from Benton, Franklin and Walla Walla coun-

ties turned to the federal government.

"They said, 'Hey, government is always passing laws. We're volunteers. You have Hanford. Why not let us train there?'" said June Ollero, HAMMER program director for the DOE.

Others asked to be included. Labor unions said their workers needed training in working with hazardous materials. American Indians said they did not want hazardous materials hauled across their reservations unless their emergency workers were trained.

But a difficult decade followed from conception and Friday's dedication.

Ollero, who's worked on the project for a decade, was the spark plug who kept the project alive,

said Al Alm, DOE assistant secretary for the environmental management office.

And Karen McGinnis, now HAMMER manager for Fluor Daniel Hanford, was the person who gave the project shape over the years, he said.

Together they came to be known as "those two women" as they pushed the project forward to include a diverse partnership of DOE, Hanford contractors, labor unions, universities, Indian tribes, government agencies and the private sector.

But it took Sam Volpentest's political savvy to make their dream of a training center come true.

"Sam Volpentest was the battering ram," Alm said.

"I was the recipient of Sam's entreaties," he said. "He is one of the most successful persuaders I know." His points are well-honed, he makes them quickly, and he will not accept a vague answer, Alm said.

Volpentest, a longtime congressional arm-twister for Tri-City interests, joked his crusade had been "six years of bloody warfare" to get federal money for the project.

Every time money for the project was cut from the budget, "Sam was the Phoenix," Ollero said.

Volpentest, who turned 93 Wednesday, was feted for much of the week before the center was named for him Friday.

John Wagoner, manager of DOE's Richland office, said he hoped 100 years from now people would be saying HAMMER was the soundest investment in health and safety ever made. "And I would not be surprised if Sam is the only one of us still around to see it."

Six small contractors will replace ICF Kaiser Engineers Services on Wednesday as the Department of Energy's aide on various support functions at Hanford.

Roughly 100 Kaiser employees currently fill most of this role of providing technical, administrative and clerical support for DOE's Richland office. Some other firms provide small additional segments of the support role.

Wednesday is the beginning of the federal 1998 fiscal year.

This role was filled by MACTEC until Sept. 30, 1996.

At that time, MACTEC was finishing the fourth year of a five-year con-

became the site's lead contractor Oct. 1, 1996.

Consequently, MACTEC and Kaiser agreed Kaiser would assume the support service contract for its final year. That was so MACTEC could avoid the conflict of interest of working for both Fluor and DOE.

Meanwhile, DOE wanted to split the work predominantly done by Kaiser among several companies so the best experts in each field could be hired, said Leif Erickson, DOE's director of procurement services at Hanford.

The new contracts are for three years, with two one-year options to extend.

Erickson said the amount of work and costs will be trimmed in fiscal 1998 as a general budget cutting measure — regardless whether one or six companies does the work.

He said it isn't known yet if any of the roughly 100 current jobs would be cut. That would depend on how the work shapes up in 1998, he said.

The new contractors agreed to keep the current clerical workers. The remaining employees would be kept or replaced, depending on each firm's individual needs, he said.

Under the new multiple company setup, two firms will each be assigned three of the contractual areas. One

project is done, each of the two firms in an area will be asked to submit a proposal on how to do the task. Then DOE would pick the better of the two proposals.

Here are the new companies and their areas:

■ Kaiser and PAI Corp. will analyze management and engineering tasks.

■ BAT Associates and ATL International Inc. will provide support services for environmental, health, safety and security tasks.

■ Critique Inc. and Informatics Corp. will provide support for financial and administrative tasks.

■ Informatics also will provide support for third-party technical reviews.

Hanford may swap waste with Idaho Falls

By JOHN STANG

Herald staff writer

In the future, Hanford might take some of Idaho Falls' high-level radioactive wastes and turn them into glass.

In return, Idaho would get a huge batch of Hanford's highly radioactive cesium and strontium to store.

A technical report written for the Department of Energy said the swap might be a good idea, with Hanford shipping more radioactivity than it receives.

But the report, plus federal and state officials, also noted the political realities and potential pitfalls haven't been examined.

Hanford could store or treat much of DOE's nationwide radioactive wastes, according to the report, which looks at ways to cost-effectively speed up cleanup at many DOE sites through 2006.

The report was put together by contractors managing DOE's cleanup projects across the nation.

It claims DOE could save at least \$24 billion over the next few decades by adopting the report's recommendations. Much of the savings would come from fixing problems in the next 10 years so they don't drain federal coffers beyond 2006.

Other substantial savings could come by not duplicating cleanup plants at different DOE sites, according to the report.

DOE asking for advice on opening records

The Department of Energy is asking for the public's help to figure out how to declassify millions of pages of documents that could have information about radioactive releases from Hanford.

Four workshops have been planned in Washington and Oregon, with the first from 8 a.m. to 5 p.m. Wednesday in Room 1B40 of the Bechtel Hanford building, 3350 George Washington Way, Richland.

Goals of the workshop include suggesting ways DOE and its contractors can provide public access to Hanford records and coming up with priorities for documents to be made public.

Hanford disputes fine for PFP blast

By JOHN STANG
Herald staff writer

Hanford officials are contesting the bulk of a \$110,000 fine levied for an explosion at the Plutonium Finishing Plant in May.

The issue revolves around the chemicals that exploded.

The Washington Department of Ecology claims the chemicals

were wastes. The Department of Energy says they were useable chemicals.

And up to \$70,000 is riding on the dispute.

Just how the chemicals ought to be classified is the basis for DOE filing a petition with the state late Friday seeking a smaller fine.

Two weeks ago, the Ecology Department hit Hanford with the biggest fine in its history — \$110,000

■ IT'S YOUR CALL: Should the state let Hanford off the hook for its \$110,000 PFP fine? Page A3.

exposed 10 workers to fumes. The penalty is levied against DOE, lead contractor Fluor Daniel

for several violations leading to a chemical tank explosion May 14 that unveiled numerous safety problems and

Hanford and B&W Hanford Co., which manages the PFP.

The explosion was caused by two chemicals — nitric acid and hydroxylamine — being mixed in a watery solution in a PFP tank for a 1993 training exercise.

But after the exercise, the chemicals were left in the tank for four years while the water evaporated to concentrate the chemicals into an explosive mix.

Meanwhile, PFP workers checked monthly the evaporating solution in that tank until Oct. 28, 1996.

Then they quit checking because they thought the volume of chemicals was too small to justify the checks.

That was the basis for the state declaring the chemicals to be wastes and fining Hanford \$10,000 a month for the seven months the

chemicals sat unchecked until the explosion.

Another \$40,000 in fines was levied for emergency response problems and trouble dealing with the chemical fumes. DOE is not contesting those violations.

But Energy Department officials

Please see **HANFORD**, Page A2 ▶

PNNL scientists headed to Arctic

By The Associated Press
and the Herald staff

Two scientists from Pacific Northwest National Laboratory in Richland are preparing to board a Canadian Coast Guard icebreaker that's looking to get frozen into the Arctic Ocean for a year.

Why? To study global warming.

The research vessel Des Groseilliers left Tuktoyaktuk, in Canada's Northwest Territories, last week, bound for a point 300 miles north of Prudhoe Bay, Alaska. It will spend a year frozen into the ocean there, with a changing crew of scientists boarding from around the world, including Richland and the University of Washington.

The scientists plan to establish Ice Station Sheba, the largest, most complex science experiment ever undertaken in the Arctic.

The ice station, which has been in the planning stages for about five years and has a \$19.5 million budget, will try to figure out how the Arctic ice — a mass about the size of the United States — is melting.

The information will be used to help scientists create better models to describe and predict global warming, which could cause extensive changes in world ecosystems over the next decades if it continues.

Global warming is believed to be caused in part by carbon dioxide emissions from burning fossil

fuels. The carbon dioxide traps the Earth's heat, creating a "greenhouse effect" that has been blamed for the creeping rise in average global temperatures.

Just how fast the temperatures might go up and what the implications are for world economies has been the subject of debate for 20 years.

The Arctic-bound research team hopes to help settle some related questions, such as how fast coastlines could sink because of rising ocean levels and how storm patterns might be changing.

Between 12 and 35 scientists will staff the station at all times, arriving and departing by small plane once an airstrip is established.

The Richland scientists, Kevin Widener and Paul Rohde, will be there through October setting up two kinds of instruments.

One will gather information about the properties of clouds — a topic scientists know little about. To better predict global warming, they need to understand how much heat clouds absorb or reflect.

The second group of instruments will measure energy from the sun, figuring out how much of the energy measured comes directly from the sun and how much is absorbed and reflected at the arctic.

One of UW oceanographer Jamie Morison's tasks will be to use an automated vehicle that swims around under the ice to take measurements.

His measurements of temperature, salinity and

turbulence will help scientists understand how heat is transferred back and forth between the ocean, ice and air.

And that will help them understand whether the ice is melting more underneath or around the edges — a distinction that has profound implications.

A key element in models of global warming is how much ice surface area is reflecting light back to the atmosphere, Morison said.

But researchers do not understand exactly how polar ice melts. If it melts from around the edges, there would be less ice surface to reflect the sun's light back into the atmosphere. If it melts from underneath, there would be much less impact on the surface area.

Current models of global warming produce wildly different results depending on what figures are used for changes in the surface area of polar ice.

The topography of sea ice, which is laced with leads of open water and pressure ridges tens of meters thick, is in constant flux. Like slow-motion sand dunes, it changes shape constantly, shaped by the wind and the endless cycle of melting and refreezing.

The shape of that frozen landscape affects the temperature of the atmosphere above it. In the summer, the ice helps chill the atmosphere by deflecting incoming sunlight. In the winter, it prevents unfrozen sea water from warming the air."

New archives to document exposures

By JOHN STANG
Herald staff writer

A new archives on people worldwide who were exposed to radiation is to join an existing archives on Hanford's downwinders.

The proposed Radiation Health Effects Archives is to be formally announced Oct. 11 at Spokane's Gonzaga University Foley Center Library, which also is the home of the Hanford Health Information Archives.

The new archives will collect health histories of people from around the world for others to study and compare notes, said Tom Carter, the administrator of both archives and associate dean of Gonzaga's Foley Center Library.

The new archives will try to obtain stories, health records and other information from people exposed to radiation at Hiroshima, Nagasaki, Chernobyl, Nevada, the South Pacific and other areas.

No timetable has been set for how fast the new archives would compile information.

The Radiation Health Effects Archives is being set up as a non-profit organization.

Already in place is the Hanford Health Information Archives, which has federal money for it to last until Sept. 30, 1998. That archives contains medical records, oral histories, journals, photos and other information from people who lived downwind from Hanford's radiation releases from 1943 to 1972.

The Radiation Health Effects Archives will have to raise its own money right away. And it is likely the Hanford archives also will have to seek nonfederal money after 1998, Carter said.

A preliminary estimate is the archives would cost about \$200,000 a year to operate. Fund-raising plans have just begun, Carter said.

The two archives probably will coexist for the next year, with the possibility of being combined later, Carter said.

Much of the Hanford archives is on the Internet. And the majority of the people contacting that archives do so by computer at <http://www.foley.gonzaga.edu/hhihome.html> on the World Wide Web.

The archives are open from 10 a.m. to 4 p.m. Mondays through Fridays at the Foley Center.

The formal announcement of the worldwide archives is set for 1:30 p.m. Oct. 11. An open house will run from 12:30 p.m. to 5:30 p.m.

U.S. Rep. George Nethercutt, R-Wash., is to be the featured speaker.

Triumph & turmoil



John Wagoner, left of center, the Department of Energy's Hanford manager and Hank Hatch, center, president of Fluor Daniel Hanford's team, toast

Fluor receiving on Aug. 6, 1996, the five-year contract to manage Hanford. Fluor's performance as lead contractor has drawn criticism and praise.

Fluor under more scrutiny than ever on its first anniversary as lead Hanford contractor

By JOHN STANG
Herald staff writer

Almost 14 months ago, Hank Hatch, John Wagoner and other Hanford and Tri-City leaders lifted their wine glasses in a toast to Fluor Daniel Hanford winning the five-year, \$4.88 billion contract to manage Hanford.

Fluor took over management of the Department of Energy site two months later Oct. 1, 1996.

One year later, has Fluor aged well like a good wine? Soured into vinegar? Or is it too early to judge Fluor's vintage?

Most observers say it's too early.

But the past year has been a rocky eye-opener for Fluor, DOE, the Tri-Cities and other Hanford observers.

Fluor has been trying to get its arms around the technical and politically complicated job of cleaning up the most contaminated spot in North America.

And Hanford workers, their fellow Tri-Citians, Hanford's regulators and watchdogs have been try-

Special report

Editor's Note: On Oct. 1, 1996, Fluor Daniel took over as Hanford's lead contractor, launching a year of radical change.

The Tri-City Herald today begins a four-day series examining what has gone right, what has gone wrong and what remains unresolved after Fluor's first year.

This series will look at:

- **Today** — Fluor faces intense scrutiny as it manages the nation's most complicated environmental cleanup project. Many issues have surfaced as Fluor, the Department of Energy, Tri-Citians and Hanford's watchdogs try to understand how the new contract is working.
- **Monday** — Hanford's bottom line is cleanup. How has Fluor done?
- **Tuesday** — Why has safety has been a major concern at Hanford during the past year?
- **Wednesday** — A year of massive job shuffling has created plenty of work-anxiety.

ing to understand and cope with the radical changes that Fluor brought.

Meanwhile, Fluor's progress on several cleanup and safety issues

has been tarnished by the May 14 explosion of a chemical tank at the Plutonium Finishing Plant, and other snafus.

And Fluor has the dubious dis-

inction of being in charge when Hanford drew its highest and the third-highest state environmental fines — \$110,000 for the PFP explosion and \$90,000 for failing to fix problems at a waste analysis lab.

Roots of both cash penalties can be traced to the previous contractor, Westinghouse Hanford. But Fluor had chances to fix both problems but did not before Hanford got stung.

Part of Fluor's challenge is that the company and DOE are venturing into a new way of managing cleanup, a change sparked by changes within DOE.

Shrinking federal budgets and a public clamor for swifter and cheaper cleanup prompted the Department of Energy in 1996 to seek innovative ways to deal with Hanford's 50-year accumulation of nuclear and chemical wastes.

So, DOE hired Fluor Daniel for five years and made the company's fees 100 percent dependent on how much work is done and how well it

Please see **FLUOR**, Page A2 ►

Herald/Cary Best
Tim Haggett, vice president of marketing for Mundo Communications Network in Kennewick, processes prepaid phone cards the company produces. Mundo is one of two firms that have received money from a venture capital fund set up by Fluor Daniel's team to create jobs outside of Hanford.



Managing Hanford means being under a microscope

By JOHN STANG
Herald staff writer

Fluor Daniel's contract to manage Hanford is as thick as a Bible.

Putting that document into action has produced some surprises and ripple effects that don't show up on paper but have very real impacts and create very major concerns.

Here are a few of the issues the Department of Energy, Fluor and others have struggled with during Fluor's first year.

Relations with government agencies

The contract gives Fluor a freer hand than Westinghouse Hanford had in running Hanford.

But DOE, Fluor and state and federal regulators have been struggling with how much over-

sight outside agencies should have over Fluor.

DOE has to learn when and how to pull back, said DOE Hanford Manager John Wagoner, adding DOE has encouraged Fluor to push for more autonomy.

And Fluor has to learn when to expect outside scrutiny. Fluor managers have been surprised at the level of detail DOE wants, especially in safety matters, Wagoner said.

"There's a certain amount of creative tension between the contractor and (DOE)," said Hank Hatch, Fluor Daniel Hanford president.

Wagoner said: "We're still making adjustments."

Meanwhile, the U.S. Environmental Protection Agency and the Washington State Department of Ecology initially got the cold shoulder from lower-level

Please see **HANFORD**, Page A2 ►

Fluor's
1st year

Charting



cleanup



Photo courtesy of Fluor Daniel Hanford

The Canister Storage Building in central Hanford is about 70 percent complete. Its purpose will be to store 2,300 tons of spent nuclear fuel to be brought in from the K Basins, which are near the Columbia River. Plans to move the fuel have been delayed.

Frustrations, successes have marked Fluor's No. 1 mission

By JOHN STANG
Herald staff writer

Hanford's mission is simple: Cleanup. Take a site highly contaminated with radioactive and chemically hazardous materials and clean it up — thoroughly, efficiently and on schedule.

As Fluor Daniel Hanford, the chief site contractor, proceeds with that job, it has plenty of related obligations — official and otherwise.

Worker safety. Employee security. Openness to the public. Job creation. Community leader. Steward of federal money.

Failing at any one of these — and probably dozens more — can create a cloud of controversy that obscures any progress in all the rest of the process.

Since Fluor took over the job a year ago, cleanup has proceeded as it usually does — with some quiet successes, some avoidable and well publicized failures, some unavoidable delays, some surprises and some necessary groundwork for progress.

Hanford is a difficult beast to tame.

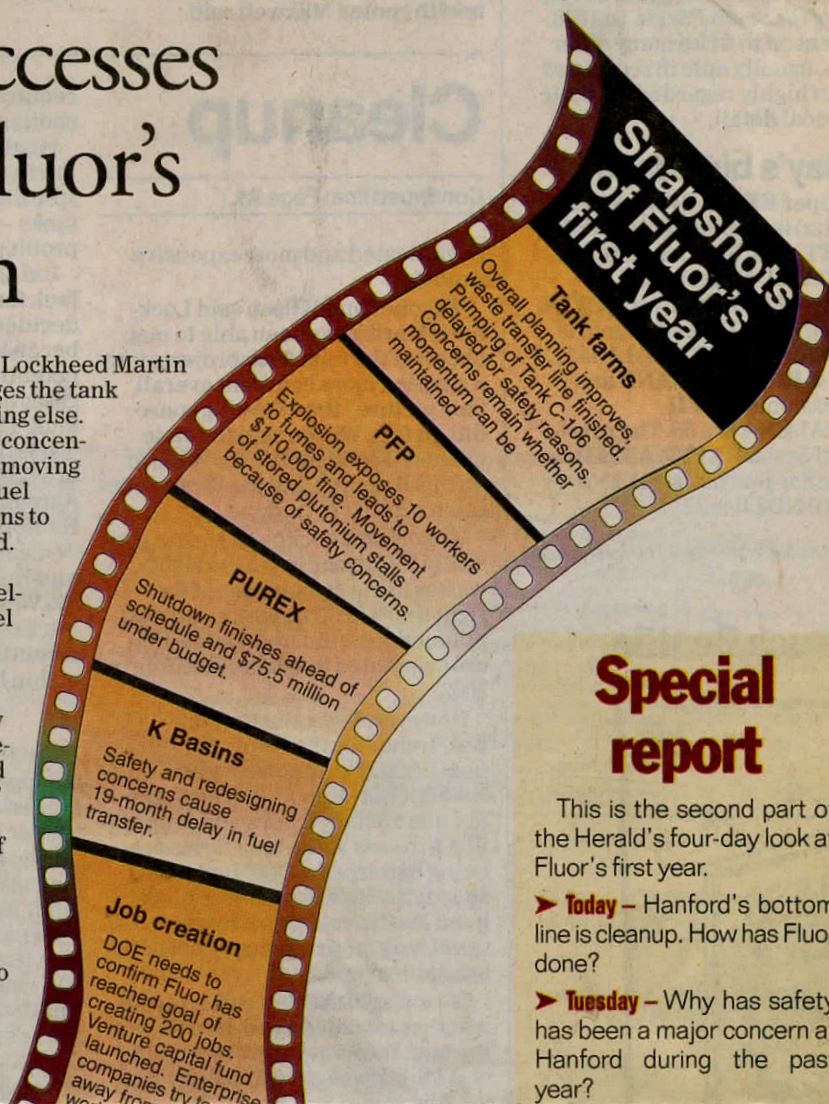
Even so, the federal and state agencies keeping a watch on Hanford believe Fluor's seven-company team might have a better grasp on many technical issues than its predecessor,

For example, Lockheed Martin Hanford manages the tank farms and nothing else. DE&S Hanford concentrates solely on moving spent nuclear fuel from the K Basins to central Hanford. And so on.

"I have the feeling Fluor Daniel and its subcontractors have a better understanding of how project management works and the need for it," said Mike Wilson, manager of the Ecology Department's nuclear waste transfer program.

But Fluor also is taking heat for delays in cleanup.

Some of the major



Special report

This is the second part of the Herald's four-day look at Fluor's first year.

► **Today** — Hanford's bottom line is cleanup. How has Fluor done?

► **Tuesday** — Why has safety been a major concern at Hanford during the past year?

10-7-97

Fluor's
1st year

Sketchy on safety

High-profile incidents overshadow progress

By JOHN STANG
Herald staff writer

Think of a baseball pitcher who strikes out 18 batters, but gives up three home runs and loses on opening day. Did he pitch a good game or a bad game?

Analyzing Fluor Daniel Hanford's safety record for its first year at Hanford poses a similar dilemma.

Injuries at Hanford have dropped significantly since Fluor took over the site on Oct. 1, 1996.

But a chemical tank exploded May 14 at the Plutonium Finishing Plant and exposed 10 workers to chemical fumes. So many safety flaws and errors showed up during investigations sparked by the explosion, it's likely to take until next spring to correct everything.

Fluor also has had a couple of other high-profile safety problems.

■ The Department of Energy rejected a proposed sitewide master safety plan prepared by Fluor as inadequate in January.

■ And in May and June, a rash of mobile crane accidents plagued Hanford.

Hanford Advisory Board members consequently view Fluor's safety record with skepticism.

"I think the jury is still out (on safety. Fluor has) talked big and has done so from day one. But I don't see it yet," said Dick Belsey, chairman of the advisory board's health and safety committee.

Please see **SAFETY**, Page A2 ►



Photo courtesy of the Department of Energy

Department of Energy investigator Reynaldo Bocanegra inspects a chemical tank that exploded May 14 at the Plutonium Finishing Plant. Ten workers were exposed to chemical fumes from the blast.

Statistics tell of improvements, troubles

By JOHN STANG
Herald staff writer

A review of Hanford statistics reveals safety improvements and problems during Fluor Daniel's first year of managing the site.

These include:

■ Accidents requiring more than first aid have dropped from 5.1 per 200,000 hours worked in 1996 to 3.09 accidents per 200,000 hours worked in 1997.

The average rate for all Department of Energy sites in 1995 and 1996 was 4.1 accidents per 200,000 hours worked.

The federal government uses the 200,000-hour standard because that is roughly how much 100 people would work in one year.

■ The number of cases resulting in people staying at home or returning to work in a limited capacity has dropped from 1.59 to 1.09 per 200,000 hours worked from 1996 to 1997. The rate for

industries roughly comparable to Hanford is 3.9, according to DOE.

■ In its last year, Westinghouse Hanford Co. averaged 6.1 cases per month of people picking up radioactive contamination, which usually is dealt with by scrubbing off the particles. In Fluor's first 11 months, that average dropped to 4.6 cases per month.

■ Chemical accidents are difficult to get a handle on.

Except for one month when Westinghouse collected eight accident reports, chemical accidents have fluctuated between one and five a month during both Westinghouse's last year and Fluor's first year — with no trend showing.

Despite 10 people being exposed to fumes, May's Plutonium Finishing Plant explosion is listed simply as one of three chemical accidents that month in Hanford's safety statistics.

Chemical exposures are harder to diagnose medically and to track statis-

tically than radiological exposures, which show up neatly on radiation counters, said Paul Kruger, DOE's director for environmental safety and health at Hanford.

And in the past, Hanford has not tracked chemical safety as closely as it has kept an eye on radiological safety.

Kruger speculated chemical exposures and accidents could increase because Hanford is doing more and more field work — creating more chances for people to be exposed to chemicals.

■ Westinghouse's last year tallied seven incidents in which a worker suffered an electrical shock or came close to it. Fluor tallied nine such incidents in its first 11 months.

■ Westinghouse averaged 15 safety-related occurrence reports a month in its last 11 months. Fluor's average has not been calculated yet, but indications are the numbers will go down.

Special report

This is the third part of the Herald's four-day look at Fluor's first year.

► **Today** — Why has safety been a major concern at Hanford during the past year?

► **Wednesday** — A year of massive job shuffling has created plenty of worker anxiety.

8 OCT. 97

Fluor's
1st year

Worker



anxiety

Employees face
new bosses,
benefit changes,
layoff threats

By JOHN STANG
Herald staff writer

When the ax fell in June, Dee Black was scared — and relieved.

For two years, the DynCorp industrial hygiene technician watched as Hanford co-workers were laid off, wondering when her turn would come.

With seven years at the federal site, the 45-year-old mother feared

for her job security as others disappeared with budget cuts and a massive reorganization of Hanford's work force after Fluor Daniel took over in late 1996.

Special report

This is the final part of the Herald's four-day look at Fluor's first year.

► **Today** — A year of massive job shuffling has created plenty of worker anxiety.

"It's very anxiety-provoking to live that way," Black said.

Then she was called into her supervisor's office and

told she would be laid off.

A nurse before working at Hanford, she managed to get an occupational medicine nursing job at Our Lady of Lourdes Health Center by August. Her anxiety was relieved.

"It feels good to be out of the (Hanford) system and away from all the uncertainty."

The past year has been topsy-turvy for Hanford's workers.

At least 8,500 people are not working for the same companies as they did a year ago.

Most employees of the three former Hanford contractors were split among 13 new companies



Fewer workers spread over wider area

The changing Hanford work force

Fluor "inside the fence" companies	Oct. 1996	Sept. 1997
Fluor Daniel Hanford	2,961	2,721
Lockheed Martin Hanford	791	675
Waste Management Hanford	673	582
Numatec Hanford	156	166
B&W Hanford	729	742
DE&S Hanford	321	297
DynCorp	404	364
Total	6,035	5,547
Enterprise companies	Oct. 1996	Sept. 1997
Fluor Daniel Northwest	1,308	1,096
Lockheed Martin Services	550	492
Waste Management Northwest	47	97
B&W Protec	179	170
SGN Eurisys	105	120
DE&S Northwest	45	83
Total	2,234	2,058
DOE, other Hanford prime contractors	Oct. 1996	Sept. 1997
DOE	524	518
Bechtel team	960	971
HEHF	124	95
Battelle-Northwest, Richland	3,422	3,300
Total, non-Fluor employees	5,030	4,884
Total, all employees	13,299	12,489

Figures come from several Hanford contractor sources

Herald/Sherry Emery

By JOHN STANG
Herald staff writer

Hanford's job juggling is difficult, if not impossible, to follow.

The bottom line is Westinghouse Hanford and two subcontractors employed 8,541 people during their final days in September 1996.

Today, that number hovers close to 7,605 people spread among 13 companies, according to a rough "apples-to-apples" comparison, drawn from various Hanford figures.

That's roughly a 900-person drop in the work force during the past year, including several hundred people who took retirement options.

It is too early to tell how future job cuts will unfold, said Hank Hatch, president of Fluor Daniel Hanford.

Charting how Westinghouse's former work force shifted and shrank in the past year is difficult because of several complexities.

The 7,605 people still working are split between seven core "inside-the-fence" companies and

six "outside-the-fence" enterprise companies.

Currently, 5,547 work "inside the fence" for the core Fluor team. And about 2,058 work in the six "outside-the-fence" companies.

"Inside the fence" is Hanford slang for the Fluor-managed companies working solely for DOE on Hanford cleanup — with all the protections and benefits of being federal contractors.

"Outside the fence" refers to the six "enterprise" companies. Although most of their work pertains to Hanford, they have to operate leaner and expand into the non-Hanford marketplace to ensure their long-term survival.

Clouding the job shuffling picture are retirements that took place, layoffs that occurred, new people arriving with new skills, workers shifting from inside the fence to the enterprise companies, employees shifting from Battelle-Northwest to the Fluor team, and different ways of counting workers.

And since part of the mission of the enterprise companies is to wean themselves from Hanford work, those six firms have been shifting people internally from Hanford jobs to new non-Hanford jobs. But most enterprise employees still work on Hanford projects.

■ **HAB:** Hanford Advisory Board says Fluor's communication is lacking. **Page A7.**

Basin/Northwest

Fluor must rehire whistleblowers

By JOHN STANG

Herald staff writer

The U.S. Department of Labor has ordered Fluor Daniel Northwest to reinstate five pipefitters who were laid off after they raised safety complaints last spring.

"This shows that a person should be able to speak his mind about safety without fear of reprisal," said Clyde Killen, one of the pipefitters.

Another pipefitter, Randall Walli, said: "It does show that the company was wrong."

However, the Labor Department didn't order Fluor to rehire two other pipefitters involved in the same controversy.

The controversy swirls around whether Fluor terminated seven pipefitters on one crew in retaliation in early June after that crew vehemently voiced safety concerns in a central Hanford pipe-laying project.

The laid-off workers filed a whistleblower discrimination complaint with the U.S. Department of Labor in early August.

In an order dated Monday, the

Labor Department told Fluor Northwest to:

■ Reinstate five pipefitters with back pay, plus \$10,000 each in compensatory damages. Fluor also was ordered to pay the workers' attorney's fees. The total for back pay, damages and fees is \$145,917.

■ Publicly acknowledge the workers' safety concerns were valid and they had the right to raise those concerns.

■ Forbid any reprisals or harassment of the reinstated workers.

Both sides have five days to file appeals with the Labor Department's chief administrative judge's office in Washington, D.C.

Tom Carpenter, attorney for the Government Accountability Project, a whistleblower advocacy group representing the pipefitters, said GAP will appeal the decision not to reinstate two of the workers.

Fluor Northwest has not decided yet if it will appeal, but officials indicated the company disagrees with some of the labor department conclusions.

"Hanford management likes to talk about safety, but then silences those who raise concerns," Carpenter said.

"The decision of the labor department is simply more evidence the safety culture at Hanford is broken."

In a written statement, Fluor Northwest said: "The workers were not laid off for raising safety concerns."

Instead, the workers were laid off because the project — installing a waste transfer pipe system in central Hanford — almost was done, and other pipefitters beside that crew were laid off, the statement said. Also, the number of construction workers has dropped at Hanford during the past year.

Fluor's statement said workers are encouraged to raise safety concerns. And the company said no one on the 16-moth pipeline project suffered an injury serious enough to take them off the job.

The dispute arose in May, when the pipefitting crew balked at participating in a hydraulic pressure test with a pipe valve they feared was unsafe.

They also complained about possible overexposures to X-rays from tests on pipe welds. And they voiced concerns about a decision on a

trench's safety classification being based on a phone description, not on an on-site inspection.

Then in June, five crew members — Killen, Walli, Terry Holbrook, Shane O'Leary and James Stull — were laid off. Two others, Pete Nicaio and Dan Phillips quit as a protest in support of the others, which is why the labor department did not order Fluor to rehire them.

The labor department noted six workers frequently worked overtime on a related crew two days after the layoffs, although Fluor said only three or four workers were needed at the time.

"The timing alone raises enough suspicions," Carpenter said.

Fluor Northwest said the workers were laid off under longtime practices in accordance with their union contract.

The reprisal charge was addressed in the collective bargaining agreement's grievance process, with no conclusion of retaliation, Fluor said.

Carpenter said Fluor "made that same case to the Labor Department and lost."

Advisory board knocks Fluor for 1st year flaws

By JOHN STANG

Herald staff writer

As Fluor Daniel reaches its one-year mark in charge of Hanford, an advisory board committee said the company hasn't done a good job communicating with the public and its workers.

On Tuesday, the Hanford Advisory Board's finance committee expressed its concerns with how Fluor and the Department of Energy have overseen work at Hanford.

The committee, which was being interviewed by DOE as part of a review of Fluor's contract, had several concerns:

■ Fluor does not communicate well with the public and its workers.

■ Employee morale is low.

■ A new lead contractor needs about two years to settle in at Hanford.

■ DOE shares much of the blame for Fluor's rocky first year.

Fluor and DOE are reviewing how well Hanford's new management structure and Fluor's 13-company team have worked during their first year, which ended Sept. 30.

DOE is conducting its own review, which Bob Rosselli, DOE assistant manager for science and technology at Hanford, described as a check to ensure Fluor's self-assessment is valid. DOE will collect some information independently of Fluor's self-review, examine the credibility of Fluor's information and evaluate Fluor's results, said Rosselli and Linda Bauer, DOE's assistant manager for environmental restoration at Hanford. They are in charge of the DOE review.

"From the employees' point of view, you busted up the whole *esprit de corps* when you busted them up. ... (An employee has to wonder) if your loyalty is to DynCorp, to Fluor Daniel or to your immediate supervisor."

— George Kyriazis, HAB vice chairman

DOE's and Fluor's reviews are supposed to be done late this month.

Bauer and Rosselli met with the Hanford Advisory Board's financial affairs committee — dubbed the "dollars and sense" committee — as part of the interviews.

Some specific criticisms by committee members included:

■ Worker complaints received by committee members.

These included workers confused by being shifted from subcontractor to subcontractor and worries that not enough work will materialize in the future to keep people employed.

Last year's breakup of three companies into 13 new firms is a factor, said George Kyriazis, the advisory board's vice chairman and Kennewick's representative.

"From the employees' point of view, you busted up the whole *esprit de corps* when you busted them up. ... (An employee has to wonder) if your

loyalty is to DynCorp, to Fluor Daniel or to your immediate supervisor," Kyriazis said.

■ Fluor not doing enough homework on Hanford's work force and general culture before it took over in late 1996, said Jerry Pollett, the committee's chairman and Heart of America's representative.

■ Fluor does not communicate well about its success or problems it faces, said Bob Larson, representing the Benton-Franklin Regional Council.

■ The public has problems seeing if and how Fluor is tackling its problems.

Harold Heacock, representing the Tri-City Industrial Development Council, pointed to a recent decision to delay moving spent nuclear fuel from the K Basins to central Hanford. While that decision has been justified for safety reasons, it is expected to add tens of millions of dollars to the costs.

Hanford's overall budget is not expected to increase. So the question arises: Which Hanford programs will be cut to transfer money for the K Basins increased price tag?

Fluor and its subcontractors are the key technical players to make this major decision. "We need (Fluor) to pull this together. Maybe they are. But it's not visible to the outside," Heacock said.

■ Several committee members wanted DOE to take a hard look at how overhead costs are calculated. Tracking overhead costs has been an ongoing issue Fluor, DOE and their critics have been wrestling with.

DOE safety official calls PFP explosion scary

By LES BLUMENTHAL

Herald Washington, D.C., bureau

WASHINGTON — After four years as the Department of Energy's assistant secretary of environment, safety and health, Tara O'Toole thought she was making good progress. Then came the explosion in May in a chemical tank at Hanford's Plutonium Finishing Plant.

"That was the scariest thing that has happened since I've been at the depart-

ment," O'Toole said Wednesday. And she said the explosion pointed out a similar or worse incident could occur at a DOE site.

Asked whether the Hanford explosion was a setback in her effort to improve safety throughout the DOE complex or a marker that showed the department still has a ways to go, O'Toole responded, "Yes, yes, yes."

"I think we are headed in the right direction. But I hope we make enough progress fast enough."

O'Toole, who resigns her post at the end

of this week, said when she joined the department there was an internal debate over whether she should even have authority to shut down an unsafe site or if she needed to give 60 days notice before conducting an inspection.

"We've come a long way from there," she said. "The performance has gotten better, but it is still lumpy-bumpy."

O'Toole said workers and contractors — under pressure from the department — have become increasingly aware of safety and health issues, and she said new DOE

contracts are helping to hold "their feet to the fire."

While the chemical explosion at Hanford showed how far the department still has to go, O'Toole said the work at the K Basins where deteriorating spent nuclear fuel is being stored near the Columbia River shows how far the department has come.

"It's a mixed bag (at Hanford)."

O'Toole said the department has made remarkable progress in dealing with problems at the K Basins, including dras-

tically reducing radiation exposure levels from 9-12 millirems per hour to 2-3 millirems per hour.

A millirem is a measurement used to estimate the damage to humans from radiation. Everyone in the United States is exposed to an annual average of 100 millirems from natural sources such as the sun. A chest X-ray results in about 20 millirems.

Please see PFP, Page A2 ▶

Fluor, guard union talks stalled

By JOHN STANG
Herald staff writer

Talks between Fluor Daniel Hanford and security forces at the nuclear reservation have hit a brick wall, launching plans for federal mediation.

Fluor sent its last best offer two weeks ago to the Hanford Guards Union Local 21.

Union members voted Thursday to reject that offer, said Jeff Carlyle, local president, leading to informational picket lines Friday on Stevens Drive, the intersection at Highway 240 and Route 10 and at the Yakima Barricade in northern Hanford.

During Thursday's balloting, more than 80 percent of the union members approved a strike authorization — allowing the local's leaders to call for a strike if a settlement isn't reached.

But Carlyle said the union hopes the federal mediator will help resolve the disputed issues without a walkout.

Mike Yates, Fluor Daniel Hanford's executive vice president, echoed that sentiment.

"It is important to note we have successfully concluded negotiations this past year with our four other collective bargaining units which represent nearly 3,000 site employees," Yates said in a written statement.

"It is Fluor Daniel Hanford's intention and expectation that we will be continue to negotiate until agreement is reached," he said.



Larry SeniRajjankul of West Richland stands in line Friday with Fluor Daniel Hanford workers and family in an effort to help win concessions in the new labor contract for Hanford Security Guards.

New archives for radiation exposure opens in Spokane

By The Associated Press

SPOKANE — Indian drumming accompanied the opening Saturday of a new archive that will collect data from anyone in the world who may have been exposed to radiation.

The new archive at Gonzaga University will collect the health histories of people from around the world to create a database for future research.

It expands a present archive of people who believe their health was damaged by radiation from Hanford.

"No two words or phrases are scarier to Americans than cancer and radiation contamination," U.S.

Radiation archive workshop planned

By the Herald staff

A workshop on the Hanford Health Information Archives will be from 6 to 8 p.m. Tuesday in Pasco.

An archive has been created at Gonzaga University in Spokane to collect health, family and lifestyle

information on those who lived downwind from Hanford during radioactive releases.

The workshop will help people prepare their information to contribute to the archive.

It will be held at the Doubletree Hotel, 2525 N. 20th Ave.

For more information, call 800-522-4446.

Rep. George Nethercutt, R-Wash., said at the ceremony dedicating the archives.

Many of the people who attended

the opening were "downwinders," who grew up near Hanford during the 1940s and 1950s, the years of the greatest radiation releases.

Fluor contributions scrutinized

Hanford contract came on heels of donation

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — As Raytheon's corporate jet sat on standby in Boston the afternoon of Aug. 5, 1996, top officials at Department of Energy headquarters scammed to put the final touches on their announcement of a new \$5 billion management contract at Hanford.

Raytheon, a \$12 billion-a-year engineering and defense firm known for its Patriot missile, was considered by many the front runner in the competition for one of the largest and most important of the

department's contracts. For Raytheon, it represented an opportunity to step into the big leagues, and big bucks, of Energy Department contracting.

And Raytheon's corporate executives believed they had the inside track. So they wanted to be on hand the next morning for the announcement, even if it meant an all-night, cross-country flight to Hanford.

But Raytheon's jet remained on the ground. DOE, in a move that sur-

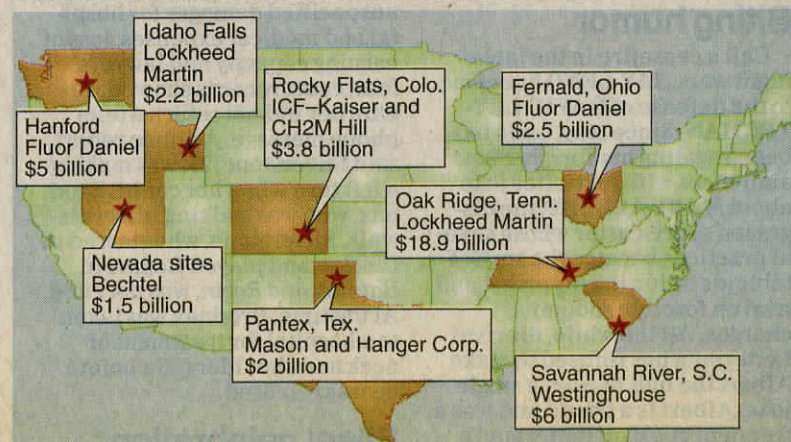
prised many, awarded the Hanford contract to Fluor Daniel.

Now, a year later, a Senate committee is investigating whether political connections and campaign contributions may have eased the way for Fluor Daniel to win the Hanford contract. Of the more than 20 boxes of materials the department turned over to the Senate committee, at least five include materials from Hanford.

While the focus has been on Fluor Daniel and a series of smaller contracts held by a Massachusetts-based

Please see FLUOR, Page A2 ▶

Value of contracts at DOE nuclear sites



Herald/Sherry Emery

State keeps pressure on Hanford for tank cleanup

By JOHN STANG

Herald staff writer

The state has refused to extend the deadline to start pumping radioactive wastes from Hanford's Tank C-106 by a year.

But if Hanford can begin the pumping by November 1998, the Washington Department of Ecology doesn't plan to levy a fine for violating the Tri-Party Agreement, which governs Hanford cleanup.

The state wants to keep the current deadline — October 1997 — in place to use as a hammer against the Department of Energy if it lags on meeting the November 1998 target, said Mike Wilson, Ecology Department director of nuclear waste programs.

This hammer — the potential fine — could run up to \$10,000 a week.

Hanford has 177 underground tanks containing 55 million gallons of radioactive wastes.

One of the most troublesome is

53-year-old Tank C-106, which contains at least 250,000 gallons of high-level radioactive waste that spontaneously and continually heats up.

That heat threatens to damage the tank, which could release radioactive contamination into the air or ground.

Consequently, 10,000 gallons of cooling water are added every six weeks. That adds to the volume of the liquid wastes and increases the threat of a leak that could send contaminants seeping toward the ground water.

Tank C-106 is not one of Hanford's 67 suspected leaking tanks.

Hanford and the state want to pump out the tank — possibly splitting the volume between two tanks — to reduce the heat.

But after Fluor Daniel Hanford and Lockheed Martin Hanford Co. took over the site and the tank farms last year from Westinghouse Hanford Co., they reviewed the pumping plan.

And Lockheed Martin decided more study was needed because the

hot wastes have the potential to release flammable gases as they enter a receiving tank.

And that prompted DOE and the contractors to request an extension in the Tri-Party Agreement deadline until November 1998 for more study and planning.

The Ecology Department does not want to extend the original deadline because it believes Hanford could have anticipated the problem and addressed it earlier, Wilson said.

However, the state acknowledges the safety concerns will delay the pumping, he said.

But the state wants to keep up the pressure so Hanford does not let this timetable slide more.

"The Department of Energy and its contractors have taken an inordinate amount of time to begin waste removal from this unsafe tank. The sooner we can defuse this situation, the better," said Ecology Department Director Tom Fitzsimmons in a news release.

Fluor seeks bids to take over training of workers

By JOHN STANG

Herald staff writer

Fluor Daniel Hanford is seeking bidders to take over worker training for the site.

It's Hanford's latest move to transfer jobs and workers to non-Hanford firms — a process that's been dubbed "outsourcing."

Fluor plans to select a bidder by late December to provide training services to Hanford workers after March.

Right now, Hanford trainers provide classes in a wide range of industrial and nuclear related topics — from how to put on radiation equipment to how to climb scaffolding safely.

Officials think that transferring training and other services to offsite companies can save money by avoiding Hanford's high overhead costs.

The idea is that an outside company will also seek other non-Hanford clients, spreading out its operating costs and helping wean

the Tri-City economy from its dependence on the nuclear reservation.

The proposed contract would be for three years with two one-year renewal options.

"Outsourcing" worker training services will affect 20 to 22 Fluor employees.

Any company bidding on the contract is required to offer jobs to those existing workers at their current salaries, said Fluor spokesman Craig Kuhlman. If an employee rejects that job offer, Fluor will try to place that worker somewhere else at Hanford.

Most of the current training staff belongs to a fledgling Tri-City company called Three Rivers Associates. Overall, it has about 40 employees, said Pat Gardner, a senior engineer and analyst who will be outsourced from Fluor. Gardner is president of the new company.

Three Rivers is in talks with other firms to create a team to bid on the training services contract, Gardner said. He declined to name the prospective partners until discussions are complete.

Fluor's request for proposals notes that the need for technical training at Hanford is expected to decrease over the years as the site's work force shrinks.

Gardner acknowledged Three Rivers faces some risk from shrinking demand for training at Hanford, but said the new company can improve its chances for survival by finding partners.

"Are we anxious? You bet. Are we excited? You bet. Are we confident? You bet," Gardner said.

DOE approves revised Fluor safety plan

By JOHN STANG

Herald staff writer

The Department of Energy has approved Fluor Daniel's revised master safety plan for Hanford.

This is the second attempt at mapping out a sitewide plan. DOE rejected Fluor's first plan last January.

Work at Hanford is split among a growing number of companies — each with different safety policies. So, DOE wanted a unified set of safety plans and procedures.

Fluor delivered its proposed plan

to DOE in late 1996. But DOE said the first version was too vague and did not sufficiently coordinate all the various policies into one plan.

Then Fluor and DOE officials worked closely to put together the revised plan.

"This was a tremendous opportunity for the contractors and DOE to partner and come to a clear and concise view of what the (safety plan) had to be," said Dave Jackson, Fluor's director of occupational safety and health.

"It's been kind of a bridge builder."

Fluor and DOE each learned what

the other's expectations are on how safety should be managed, he said.

With the new plan in place, the next step will be to study how much needs to be done to bring safety programs at individual departments and facilities up to the new master plan's standards.

DOE and Fluor plan to complete all those studies next year.

Then they will begin putting the safety measures in place, hoping to have half the changes made next year and finish up the work in 1999.

The project with the first priority to meet the new safety standards is the

removal of the spent nuclear fuel from the K Basins to central Hanford.

That removal is to begin late next year or in 1999. That program's safety plan measures are supposed to be done by May 1998.

Firms may join forces for fuel operations

By DON McMANMAN

Herald staff writer

The parent company of a Richland nuclear fuel manufacturer and the parent of a company wanting to handle Hanford tank waste announced Wednesday that they were discussing a partial merger.

It wouldn't negatively affect current Mid-Columbia employment, their spokesmen said.

BNFL, parent of BNFL Inc., and Siemens, parent of Siemens Power Corp., hope to complete talks within a few months, said Wayne Baker, a Siemens spokesman in Richland.

The two firms envision combining only their commercial nuclear reactor uranium fuel operations, said David Campbell, a Washington, D.C., spokesman for BNFL.

The fuel company could stand alone, jointly owned by Siemens and BNFL, Campbell said.

Other endeavors of both companies would not be affected, he said.

BNFL is based in the United Kingdom, Siemens in Germany.

Here is what the companies do in the Mid-Columbia:

■ BNFL Inc. leads one of two teams hoping to be selected by the Department of Energy to build plants to turn Hanford tank waste into glass, a process called vitrification.

The contract would be worth at least \$4 billion.

The BNFL vitrification bid would not be affected by talks between the two companies.

■ Siemens Power Corp. and BNFL Inc. are direct competitors in the campaign to produce commercial nuclear fuel by mixing uranium and bomb-grade plutonium — creating mixed-oxide fuel, or MOX.

The Department of Energy, which is responsible for disposing of the surplus bomb-grade plutonium, has asked for proposals from both teams.

Siemens leads a consortium that includes the Washington Public Power Supply System's plant north of Richland. WPPSS officials want to burn the mixed fuel in their reactor, hoping it will be cheaper than straight uranium.

Fluor signs contracts with 3 enterprise firms

By JOHN STANG

Herald staff writer

Three of Hanford's six enterprise companies now have formal contracts — a year after they were created.

Fluor Daniel Hanford — with the Department of Energy's approval — has signed contracts with SGN Eurisys Services Corp., Waste Management Federal Services Northwest Operations and B&W Protec in recent weeks, said officials with Fluor and DOE.

That leaves contracts still unsigned with Fluor Daniel Northwest, Lockheed Martin Services and DE&S Northwest.

John Wagoner, DOE's Hanford manager, and Hank Hatch, Fluor Hanford's president, discussed the enterprise firms Friday with a Han-

ford Advisory Board financial affairs committee. DOE cleanup czar Al Alm also participated by a televideo linkup.

When Fluor's team took over Hanford last year, it spun off about 2,000 workers into six "enterprise" companies.

The idea is the enterprise companies are guaranteed a certain amount of Hanford work while they try to cultivate non-Hanford businesses and grow independent of Hanford.

For the past year, these firms have worked under agreements — but not formal contracts — with Fluor Hanford. The exception is Fluor Northwest, which instead has agreements with Fluor Hanford's major subcontractors to avoid a conflict of interest.

The time to nail down formal contracts has "gone way too long," Wag-

oner said. But he said DOE and Fluor are wrestling with extremely complicated contracts governing amounts of work, reasonable costs to taxpayers and other issues.

A point of contention has been DOE wanting to hold the enterprise firms to two-year contracts as originally planned, with Fluor wanting to expand that to three years to give each company more time to build itself up.

DOE and Fluor are sticking with the two-year contracts, but with three one-year options to renew. At the end of the second year, Fluor must decide if it will renew each contract, and if each company will have to compete with other firms on some Hanford work.

Hanford board members said enterprise employees suffer low morale because they have not known how long their firms' con-

tracts will last. With Fluor Hanford able to renew contracts, the workers have good chances of keeping their firms within the Hanford fold by doing their jobs well, board members said.

Board member Bob Larson, representing the Benton-Franklin Regional Council, said it would not be cost-effective for Fluor to get rid of enterprise companies because it would take one or two years to get a replacement firm up to speed.

Wagoner is unsure when the contracts will be nailed down on Fluor Northwest, Lockheed Martin Services and DE&S Northwest.

Also Friday, the advisory committee:

■ Heard Alm, Wagoner and Hatch say they are looking at speeding the cleanup and dismantling of the Plutonium Finishing Plant.

Currently, DOE plans to clean up

the PFP by 2011, remove four tons of scrap plutonium by 2025, and demolish PFP's approximately 45 buildings and facilities by 2038.

DOE is thinking about accelerating the work to be done by 2006. A key factor would be if the plutonium can be shipped to a Savannah River storage site.

Currently, DOE expects to spend \$800 million on the PFP between now and 2006, and the acceleration would add \$180 million to that figure. But DOE also estimates the acceleration would save \$1.4 billion by 2038.

Acceleration also would eliminate the PFP's numerous safety concerns, Wagoner said.

But George Kyriazis, the Hanford board's vice chairman, noted DOE already operates under tight bud-

gets, and Congress appears unlikely to add \$180 million over the next nine years.

Wagoner said DOE hopes to decide in 1998 whether to speed up work at the PFP.

■ Discussed the difficulty of coming up with a starting figure that Fluor can base cost savings calculations on. Although it is not an enforceable contractual clause, Fluor has a goal of trimming \$1 billion in costs over five years.

But it's difficult to determine savings because Fluor inherited a 1997 budget from previous contractor Westinghouse Hanford, and Fluor has a different administrative approach. The fiscal 1998 budget will be the first that Fluor has played a significant role in putting together.

Hearings on Hanford waste swap this week

By the Herald staff

Four public briefings and discussions on what to do with the nation's and Hanford's nuclear wastes are scheduled for next week across the Northwest.

Much of the discussion is expected to focus on preliminary ideas on how radioactive wastes could be shifted among Department of Energy sites.

Each of the four sessions will include 5 p.m. briefings and video displays on the issues — followed by group discussions at 7 p.m.

The sessions will be as follows:

■ Today at the Benson Hotel, 309 S.W. Broadway, Portland.

■ Tuesday at the Richland Doubletree Hotel.

■ Wednesday at the Ridpath Hotel, West 515 Sprague St., Spokane.

■ Thursday at the Center for Urban Horticulture, 3501 N.E. 41st St., Seattle.

DOE's contractors have written a technical report on their recommendations on how wastes could be swapped among sites.

Briefly

Battelle gives \$50,000 to Tri-Cities Prep

Battelle has donated \$50,000 along with a pledge to help Tri-Cities Prep equip its math and science lab.

John Bagley, education chair for the Battelle's distributions committee, presented the check at Wednesday's groundbreaking festivities for the Catholic high school.

School officials broke ground last week on the school's \$1 million first phase, which will include four classrooms, a gymnasium shell and a temporary administrative complex on a 28-acre site on Road 100/Broadmoor Boulevard.

The school is expected to open next fall with about 50 students. Future phases will add more classrooms, a library, computer and science labs, a chapel and sports facilities.

At full enrollment, Tri-Cities Prep will be able to serve 400 to 500 students.

The school is independently owned by a lay board of directors, but to maintain its Catholic affiliation, it works closely with the Spokane Diocese, in which it is located, as well as the Yakima Diocese, which includes a large portion of the Tri-Cities.

HANFORD CLEANUP

Your comments are requested on ...

Phase 1 Feasibility Study for the Canyon Disposition Initiative (221-U Facility)

The U.S. Department of Energy, U.S. Environmental Protection Agency and Washington State Department of Ecology are seeking public comment on the draft Phase 1 Feasibility Study for the Canyon Disposition Initiative (221-U Facility) (DOE/RL-97-11). Comments on the study will be used by the decision makers to determine which alternatives are viable for further analysis.

Five main processing facilities (also known as canyons) located in the 200 Area (221-U Facility, B-Plant, T-Plant, Plutonium Uranium Extraction Facility, and Reduction Oxidation Plant) of the Hanford site will eventually require decontamination and decommissioning as part of the site cleanup program. The cleanup process for each canyon includes: 1) transition phase; 2) surveillance and maintenance; and 3) disposition. The study discusses alternatives for disposition that consider removing the canyons, leaving all or part of the facilities in place, and identifying beneficial uses for the facilities. The input received on the study will provide decision makers sufficient information on cleanup alternatives for the disposition of the 221-U Facility (the first canyon studied for final disposition).

Public comments will be accepted from October 20 through November 18, 1997.

For more information please contact:

John P. Sands
U.S. Department of Energy
P.O. Box 550 (HO-12)
Richland, Washington 99352
(509) 372-2282

OR CALL TOLL FREE:

Hanford Cleanup Line

1-800-321-2008

PNNL scientists study electricity-cancer link

By ANNETTE CARY

Herald staff writer

Scientists at Pacific Northwest National Laboratory in Richland are studying whether one hallmark of modern life — electricity — might be linked to another — the rapid rise in breast cancer.

Studies are under way that may help prove or disprove what is only a hypothesis now: That two byproducts of electricity might interfere with the human body's delicately balanced system of hormones.

There are indications the invisible force fields surrounding electrical appliances and the convenience of lights at night may interfere with the human body's ability to protect itself against breast cancer.

Richland scientists are testing the hypothesis both in laboratory experiments and a field study to measure the light and the strength of electrical and magnetic fields that 800 women with breast cancer are exposed to at night.

At the center of questions in the studies is melatonin — a little-understood hormone produced by the pineal gland in the center of the brain.

"Disruption of the pineal function might be implicated in the risk of breast cancer," said Richard Stevens, a scientist at the Richland laboratory.

That disruption could come from tampering with nature's cycle of light and dark. During the dark of night the gland secretes melatonin, and levels of that hormone in the blood rise. When the sun comes up — or the lights are flicked on — production slows or stops.

Scientists do not understand exactly what melatonin does in the body, but they believe it may slow the production of estrogen. And they know that higher lifetime levels of estrogen have been linked



Photo courtesy Pacific Northwest National Laboratory

Richard Stevens, right, a scientist at Pacific Northwest National Laboratory, and Will Chrisler, a technical specialist, work on an experiment to see whether electricity has an effect on breast cancer. In the experiment, cancer cells mixed with a hormone are exposed to electrical and magnetic fields.

with higher levels of breast cancer.

Stevens proposed the theory in 1987.

He's now working to duplicate the success of experiments at three other laboratories stemming from that theory.

Other laboratories have found when melatonin in the amounts found in human blood at night is added to cancer cells in a petri dish, the growth of the cells slows.

Taken a step further, the experiment indicates the effect of electrical and magnetic fields on the protective properties of melatonin. Expose the mixture of cancer cells and melatonin to strong enough fields and the cancer cells begin to grow again.

Stevens is using a 2 milligauss field, a typical exposure for a person not standing near any appliance, and a 12 milligauss field, equivalent to standing a foot from a

dishwasher. Studies so far have shown no affect at the lower levels, but a resurgence of cancer cell growth at the high levels.

So far, scientists have been unable to assemble all the pieces of the puzzle. For instance, they know that giving rats melatonin lowers their risk of cancer. But they don't know the same is true for humans.

But another piece of the puzzle may fall into place this winter with the completion of a four-year study by the Richland laboratory and Fred Hutchinson Cancer Research Center in Seattle.

Stevens and Scott Davis, a Seattle researcher, were awarded \$3.5 million by the National Cancer Institute to measure and monitor light and electric and magnetic fields in the bedrooms of 800 Seattle women recently diagnosed with breast cancer.

Those measurements, taken over

HBO movie chronicles breast cancer research

By the Herald staff

When eight women living with breast cancer set out to find the causes of their disease in a documentary film, their search took them to Pacific Northwest National Laboratory in Richland.

The feature-length documentary, now being shown on HBO, includes the work of Richland scientist Richard Stevens on whether electricity may be responsible for the increase in breast cancer in industrialized nations.

Rachel's Daughters: Searching for the Causes of Breast Cancer

48 hours, will be compared with the measurements of bedrooms of 800 randomly chosen women without breast cancer.

The study also will gather information on participants to identify other factors that could contribute to an increased risk of cancer and influence the research results.

Richland scientists also are working on another study paid for with \$2 million from the National Institute of Environmental Health Sciences to see if results of an earlier German study can be reproduced under carefully controlled conditions at the Richland lab.

The German study gave rats cancer, then exposed some to magnetic fields. Those exposed to the fields grew more tumors than those not exposed.

The Richland study is exposing the rats to 1 gauss fields, as the Germans did, and to 5 gauss fields.

looks at whether electric lights and electric and magnetic fields may contribute to the risk of breast cancer.

It also looks at nutrition, pesticides, hormones and radiation.

"The film deals with a tough subject — breast cancer and its impact on women's lives," Stevens said.

"In addition, the film presents new ideas on possible environmental causes of breast cancer which are speculative, but the science is sound and not overstated."

The film can be seen at 6 p.m. Oct. 28 on HBO.

"If some is bad, is more worse?" asked Richland scientist Larry Anderson.

The results of all three studies could get scientists closer to answering the question of why breast cancer is a disease of modern life, Stevens said.

Doctors know women in primitive societies have a five times lower risk of developing breast cancer than women in the United States. Some of that can be attributed to factors such as giving birth earlier in adulthood in primitive society, but scientists can't fully explain the different rates.

What scientists know now about the possible link between the byproducts of electricity and breast cancer is "sufficient evidence to bind it over for a trial," Stevens said, using a courtroom analogy. "But it's not nearly enough evidence to render a verdict."

By JOHN STANG

Herald staff writer

Safety reviews done since May's Plutonium Finishing Plant explosion have produced greater worries and a closer look at a possibly leaking underground tank containing plutonium-laced sludge at the same complex.

Last week, the Department of Energy declared an "Unreviewed Safety Question" exists with a former settling tank tucked into a corner of the PFP complex.

The declaration means Hanford must verify if unsafe conditions exist and what follow-up measures must be taken.

Studies will include trying to verify if the tank actually is leaking, how much plutonium is in it and if it is safe even to work on the tank.

A preliminary rough estimate indicates the cleanup could cost as much as \$3 million.

DOE's best estimate is the tank contains 26.8 kilograms — or almost 59 pounds — of plutonium. However, there could be as much as 75 kilograms, or 165 pounds, Hanford officials said.

The only other unreviewed safety question pending at the PFP is Tank A-109, the chemical tank that exploded May 14, prompting extensive remedial work and a safety review of Hanford's waste storage.

Hanford PFP tank causing concern

Few answers in Hanford waste swap meeting

By JOHN STANG

Herald staff writer

No real answers, or even solid stances, showed up during a Tuesday public discussion on a preliminary Department of Energy concept on transferring radioactive wastes among its sites.

Instead, just questions popped up. And observations. And broad issues to ponder.

About 100 people attended the meeting in Richland, the second of four Northwest public workshops being held on the matter by the League of Women Voters.

The third will be this evening in Spokane, and the fourth is set for Thursday in Seattle.

The workshops are prompted by DOE considering transferring wastes among its sites to help its plans to clean up its smaller sites by 2006. The larger sites, such as Hanford, would still need years of cleanup work beyond 2006 under this plan.

A report by various site contractors to DOE claims DOE could save at least \$24 billion over the next few decades by adopting the report's recommendations on transferring wastes. But that report does not address political, transportation, and public feedback issues.

If all of the recommendations are accepted, Hanford could receive several hundred thousand cubic yards of low-level radioactive wastes from other DOE sites, and sever-

al hundred cubic yards of high-level wastes. "When you look at the maps, you notice that Hanford is where (most) the arrows are pointed to," said Todd Martin, staff researcher for the Hanford Education Action League.

On the other hand, one scenario has Hanford sending its highly radioactive strontium and cesium to the Idaho National Engineering and Environmental Laboratory, which would drastically reduce the overall amount of radioactivity at Hanford.

No one theme dominated Tuesday's discussions. But some themes popped up, including:

■ No overwhelming stance was taken on whether Hanford should accept other sites'

wastes. This prospect was not embraced, but it was not rejected either.

Questions were raised on whether extra federal money would accompany any imported wastes. And questions were raised on whether transferring wastes would be financially feasible under the tight DOE budgets expected in the next several years.

■ The Northwest needs to talk directly on other regions on this issue.

Transferring wastes between sites is being discussed in individual regions, but DOE is undecided how to best tackle this discussion nationwide.

Several people said a universally accepted master plan on transferring wastes will be impossible. But they also said DOE needs to

earn the trust of states and communities by tackling a nationwide discussion.

■ Communities around some DOE sites believe their wastes will be automatically shipped elsewhere, regardless of any national talks.

Beverly Gattis, representing an activist group near Texas' Pantex weapons plant, said people in that area assume that site's wastes automatically will go to Hanford or to a repository scheduled to open in 1998 in New Mexico.

Doug Mercer, a University of Washington graduate student studying DOE's decision processes, said a similar attitude exists at Colorado's Rocky Flats plant.

Hanford budget coming in focus

By JOHN STANG

Herald staff writer

Hanford's budget picture came into sharper focus Friday when a congressional conference committee added \$5 million to one project and designated \$115 million for another key part of cleanup.

The \$5 million is extra money to "cocoon" Hanford's closed reactors — and could possibly head off some predicted layoffs at Bechtel Hanford Inc.

■ **HANFORD:** State health department suggests an outside agency oversee Hanford safety. Page A3.

The \$115 million is the joint House-Senate committee's recommendation on what to set aside for Hanford's privatized tank waste glassification project. The number drew mixed reviews from prospective contractors for the job.

The \$115 million is a compromise. The House of Representatives had approved \$70 million and the Senate \$190 million.

Contractor will fight whistleblower lawsuit

A former Hanford contractor is denying the claims of whistleblower Inez Austin, who says Westinghouse Hanford Co. wrongfully fired her last year.

Austin, 47, who had been a tank-farm supervisor, filed a lawsuit against Westinghouse in September in Benton County Superior Court.

Westinghouse responded to the suit earlier this month. The response simply denies Austin's allegations and does not elaborate.

Attorneys for Westinghouse refuse to discuss the case outside of court.

While Austin says she was fired from her job in February 1996, Westinghouse maintains she quit by walking off the job and refusing to apply for a new one once the tank farm had been reorganized.

Austin also alleges that while she was a Westinghouse employee, she was repeatedly harassed for raising safety concerns. She also says she was given work far below her skill level.

A court date has not yet been set.

No egg timers at state or DOE

Five months and 10 days after the May 14 explosion at the Hanford Plutonium Finishing Plant, the state Department of Health issued a report that said the Department of Energy was too slow in notifying emergency response agencies.

"They need to take steps to make sure it doesn't happen again," said State Health Officer Dr. Mimi Fields.

"If there had been a release of radioactivity from the explosion, Richland residents would have been exposed before any offsite agency could have warned them.

So, it took DOE 180 minutes to discover it had an emergency.

And 149 days to decide that's too slow.

Richland meeting about Hanford history

A Department of Energy public meeting to discuss Hanford historical and cultural resource issues is scheduled from 7 to 9 p.m. Wednesday at the Federal Building in Richland.

The discussion topics include sorting and preserving historical items, protecting American Indian artifacts, and future activities in these fields.

Hanford 242-A Evaporator removes fluids from underground waste tanks

By the Herald staff

Hanford's 242-A Evaporator recently completed on schedule a run that removed 651,000 gallons of fluids from its underground radioactive waste tanks.

Central Hanford has 177 underground tanks that had been filled with more than 54 million gallons of

liquid radioactive wastes.

The evaporator's purpose is to remove water and other fluids from the wastes to decrease the wastes' overall volume.

It essentially evaporates out the water, and sends the more concentrated wastes back to the tanks in smaller volumes.

Meanwhile, the removed water

and fluids have been sent to the Effluent Treatment Facility for additional purification.

Currently, about 53.9 million gallons of high-level radioactive wastes remain in the tanks, according to a Hanford news release.

Waste Management Federal Services of Hanford is the Fluor Daniel subcontractor in charge of this project.

Murray examines Hanford job issue

By JOHN STANG

Herald staff writer

U.S. Sen. Patty Murray will lead a look into making sure work that can be done at Hanford stays at Hanford.

On Wednesday, Murray met with other state congressional leaders and Department of Energy officials in Washington, D.C., to talk about a problem brought up by Hanford unions.

The meeting was sparked by a concern that 50 to 150 jobs making elements of nuclear fuel canisters could be shifted to Portland.

A "working group" — led by Murray — will be formed to tackle this issue. The group's makeup and timetable are yet undetermined — other than Hanford's union and nonunion workers will be represented, according to Murray's staff.

The unions contend DOE is pushing to send work to companies outside of Hanford in violation of the site's main labor contract with Fluor Daniel Hanford.

Fluor and DOE contend that contract is being honored.

While union dissatisfaction has been growing, the latest complaint focuses on manufacturing:

■ "Multi-Canister overpacks" — essentially long canisters to hold 2,300 tons of spent nuclear fuel to be removed from the K Basins. Four hundred are to be manufactured by 2000, with the first five due in May 1998. They will be made in suburban Portland, and the unions concede they don't have to be made at Hanford.

■ "MCO baskets" — tubelike frameworks to hold the fuel inside the overpacks. Five or six baskets would fit inside of each overpack. The first 30 are due by May 1998, with 2,200 to be built by 2000. The

Please see HANFORD, Page A2 ►

K Basins leak ruled out in rising tritium level

By JOHN STANG
Herald staff writer

Hanford scientists have tentatively ruled out a leak from the K Basins as the cause of a fivefold increase in the tritium level in nearby ground water, but the scientists admit they aren't sure where the contamination is coming from.

The dramatic jump in radioactive contamination in a monitoring well a half-mile from the Columbia River was discovered in September.

No action has been taken to stop the contaminants from seeping toward the Columbia River other than increasing monitoring efforts. But the problem illustrates the need to remove the highly radioactive fuel from the K Basins as fast as possible, said Charles Hansen, the Department of Energy's assistant manager for waste management.

K East and K West Basins are two huge indoor pools holding 2,300 tons of spent nuclear fuel that is to be moved to central Hanford by 2001. K East Basin leaked in the 1970s and in 1993.

The monitoring well is one of several

between K East Basin and the Columbia River, and is about 50 feet north of K East Basin. None of the other wells has shown a similar increase, Hansen said.

DE&S Hanford, the company in charge of moving the spent fuel, recorded readings from the well in September showing tritium radiation of 400,000 picocuries per liter — five times the normal level of 80,000 picocuries for that well.

The U.S. Environmental Protection Agency's drinking water standard is 20,000 picocuries per liter or less.

By comparison, water inside the K Basins

has about 3 million picocuries of tritium.

DE&S Hanford has examined the K Basins for leaks and not found any, Hansen said. But he said Hanford will never be able to say with 100 percent certainty the basins don't leak.

There are many other potential sources of contamination at Hanford, where some 200 square miles of ground water are contaminated from years of dumping the byproducts of plutonium production. Half that amount is contaminated in excess of drinking water standards.

Hansen said DE&S Hanford and DOE are

considering several possible causes for the tritium levels.

He said one theory is this year's record runoff in the Columbia raised the ground water level in the K Basins area, perhaps pushing tritium through the ground.

In recent months, the same well has shown fluctuations in strontium from a normal 5,000 picocuries to 18,000 picocuries.

But Hansen said that apparently was caused by the flushing of an uphill fire hydrant for maintenance. He said scientists believe the water soaked through a subterranean deposit of strontium contamination.

DOE cites Bechtel for safety lapses in plutonium mishaps

By JOHN STANG
Herald staff writer

The Department of Energy has cited Bechtel Hanford Inc. for not taking proper safeguards that would have prevented five workers from inhaling plutonium contamination.

DOE issued "Severity Level III" preliminary notices of violations to Bechtel in mid-September for:

- Insufficient preventive measures prior to four workers inhaling small amounts of plutonium Sept. 4, 1996, during surveillance work at the 224-B Facility, a long-closed auxiliary building next to B Plant.
- Insufficient preventive measures prior to one worker inhaling 120 millirems of cesium and plutonium on Jan. 29, 1997, while working at a fuel basin pit at C Reactor.

A "Severity Level III" is characterized as "less than serious" but presents the potential for more serious

problems if left uncorrected, according to DOE documents.

"While the (amounts inhaled) were very small and presented no threat to the workers' health, they demonstrated the contractor's failure to follow basic radiological work controls that, if left uncorrected, could have caused a more serious incident if more nuclear material had been present," a DOE document states.

DOE said Bechtel spotted the violations and reported them itself to DOE. No fines are being levied.

The company agrees with DOE's findings and does not plan to appeal, said Mike Hughes, Bechtel's vice president for operations. "We take this pretty seriously, and that's why we self-reported it," he said.

Training and procedures have been upgraded, and Bechtel has to make sure workers do not grow complacent and ignore those improvements as time passes, Hughes said.

In both incidents, the workers did not do all the surveying checks that were needed to prevent the exposure and did not wear respirators. In one case, they also relied on a 6-month-old radiation survey.

Pitch made for burning plutonium at Hanford

By JOHN STANG
Herald staff writer

Tri-City area governments made their pitch Wednesday to use an area reactor to burn the nation's excess plutonium.

Pam Brown, Richland's Hanford analyst, presented the Hanford Communities coalition's stance Wednesday at a DOE hearing in Richland.

Senate dropping inquiry of Hanford, campaign link

By LES BLUMENTHAL
Herald Washington, D.C., bureau

WASHINGTON — Senate investigators have dropped, for now, their search for links between a \$100,000 campaign contribution, the hiring of a lobbyist with close ties to Vice President Al Gore and top Department of Energy officials and the awarding of a \$5 billion contract at Hanford.

But they came away from the four-month investigation convinced lobbyist Peter Knight was not in the least bashful about advertising his connections to the department. Further, they contend DOE's contractors believed, rightly or wrongly, that hiring Knight and giving money to the Democrats was part of the cost of doing business.

Even as the top ranks of Energy Department officials were awaiting confirmation by the Senate after President Clinton took office in 1993, Knight was ballyhooing his ties to the department in letters to prospective clients.

"I am very familiar with DOE and close to Secretary Hazel O'Leary's new team," Knight

wrote one prospective client in a letter obtained by the Senate Governmental Affairs Committee.

The June 2, 1993, letter, written on Knight's Washington, D.C., law firm's stationery, came as one of Knight's former colleagues on Gore's Capitol Hill staff, Thomas Grumbly, was awaiting confirmation as assistant secretary in charge of the multibillion-dollar program to clean up nuclear production sites.

Grumbly, who worked with Knight when Gore served in the House, was confirmed by the Senate a week after Knight sent his letter.

Knight helped head President Clinton's transition team, which had recommended Grumbly for the job. Earlier, he had run Gore's unsuccessful 1988 presidential campaign and handled Gore's vice presidential campaign in 1992. Subsequently, Knight was campaign chairman of the Clinton-Gore campaign in 1996.

"Knight was going around advertising his connection to DOE," said a committee source. "He was holding himself out that way, and people in the industry

(department contractors) considered him a must-hire. They also felt it was certainly in their best interest to make contributions."

Among Knight's clients were the Fluor Corp., parent company of Fluor Daniel, which was awarded the Hanford contract in August 1996. Fluor won the contract just weeks after it, and one of its prime subcontractors, Lockheed Martin, contributed \$100,000 to the Democrats.

Fluor was paying Knight \$15,000 a month, according to documents obtained by the Senate committee.

The committee, which has been reviewing campaign finance irregularities during the 1996 presidential election, became interested in the Hanford contract in early August. It subpoenaed documents from Fluor Daniel and the Energy Department and interviewed Grumbly, Knight and others.

"We were never able to get any traction going on this beyond coincidence," the source said of the Hanford contract. "It just

Please see **SENATE**, Page A2 ►

Hanford working on 1999 budget

By JOHN STANG
Herald staff writer

Fiscal 1998 has just begun, and preparations already are under way to fight Hanford's fiscal 1999 tank waste privatization budget battle.

Sign-up sheets were out Thursday at Richland City Hall to seek people interested in lobbying Congress to provide money to convert Hanford's 54 million gallons of radioactive tank wastes into glass.

About 45 people attended a public briefing Thursday on DOE's plan to hire one or two corporate teams to build glassification plants at Hanford by 2002.

The privatization concept calls for the two teams — led by BNFL Inc. and Lockheed Martin Advanced Environmental Services Systems — not to be paid until they produce glass. DOE aims to pay the two teams a total of \$4 billion between 2002 and 2007.

DOE is trying to convince Congress to set aside money annually to eventually pay that \$4 billion.

Congress has been leery about the idea. So far, it has set aside a total of \$285 million in fiscal 1997 and 1998, including a \$110 million allocation expected to be approved any day now.

Congress' skittishness can be traced to plans to balance the national budget by 2002, suspicions about DOE's ability to manage this new type of contract, and DOE's problems with a similar contract for an Idaho Falls project that went drastically over budget.

"It's a big task that's ahead of us," said Pam Brown, the city of Richland's Hanford coordinator.

A coalition of Mid-Columbia governments is networking with other regional interests, such as environmental groups, to come up with a simple and universal set of arguments to convince Congress to pay for the glassification project.

BNFL's and Lockheed's teams are scheduled to submit their technical and financial plans to DOE in January. Then DOE will evaluate those packages to decide by May whether one or both teams will build the plants. Most technical information will be kept confidential, at least until May.

Monday, Nov. 3, 1997 Tri-City Herald

Hanford may enlist trees to help clean soil

By JOHN STANG

Herald staff writer

Researchers think a small forest of poplar trees could one day be used to suck up some of the tons of toxic chemicals that were dumped into the ground water at Hanford.

The trees have done well in removing carbon tetrachloride out of soil under laboratory conditions.

And now researchers from Washington State University and the University of Washington want to explore whether Hanford would be a good place to test the concept.

As much as 990 tons of carbon tetrachloride were poured into the soil from Hanford's plutonium plants. The hazardous chemical was a key part of the process that separated plutonium atoms from the fuel rods that came out of Hanford's Cold War reactors.

Scientists are looking at other plants that might absorb radioactive strontium and hazardous chromium along the Columbia River shore.

But the field test for poplar trees is the only proposal that's been presented to the Department of Energy so far.

"They've got a good idea. Anything that uses the natural processes is a good idea," said Mike Thompson, the DOE official in charge of ground water cleanup and monitoring.

Researchers at the state schools have been looking at using poplar trees as a ground water purification tool under lab conditions — with eventual forests in mind.

"Our research has shown this has produced wonderful results," said Stuart Strand, a University of Washington forestry researcher.

Under lab conditions, water laced with carbon tetrachloride was sent through a plot of poplar trees. The roots sucked out most of the chemical, researchers said.

The trees then broke down the carbon tetrachloride into harmless components, with no dangerous emissions going into the air and no hazardous materials accumulating in the wood, Strand said. Ultimately, the wood from the trees could be harvested and sold, he said.

The lab successes sent the scientist looking for test sites in the real world.

And central Hanford's 200 West Area apparently fits the bill. Carbon tetrachloride is a nonradioactive — but hazardous — waste from Hanford's plutonium processing days. Between 660 to 990 tons of the chemical were dumped in the 200 West Area from 1955 and 1973.

Those wastes have seeped into the ground and now exist as fluids in the ground water or as gases in the soil — spread across a subterranean region about as big as the 200 West Area.

The fluids are being pumped out with the carbon tetrachloride extracted from the water using "air stripper" equipment. Subterranean gases are being removed by vapor extraction systems.



Herald/Cary Best

Randy May, a Hanford operating engineer, reviews data at an "air stripper" in central Hanford. The air stripper removes carbon tetrachloride from ground water.

So far, 1,800 pounds of carbon tetrachloride have been removed from the water, and 80 tons have been taken from the soil by the vapor extraction systems.

Strand and his colleagues — researchers Milton Gordon and Lee Newman of the UW and Paul Heilman of WSU — proposed planting at least 200 acres of poplar trees just west of the 200 West Area.

"Trees are low maintenance. They're a solar-powered, pump-and-treat system," Strand said.

With the ground water more than 200 feet deep, the trees' roots cannot reach far enough to suck up the contaminated water. The researchers want to pump the contaminated water into a drip irrigation system.

However, Strand and Thompson said some problems need to be addressed before this idea can proceed.

Both noted the best spot to plant the trees is in sensitive shrub-steppe habitat. With Hanford one of the few remaining places where the native plants haven't been cleared for farms and towns, eliminating a couple of hundred acres would provoke protests, they noted.

For every acre of shrub-steppe removed, DOE would be legally required to reclaim three acres elsewhere, Thompson said.

DOE also needs more information on how the carbon tetrachloride breaks down and if any remains in the tree, Thompson said. Also, the economics of trees vs. the air stripper technology would be have to be studied, he said.

Also, the Washington Department of Ecology and the U.S. Environmental Protection Agency — which regulate Hanford — would need to be convinced, Thompson said.

"If the University of Washington proves this is a viable option, we can look at it any time," Thompson said.

Other scientists are looking at Indian mustard, which has the ability to take up huge amounts of chromium, a hazardous chemical found in small plumes along the Columbia River shore at the D, H and K Reactors.

The chromium is in high enough concentrations that if it seeps into the under water gravel where salmon lay their eggs, it could harm small fish or even eggs still in adult fish.

Some pumping of the chromium-laced ground water has begun, but questions remain on the eventual disposal.

If Indian mustard is used, the question arises on what to do with the contaminated plants, Thompson said.

If the plants were buried in a landfill protected by some type of liner, the plants would decompose, possibly shrinking their volume and creating subterranean air spaces, he said.

And those air spaces could cause the dirt above the burial site to shift and eventually cause cracks in the protective liners.

Still other researchers are looking at sunflowers, which could suck up radioactive strontium that's headed toward the river near the N Reactor. Strontium is absorbed into the skeleton and can cause bone cancer.

Currently, Hanford is pumping and treating that water, which mostly is above the water table. But pumping the strontium-laced water is not considered a viable solution.

DOE is looking at several options, including digging trenches and filling them with filtering substances, building an underground barrier, or flushing the area to force the strontium to the ground water level where it could be easier to remove.

The sunflower idea — which has been used at Chernobyl — could eventually be added to the options DOE and its regulators are pondering, Thompson said.

Ecology, Hanford continue arguing over \$90,000 fine

By JOHN STANG

Herald staff writer

The state and Hanford expect to resume arguing soon whether the site's 222-S waste analysis laboratory deserves a \$90,000 fine.

The Washington Department of Ecology is preparing to issue a more detailed notice of violation to Hanford about alleged deficiencies found in February, said Mike Wilson, director of the Ecology Department's nuclear waste program.

Hanford officials have argued the original May violation notice was not detailed enough for the Department of Energy and its contractors to address.

The bottom line is the Ecology Department and Hanford are sticking by their original stands on the lab and will argue their positions in greater depth.

And once the state makes its decision after the new arguments, the appeals process will start anew.

The dispute is whether the lab fixed deficiencies noted in 1996 by the time the state inspected again in February 1997.

In 1996, three accidents drew state attention.

All occurred prior to Fluor Daniel assuming control of Hanford on Oct. 1, 1996, when Waste Management Federal Services of Hanford became lab subcontractor.

In one case, a lab worker added nitric acid to alcohol inside a protective hood, which caused acid to spurt through holes in the glass in the hood.

The state fined Hanford \$9,000 a day for the 10 days from Feb. 3 — when Hanford told the state the lab was ready — to Feb. 13, which was when the state actually inspected.

The maximum possible fine is \$10,000 a day.

DOE, Fluor and Waste Management filed a petition for relief with the Ecology Department, which is a request to re-evaluate to determine whether a fine is appropriate.

This petition acknowledges procedural problems.

DOE contends the original notice of violation contained "fuzzy language" and lacked detail, which makes it hard to discuss and tackle, said Charles Hansen, DOE assistant manager for waste management at Hanford.

Also, DOE and the contractors contend that while internal procedures were not followed, state laws were not violated.

While the February inspection noted procedural problems, the lab "did not actually lose control of any wastes," Hansen said.

Fears that an in-house procedural mistake could violate state law could drastically slow the lab's analytical work, he said.

Meanwhile, the state stands fast on its contentions that state law was violated, and the \$90,000 fine — third highest in Hanford history — is appropriate, said Bob Wilson, Ecology's compliance inspector.

The highest fine is \$110,000 for May's Plutonium Finishing Plant explosion, which Hanford is seeking to get trimmed by \$70,000.

Former Hanford spokesman dies

Longtime and respected Department of Energy spokesman Tom Bauman died Wednesday at his Richland home from respiratory failure. He was 66.

Bauman was one of DOE's leading public relations specialists at Hanford, working there from 1973 until he retired in 1995.

Bauman was born in 1931 in Toledo, Ohio. He attended college at the University of Toledo and the University of Washington.

He worked as a reporter at the Seattle Post-Intelligencer from 1958 to 1964.

He later became a public information officer for the state Department of Commerce and Economic Development, then a press specialist for Battelle-Northwest from 1965 to 1969.

By JOHN STANG

Herald staff writer

Fluor Daniel's leadership at Hanford hasn't been as strong as the Department of Energy hoped.

But the momentum to clean up the nuclear reservation continues.

Those are two of many themes contained in Fluor's self-review of its first year as

Hanford's chief contractor and in DOE's parallel review of Fluor's work.

The DOE review, completed in August, also calculated that Fluor's team was \$20.7 million over budget — or 3 percent — on cleanup projects, and 28 percent of fiscal 1997's legal cleanup milestones had been completed late or were undone.

DOE expects to unveil the results of both reviews formally later this week. The Herald obtained copies Wednesday of both documents.

The reviews resulted from a request by Sen. Patty Murray, D-Wash., that the effectiveness of Fluor's management contract be examined after its first year.

Fluor already planned to do a self-review, and it modified that to accommodate Murray's wishes. Meanwhile, DOE did its own.

Murray and Rep. Doc Hastings, R-Wash., were briefed Wednesday on the reviews. Murray was pleased with the candor and quality of the reviews.

■ IT'S YOUR CALL: Has Fluor done a good job at Hanford? Page A3.

"There have been a number of frustrations, and they've now been identified. ... And now we need to require Fluor to put corrective actions in place," Murray said.

Hastings said: "They've have given us a

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Murray burning over PFP response

By MIKE LEE

Herald staff writer

Sen. Patty Murray is steamed about how Hanford workers were treated after the May 14 explosion at the Plutonium Finishing Plant.

Thursday, she promised to write Department of Energy Secretary Federico Peña a fiery letter criticizing management's inept response.

Speaking one day before Fluor Daniel Hanford and DOE formally release their one-year reports about Hanford cleanup efforts, Murray, D-Wash., said the worker health issue was one of the things not addressed well by the company or DOE. The reports are to be released at a press conference today.

The workers "still haven't gotten care they were promised," Murray said. They were exposed to a chemical

plume in the post-explosion confusion. "I am absolutely furious about that."

Murray said she keeps getting put off when she asks about treatment for the workers. "We keep hearing, 'We are going to take care of them in two days,'" she said. "That is just not acceptable at all."

Gordon Beecher, director of human resources at Fluor Daniel Hanford, said the company has done its best to handle worker concerns and he's not

■ HAB: Panel question's DOE plan to speed cleanup. Page A3.

sure why Murray is upset. But progress has been slowed by working out details with doctors and by most employees not requesting independent evaluations for weeks after the incident, he said.

"It's going slower than all of us would have liked it to go," he said, noting some workers are getting anxious about get-

ting their independent checkups. "We want to get this behind us. We want to finish up the exams."

The night of the incident, eight workers were evaluated at Kadlec Medical Center Richland and have had the option of follow-up monitoring at the Hanford Environmental Health Foundation, Beecher said. In the weeks after the incident, some workers complained



Murray

Please see **PFP**, Page A2 ▶

Hanford advisers question DOE plan

By JOHN STANG

Herald staff writer

PORTLAND — An oversight panel raised questions Thursday about the Department of Energy's plans to speed environmental cleanup across the nation.

DOE has several draft plans and environmental studies on the drawing board to address long-range cleanup for all its sites, including one that calls for transferring radioactive wastes among former atomic weapons sites.

Hanford Advisory Board members questioned how well all these plans are coordinated to create a cohesive nationwide program aimed at speeding cleanup through 2006.

Board members said they wondered whether key decisions on the cleanup master plan — the so-called "2006 Plan" — would be made before other environmental impact studies are finished.

And they questioned if all the reports use the same data.

Board members also wondered about the purpose of a draft report on ways to speed cleanup by transferring radioactive wastes among different sites.

Sometimes the report is described as a trial balloon to stimulate discussion, and at other times as a full-fledged appendage to the 2006 Plan, board members complained.

Murray insists DOE speed up PFP health tests

By MIKE LEE
Herald staff writer

As promised, Sen. Patty Murray told the Department of Energy on Friday to get medical tests for the Hanford workers exposed to a chemical cloud in a May explosion — and to do it quickly.

The Washington Democrat also rebuked DOE for not promptly reimbursing some of the workers for health evaluations they got for themselves, and for not then paying their medical bills so the workers could get their health reports.

In her letter to Energy Secretary Federico Peña, Murray said she was "concerned and angry" about how long it has taken to get independent health evaluations for the workers exposed to a dangerous chemical plume in the explosion at the Plutonium Finishing Plant.

An official with the company in

charge of operating the federal site responded that there are reasons for the delays and said everyone wishes things could go more quickly. "We have been working on this for such a long time," said Gordon Beecher, director of human resources at Fluor Daniel Hanford. "This (letter) isn't making us do anything different than what we have been doing for the last week-and-a-half."



Murray

But at least some of the 10 workers involved said Fluor has been holding things up for weeks. They are angry about repeated barriers to getting their

Please see MURRAY, Page A2 ►

Bechtel sets aside \$50,000 for river

By MELISSA O'NEIL
Herald staff writer

Bechtel Hanford is supporting the Tri-Cities' Year of the River with \$50,000 and volunteer talent.

The proclamation came Friday at the Tri-Cities Visitor & Convention Bureau annual meeting.

Bechtel Hanford's sponsorship with the Year of the River effort is based on the corporation's shoreline cleanup mission and its 100th anniversary.

The money is intended for "physical things," said Tom Hogan of Bechtel Hanford. "Some of the special attractions or needs, like bike trails or the Columbia Park fishing pond."

Hogan, a project manager, is involved in the environmental restoration of the Hanford site's Columbia River shoreline. He's among the scientists, engineers and



Lamont

bureau officials.

"Another thing is awareness in the community," Hughes said. "Some of these dollars have to help in that effort. And we need to get more people to contribute. The \$50,000 will not fund all the special projects, but it is a real boost."

The 150 people at the bureau's meeting also heard:

■ Bureau Executive Director Kris Watkins summarized the 1997 goals and progress.

project managers likely to volunteer their time and expertise to Year of the River activities.

Bechtel Hanford Vice President Mike Hughes presented the oversized check to



Strawn

in publications, which reached about 5 million readers.

"Tourism dollars really should be viewed as a pot of gold that should be captured for the Tri-Cities," Watkins said. "Tourism really does mean business."

■ Board members were elected. The 1998 president, Dean Strawn, owns Dependable Janitor Service in Kennewick. The past president is Sally Kirkpatrick with Sage Resources.

The bureau booked 213 meetings and events, which brought 65,785 delegates. Those visitors spent about \$21 million here.

The media outreach program helped place 85 articles

Other new or renewed board members are B. Sue Kuntz with Bechtel Hanford, Sheila Little with Fluor Daniel Hanford, Linda Sue Williams with the Pasco School District and Gwen Leth with the Columbia River Exhibition of History, Science & Technology.

■ Ian Lamont was honored for his dedication and leadership to the bureau and its Tri-Cities River-shore Enhancement Council. He is publisher of the Tri-City Herald.

In the surprise 1997 Tourism Individual of the Year Award presentation, Port of Kennewick director John Givens said Lamont "makes headlines, but he doesn't seek them out for himself." Lamont agreed, saying he was "humbled by the recognition."

The Year of the River kickoff luncheon is Dec. 5. About 60 events already are planned throughout the year. For more information, call 735-8486.

DOE to assign more security guards to Hanford

By DON McMANMAN
Herald staff writer

Hanford will get more guards as part of the Department of Energy's plan to beef up security at its sites across the country.

But no one will say how many new patrol officers will be added.

"I can't comment on the exact number," said Jim Spracklen, security director for DOE at Hanford.

Nor will he say exactly how many officers he has now. "We have more than 200. I'm not permitted to give an exact number."

While Hanford gets its additional patrol officers, other DOE sites will receive even more help because a six-month review discovered weaknesses at those sites.

Four sites will get special attention — more sensors, more people, more training. They are Pantex in Texas, Lawrence Livermore National Laboratory in California, Rocky Flats near Denver and Los Alamos (N.M.) National Laboratory.

At each of these sites, "the protection system

surrounding a very important asset had an exploitable weakness," according to a DOE report.

At Hanford, the "very important asset" is something Spracklen calls "special nuclear material" — plutonium, in other words.

There are 12 tons of plutonium at Hanford.

And, in April, the Hanford Patrol was able to protect the plutonium from simulated attacks staged as part of the national DOE security survey.

A select team of security officers — Spracklen won't say how many — from other DOE sites gathered and prepared to assault Hanford.

"They bring in their own team and they gather their own intelligence and formulate their own plans," Spracklen said.

Over two weeks, the "terrorists" pecked at one Hanford defense and then another.

Then came the big show.

But it really wasn't much of a surprise.

"We have to make sure it's safely conducted. We can't risk people getting seriously hurt in these kind of tests," Spracklen said.

Everyone involved in the exercise — defend-

ers and attackers — carry laser devices that resemble automatic weapons. They also wear harnesses and hoods sensitive to laser light.

"Get hit by a laser, your suit buzzes, you're dead."

Meanwhile, there are other defenders carrying real arms just in case real terrorists decide to attack at the same time the DOE "terrorists" do.

Attackers have a window of time in which to strike.

"It can happen immediately or hours and hours later," Spracklen said.

In April, the assault came at night. Attackers burst out of secret lairs in the sagebrush. "They came from a multitude of directions," Spracklen said.

"We were successful in protecting our assets," he said.

The big test in April mirrored a series of exercises Hanford has run over the past decade. "Sometimes we use our own people, sometimes the military, sometimes people from other sites," Spracklen said.

DOE intends to use the military as part of its program to beef up security. The department will draft Navy SEALs for training.

Issaquah woman sentenced to 9 years for fatal hit-and-run

By The Associated Press

SEATTLE — An Issaquah woman with a record of alcohol-related traffic violations was sentenced Friday to nine years in prison for the hit-and-run death of a pedestrian who was walking with her husband.

Susan West's sentence was more than twice the top end of the sentencing range, said Dan Satterberg, a spokesman for the King

County prosecutor's office.

King County Superior Court Judge Larry Jordan also gave her four years of probation.

West pleaded guilty in September to vehicular homicide, felony hit-and-run, reckless driving and reckless endangerment.

Prosecutors had sought an exceptional sentence of 10 years.

Mary Johnsen, a 38-year-old Issaquah mother of two, died July

26. A fast-moving green van struck her from behind as she walked hand-in-hand with her husband Keith. The van then sped off.

"This business needed to be taken care of, and we are very happy that it has been done," Keith Johnsen said after the sentencing.

West, 39, had a blood-alcohol level of .34 percent — more than three times the legal intoxication threshold — when she was arrested.

She has had at least four drunken-driving arrests, a history of failed alcoholism treatments and more than 20 other traffic violations.

"The defendant has a 20-year history of alcohol-related arrests and failed treatment," Deputy Prosecutor Steven Fogg said Thursday. "Her alcohol problem is undoubtedly much graver than even the ... dismal history suggests."

West's record shows she consis-

the air and on my body," he said, choking back tears. "I just regret it so much."

But Judge Carolyn Brown showed little sympathy for Sanchez, sentencing him to 17 years and one month in prison — the maximum sentence for second-degree murder.

"These cases leave very little to be said," Brown said. "They are by their nature very, very tragic."

Four months ago, Darbeliani, 27, was found dead in an irrigation canal outside Prosser. He had been shot three times in the head and his white sports car was missing.

Sanchez pleaded guilty last month to second-degree murder. He was arrested while driving Darbeliani's car in Pasco a few days after the killing.

His younger brother, 14-year-old Valentin Sanchez, also pleaded guilty to second-degree murder and is to be sentenced Monday. The Prosser brothers are expected to testify against the third suspect, Jose Munguia, 16, of Grandview.

The Sanchezes have told police the three teens set out to steal Darbeliani's car, but that it was Munguia who shot the victim. Munguia, who pleaded innocent to first-degree murder earlier Friday, goes to trial Dec. 8.

In court Friday, Prosecutor Andy Miller said Sanchez deserves the maximum sentence because he not only knew there would be a gun involved in the holdup but he also continued to drive Darbeliani's car after the shooting.

"This wasn't a situation where the defendant was caught up in a felony murder and then tried to make right," Miller said.

Miller did give Sanchez credit for confessing to police when he was arrested, and said the confession shows Sanchez is taking some responsibility.

Larry Zeigler, Sanchez's attorney, asked that his client be given a midrange sentence so he'd be released when he was nearly 30. The Prosser brothers didn't know someone would be killed, Zeigler argued.

"The biggest mistake he made was to keep that car and drive it around," he said.

tently avoided jail after her arrests, even when she faced simultaneous drunken-driving prosecutions in Marysville and Issaquah.

She and her husband, attorney David West, have arranged to turn over almost all their assets — proceeds from a retirement plan, home equity, insurance proceeds and a loan — to Keith Johnsen and his two sons. The amount totals more than \$175,000, The Seattle Times reported.

Cost of K Basins cleanup climbs

By JOHN STANG

Herald staff writer

SEATTLE — The cost to move and neutralize the spent nuclear fuel in Hanford's K Basins could grow by an extra \$238 million — a 29 percent increase.

And that could put further strain on a Hanford cleanup budget Congress has shown no inclination to increase.

The Department of Energy is examining

Fluor says as much as \$238 million more needed

Fluor Daniel Hanford's cost figures addressing a proposed 14-month delay in moving the fuel.

And in a few weeks, DOE's Hanford Manager John Wagoner will have to decide whether to approve the extra delay and costs, said Beth Sellers, director of DOE's spent nuclear fuels project division at Hanford.

Sellers discussed the matter Wednesday in

Seattle with the health, safety and waste committee of the Hanford Advisory Board. Some of those board members weren't happy.

"This has the potential for (causing) a train wreck on the whole cleanup program," said board member Harold Heacock, representing the Tri-City Industrial Development Council.

The K Basins are two indoor pools contain-

ing 2,300 tons of spent nuclear fuel. Both basins are several hundred feet from the Columbia River, and one pool has leaked twice since the 1970s.

The K Basins program is one of Hanford's two top-priority projects. The other is removing wastes from the tank farms.

Originally DOE planned to have the fuel moved to central Hanford, processed into a

UNION: Hanford security guards to vote on labor contract. **Page A3.**

drier, safer condition, and put in an interim storage building by late 1999.

The original cost

estimate was \$814 million.

But when Fluor Daniel and its subcontractor DE&S Hanford took over the project last year, they found more problems

Please see **K BASINS**, Page A2 ▶

Guards union to vote on Fluor contract offer

By MIKE LEE

Herald staff writer

The Hanford Guards Union Local 21 will vote on Fluor Daniel Hanford's latest contract proposal next week, said local president Jeff Carlyle. That means there's no imminent strike and the parties still are hoping to settle their differences soon.

The union met Wednesday night to discuss the company's latest offer, said Carlyle, noting the parties have come closer to agreement on the new pay scale. At present, the average pay for a guard is \$38,000 a year, he said.

"The company has made movement from their previous proposal. It's not as much as what we were looking for. ... But I think the vote is going to be very close."

Several issues remain unresolved, including

"It's not as much as what we were looking for. ... But I think the vote is going to be very close."

— Jeff Carlyle,

Hanford Guards Union Local 21 president

seniority rights, transportation from the site for overtime workers and medical benefits, Carlyle said.

"The union will continue to try to strive to work this out. We do not want to try to take any kind of labor action. We certainly hope the issues can be resolved," he said.

After hearing the union's plans Wednesday night, Fluor Hanford President Hank Hatch said, "I am optimistic that we can work some-

thing out. We look forward to their continued cooperation and membership in the team."

Contract talks between Fluor and security forces broke down in mid-October when union members voted to reject the company's then-latest offer.

Also, more than 80 percent of the union members approved a strike authorization, which allows leaders to call for a strike if a settlement isn't reached.

Guards have been working without a contract since March 15. The union has fewer than 200 members, though the exact number isn't released for security reasons.

A federal mediator has been working with the parties for the last few weeks. "It has kept the company and the union talking," Carlyle said.

■ You can reach Mike Lee at mlee@tri-cityherald.com or by calling 582-1542.

Smoke smell evacuates PFP

By the Herald staff

The smell of smoke led to the evacuation of Hanford's Plutonium Finishing Plant for three hours Thursday.

Evacuation began at 9:30 a.m. when a fire alarm went off near an area where plutonium used to be processed.

Employees reported smelling smoke, which apparently quickly dissipated, according to the Department of Energy and Fluor Daniel Hanford.

Employees were taken to a nearby

office complex until firefighters completed searching the area. Work at the PFP resumed at 12:30 p.m.

Firefighters could not locate the source of the odor. But officials said it could have come from a faulty fluorescent light fixture and corrective actions will be taken, according to DOE and Fluor.

No evidence was found that chemical or radiological materials were involved, DOE and Fluor said.

As a precaution, 19 workers who reported smelling smoke were taken to the Hanford Environmental Health Foundation for medical evaluations.

Thursday's preliminary physical exams showed no ill effects, but the results of some lab tests were not complete Thursday, DOE said.

Off-site emergency agencies were notified of the incident.

The prompt notice to emergency agencies was a direct result of the May explosion at PFP. In that incident, Hanford officials waited more than three hours to notify local agencies after a chemical tank exploded.

After that incident, Hanford officials agreed to notify local agencies immediately whenever a potential emergency incident occurs.

Hanford turns pot pipe over to sheriff's office

By the Herald staff

Maybe Cheech and Chong are helping with the cleanup at Hanford.

That's one way to explain a Hanford worker's discovery of a marijuana pipe Wednesday in a parking lot of the 200 East area.

In truth, officials aren't sure who the bong belonged to or how it got into the restricted area of the nuclear reservation. Because of where the pipe was found, Benton County Undersheriff Bill Morey said, it probably belonged to a Hanford employee or a worker for one of the various subcontractors helping with the cleanup.

"You need a badge to get to that point," Morey said, effec-

tively ruling out the famously high stars of the cult films *Up in Smoke* and *Still Smokin'* as suspects.

Hanford spokesman Craig Kuhlman said the worker who found the device wasn't sure what it was. The person called the Benton County Sheriff's Department to report finding a "suspicious object."

A sheriff's deputy recognized it for what it is and filed a report.

That, more than likely, is the end of it, though drugs and drug paraphernalia are banned from the Hanford site.

Hanford has turned the matter over to the sheriff's office, Kuhlman said. And Morey said his department is finished looking into the matter.

HAMMER has to close training room

Hanford's new Hazardous Materials and Management Emergency Response training center has closed off a room for training after officials were unable to figure out what's been causing a faint odor there.

There had been reports of a faint stale odor in the bedroom-size room at HAMMER's main Volpentest Training and Education Center, which was being used to train people in simulated radioactive conditions.

But efforts to determine the source of the smell have found nothing so far, said Mike Berriochoa, Fluor Daniel Hanford spokesman.

Consequently, no more training will be conducted in the room, which will be converted into a storage chamber.

Saturday, Nov. 15, 1997 Tri-City Herald

Request to cut Hanford lab fine rejected

By JOHN STANG

Herald staff writer

The state has denied a request to trim a \$90,000 fine levied against the main Hanford laboratory for testing Cold War wastes.

However, the Washington Department of Ecology is drafting a more detailed violation notice to Hanford, state officials announced Friday.

And that will start a 30-day clock for the Department of Energy and two contractors to contest the fine a second time.

DOE, Fluor Daniel Hanford and Waste Management Federal Services of Hanford had complained the Ecology Department's initial citation was too vague.

Tom Fitzsimmons, director of the Ecology Department, said Friday

that a February inspection showed the 222-S lab at central Hanford did not have adequate knowledge or control of its wastes — and charged that those weaknesses threatened workers' safety.

"In the spirit of cooperation and collaboration, Ecology has made numerous attempts to allow (DOE) and its contractors to voluntarily comply with the state's regulations," Fitzsimmons said.

"Unfortunately, they made insufficient progress in the management of their wastes. Therefore, the penalty stands as assessed."

However, Charles Hansen, DOE's assistant manager for waste management at Hanford, said the problems noted in the state inspection — which took place in February — were not violations of state regulations.

The problems were in-house procedural items the lab was already fixing when the state inspected, Hansen said. Treating them like violations of state rules will slow cleanup progress, he said.

The 222-S lab's safety record improved dramatically in the past year after Fluor subcontractor Waste Management took it over, Hansen said.

In the past 12 months, the lab posted no chemical mixing accidents, and two skin contamination incidents compared with 11 skin contamination incidents the year before.

Also the lab's rate for accidents requiring more than first aid dropped from 3.67 per 200,000 hours worked in fiscal 1996 to a rate of 2.2 per 200,000 hours worked in fiscal 1997. The 200,000 hours is a standard federal measure that roughly

equates to how much 100 people would work in one year.

"We consider (the lab) outstanding for the entire year," Hansen said.

The dispute is whether the lab fixed deficiencies noted in 1996 by the time the state inspected it again in February 1997.

Three accidents drew state attention to the lab in 1996, all before Fluor and Waste Management took over on Oct. 1, 1996. One worker was burned in one accident.

The lab did a massive overhaul of its training and procedures after Fluor took over the Hanford site.

The state inspected the lab again in February 1997, and noted six safety violations relating to storage, labeling, control and verification of wastes. That led to the \$90,000 fine.

In May, DOE, Fluor and Waste

Management petitioned the Ecology Department to re-evaluate the fine, partly because training at the lab was still under way during the review.

But the Ecology Department said Friday that no new information has surfaced to justify reducing the \$90,000 fine.

DOE argued the fine would take money from cleanup. The Ecology Department recommends a settlement that would put the money into an environmental project, rather than the state's general fund.

DOE expects to appeal the new violation. If it's rejected, Hanford officials get another 30 days to appeal to the Washington State Pollution Control Hearings Board.

■ John Stang can be reached at 582-1517 or via e-mail at jstang@tri-cityherald.com

Water main bursts in Hanford 300 Area

Firefighters were working late Monday night to repair a burst water main in Hanford's 300 area, a few miles north of Richland.

The cause of the leak or how much damage had been done was not immediately clear.

Water surfaced between a small, and apparently empty, storage building and a building leased to Kaiser Aluminum, said Sheila Woody, Fluor Daniel Hanford spokeswoman. Firefighters were initially concerned the water might leak into underground electrical transformers and cause power outages. But as of 11 p.m., no outages were reported.

Possible Molten Metal closure won't end Hanford team

By JOHN STANG

Herald staff writer

The possibility Molten Metal Technology Inc. might shut down should not affect the Hanford glassification team the firm has been a member of, a Lockheed Martin corporate spokeswoman said Monday.

Molten Metal has been a peripheral member of Lockheed Martin Advanced Environmental Services' 11-company team that is designing a waste glassification plant for Hanford.

Molten Metal said Monday that it might sell its business or shut down after this month unless it can raise more money, according to the Bloomberg News Service.

Massachusetts-based Molten Metal has been plagued with business problems and

questions about its president's political donations.

Consequently, if the company cannot raise extra money, it might "be unable to continue normal operations after November 1997," Molten Metal's home page said.

Meanwhile, Molten Metal is replacing its controversial corporate president, William Haney III, with its chief financial officer, F. Gordon Bitter, the firm said.

Molten Metal originally was supposed to provide the melter — a key component — in the Lockheed team's plant to turn Hanford's radioactive tank wastes into glass logs.

That melter technology was not developed quickly enough for Lockheed to be certain it could meet deadlines.

And several months ago, another company, Envitco, took Molten Metal's place as

the firm providing the melter, which would fuse glass flakes and wastes into glass.

Molten Metal remained on the Lockheed team to try to figure out ways to commercially recycle sodium extracted from the wastes before they go to the melter.

When Molten Metal perfected that process, the plan was for it to be added to Lockheed's glassification operation after the key 1998 deadlines.

Diane Knippel, Lockheed Martin spokeswoman, said Molten Metal does not play any role in what Lockheed must provide to the Department of Energy in 1998 to get approval to build its plant.

And because Molten Metal plays only a small role, its highly publicized troubles have not hurt Lockheed's efforts to woo Wall Street investors, Knippel said.

Lockheed is one of two teams preparing a

proposal to build glassification plants that are supposed to operate at Hanford. The second team is led by BNFL Inc.

DOE's privatization concept calls for each team to sink a few billion dollars into its Hanford plant before getting repaid.

That means each team must find Wall Street investors to finance construction and operating costs.

Lockheed and BNFL must submit their proposals to DOE in January 1998, with DOE deciding whether to approve one or both plans by May 1998. The plants are to be operating by 2002.

Molten Metal has come under fire in 1997 for:

■ Haney's donations to Vice President Al Gore and the Democratic Party — along with Molten Metal lobbyist Peter Knight's close ties with President Bill Clinton and

DOE's former cleanup czar Tom Grumbly. Congressional probes are continuing into whether Molten Metal's \$33 million in DOE contracts were linked to Haney's political ties or donations.

■ A published report in Forbes magazine that said Molten Metal has a pattern of promising more than it can deliver on environmental cleanup technologies.

■ Other financial problems, which apparently led to Molten Metal calling in an investment banking firm to figure out how the company can bail itself out.

The company is studying several options, including selling some or all of its assets, finding partners or finding additional financing.

■ John Stang can be reached at 582-1517 or via e-mail at jstang@tri-cityherald.com

New law could speed up FFTF restart

By DON McMANMAN

Herald staff writer

A new law designed to speed federal approval of experimental drugs could help the drive to restart a research reactor north of Richland.

"This may help FFTF because it could become a supplier earlier than we had thought," said U.S. Rep. Doc Hastings during a press conference Monday.

Proponents of the Fast Flux Test Facility want eventually to pay for the reactor's operation by selling radioactive isotopes to treat cancers and other ailments.

These isotopes have been approved for some medical treatments, but they have shown great promise in clinical trials, saving

lives of those who, by all other measures, should have died, said Tom Tenforde, manager of the Hanford Radioisotopes Program.

The sooner new drugs are approved, the sooner FFTF can start production — and the sooner it can start paying operating costs with isotope sales, said Bruce Klos, deputy director of the FFTF Standby Project Office.

Regardless of the effects of the new federal drug law, FFTF will need some other endeavor to pay the bills — at least initially.

FFTF supporters hope the Department of Energy will go along with their plan to restart the reactor in 2002. By 2012, isotopes could pay for about 60 percent of operating costs, based upon estimates compiled before the new federal drug law was passed.

To pay the rest of the bill, FFTF supporters want to use the reactor as a source of tritium,

a hydrogen isotope used in nuclear bombs.

Tritium degrades relatively rapidly, meaning it must be replaced in weapons. The United States now has no source of tritium. However, there are plans to produce the isotope in a particle accelerator in South Carolina or to collect it in a commercial nuclear reactor.

But those two options won't be ready until well beyond 2002.

FFTF supporters say the Energy Department should operate it to produce tritium — and provide "bridge funding" — until sales of medical isotopes can pick up the tab.

The isotope technology Hanford officials are investigating takes radiological isotopes into the healing side of medicine.

In the past, such isotopes mostly have been used only in diagnostic roles — highlighting tumors for X-rays, for example. But now, doc-

tors have begun using isotopes to alleviate the excruciating pain of bone cancer.

And in experimental therapies, researchers are marrying isotopes with man-made proteins that seek out malignancies, snuggling close, carrying the radioactive isotopes directly to the cancerous cells and destroying them.

The new federal drug law should cut the time it takes to get federal approval to use such isotopes, Tenforde said.

"It's a very positive thing in the long run. The spinoff won't be so great for us as for those addressing AIDS and heart disease, but it's encouraging," he said.

Hastings agreed. "FFTF is still in the hunt."

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DOE, Fluor Daniel to sort out management woes

By JOHN STANG

Herald staff writer

It will take several months before Hanford resolves management problems outlined in two recent reviews of Fluor Daniel's first year in charge, Fluor President Hank Hatch said Monday.

Fluor and the Department of Energy already were wrestling with those problems in overseeing nuclear waste cleanup at Hanford before they were identified in the two reports, said Hatch and DOE Hanford Manager John Wagoner.

The two discussed the reports with the Tri-City Herald's editorial board Monday.

The conclusions of Fluor's self-review of its first year and DOE's parallel review were released earlier this month.

A major theme of the reports was that DOE, Fluor and its subcontractors were having trouble determining their roles under

Hanford's new concept of project management.

The concept of project management divides Hanford's work into individual projects, with each project having its own individual subcontractor.

Fluor is to supervise the subcontractors, and individual DOE divisions are to oversee each project through Fluor while stepping back from daily decisions.

In some cases, the concept has worked, with DOE and the contractors functioning well, said Hatch and Wagoner.

They cited the K Basins project run by DE&S Hanford and smaller projects supervised by Waste Management Federal Services of Hanford.

But in many cases, DOE has



Hatch



Wagoner

played a bigger role in day-to-day matters than planned.

Sometimes, DOE has aggressively pushed itself into Fluor's managerial turf.

And sometimes, DOE has filled Fluor's

management voids.

Wagoner noted that the tank farms are an example of DOE filling in. DOE often has dealt directly with subcontractor Lockheed Martin Hanford Co.

Wagoner and Hatch said Fluor and DOE are working internally and with each other to iron out the problems.

Several months ago, Fluor brought in Skip McGinley, a retired rear admiral with experience in running shipyards, who later became Fluor's vice presi-

dent for project direction.

His main task is to tackle the issue.

Also at Monday's editorial board meeting:

■ Hatch discussed the conclusion in DOE's report that Fluor was late or is overdue on 28 percent of Tri-Party Agreement, Defense Nuclear Facilities Safety Board and DOE milestones.

He said some deadlines were intentionally missed because safety problems emerged and fixing them took priority over meeting milestones.

He estimated that roughly 90 percent of Fluor objective contractual obligations for its first year will be met — which is where Fluor will earn its performance fee.

Those calculations are expected to be done in December.

■ Hatch noted that the Fluor team laid off fewer than 400 people in fiscal 1997, less than the 500 originally projected.

Figures still have not been calcu-

lated for fiscal 1998, but Hatch believes 1998 layoffs will be fewer than in 1997.

■ Hatch said five of six enterprise companies have signed contracts with Fluor.

The exception is Fluor Daniel Northwest.

For Fluor's first year, and part of its second year, Fluor and the enterprise companies have been operating under letters of agreement outlining general responsibilities — but not formal contracts with specific terms.

In recent weeks, five enterprise companies have signed two-year contracts with three one-year options to renew.

The aim of the enterprise companies is to depend initially on Hanford to get established and then wean themselves away by drumming up outside contracts.

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Hanford inspects waterline

By the Herald staff

Hanford workers were preparing to enter a 300 Area building containing uranium pellets late Tuesday evening to check for flood damage.

But as of Tuesday afternoon, no contamination had surfaced outdoors in the aftermath of an underground waterline that burst Monday evening, said Sheila Woody, a Fluor Daniel Hanford spokeswoman.

The waterline broke southwest of the 313 Building at about 9:10 p.m. Monday, spewing out about 60,000 gallons of water. No cause for the break had been determined as of late Tuesday.

The escaped water was shallow — not deeper than the soles of people's shoes in most cases.

But the flooding caused Kaiser Aluminum to evacuate the 313 building and to shut off the power.

The 313 Building houses Kaiser's extruder press operation at one end and B&W Hanford Co. functions on the other. Workers were back on the job Tuesday, Woody said.

Meanwhile late Tuesday, Hanford workers were warily approaching the 303K Building, which is a storage site for uranium fuel pellets for the Fast Flux Test Facility. The water reached the bottom of the 303 K Building's door, but it was unknown late Tuesday if water got inside the building.

Workers quit by evening, and were set to resume their efforts this morning.

Workers were taking precautions before opening the doors to avoid spreading any potential contamination, Woody said.

Meanwhile, the 300 Area's northeast section was cordoned off Tuesday because of the incident.

PNNL, world looks to repair Chernobyl enclosure

By JOHN STANG

Herald staff writer

The odds almost are as bad as playing Russian roulette.

Scientists have looked at the super-huge, 20-story-tall concrete shell enclosing the destroyed and highly radioactive Chernobyl reactor in Ukraine.

And they recently calculated the boxlike shell has a one in 10 chance of collapsing each year.

The Pacific Northwest National Laboratory is involved in efforts to

head off that potential collapse.

And PNNL's involvement includes participating in a conference today at the United Nations in New York City, which is being chaired by Vice President Al Gore and Ukraine's President Leonid Kuchma.

The conference's purpose is to figure out how to raise an extra \$460 million needed to fix that protective shell — dubbed a sarcophagus — by 2005.

When Chernobyl's Unit No. 4 reactor melted down in 1986, workers dashed to build the enclosing sarcophagus in seven months — too

short of a time to build a stable, leak-proof shelter while dealing with nearby heat and intense radiation.

Consequently, cracks and holes have appeared in the shell to allow water and small animals inside and to allow radioactive dust to leave.

The structure's dubious stability also makes its prone to damage from earthquakes, wind storms and heavy snows.

Dealing with Chernobyl is a major strain on Ukraine, which devotes 12 percent of its annual budget to the site.

Meanwhile, the rest of Europe worries about a sarcophagus collapse

scattering radioactive dusts, materials and water across a larger area.

The estimated price tag to overhaul the sarcophagus by 2005 is \$760 million. The United States, Canada, Great Britain, France, Italy, Germany and Japan pledged \$300 million to that effort in 1995 — leaving \$460 million to go.

And that \$460 million is why Dennis Kreid, PNNL's project manager on the sarcophagus matter is at today's conference in New York City.

Laurin Dodd, who is in charge of PNNL's reactor safety efforts in Russia and Ukraine, said it is a big ques-

tion mark on how the extra \$460 million is to be raised. He speculated other nations besides the original seven may contribute.

The sarcophagus is one of two broad nuclear-related issues that Battelle-Northwest — which operates PNNL — and other Hanford corporations are tackling in Ukraine.

The other broad matter is improving safety at Ukraine's 15 reactors, Dodd said. Individual facets include training programs, research and upgrading equipment.

Battelle has two permanent staff members and three offices in

Ukraine. The offices are at the Chernobyl site, at the nearby town of Slavutych, and in Ukraine's capital Kiev.

Besides the permanent staff, Battelle and other Hanford companies have a couple of dozen employees splitting time between the Tri-Cities and Ukraine. These local firms and agencies include Fluor Daniel, Bechtel, Science Applications International Corp., the Department of Energy and others.

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Hanford guards reach deal with Fluor

The Hanford Guards Union Local 21 ratified a new, three-year contract Thursday night with Fluor Daniel Hanford.

It took five months, 55 negotiating sessions and a federal mediator to reach the agreement. Among the issues were salary, seniority rights, training standards and benefits. The key issue resolved was that workers held over in an emergency would get transportation home from the site, as many of them carpool, said union President Jeff Carlyle.

The union has about 140 members working on the Hanford nuclear cleanup project, which is managed by Fluor. Guards have been working without a contract since March 15.

FFTF protest rally planned for Dec. 6

A rally to protest the possible restarting of the Fast Flux Test Facility is scheduled 11 a.m. to noon Dec. 6 in front of the Federal Building in Richland.

The rally is being organized by the Spokane-based Hanford Education Action League and the Portland-based Hanford Watch.

Both groups oppose the proposed tritium production mission for the FFTF, primarily because tritium is used to boost the explosive power of nuclear weapons.

The Department of Energy is studying whether the dormant FFTF should be restarted with a short-term mission of producing tritium as a bridge to a later, long-term mission of producing medical isotopes.

For information, call HEAL at 509-326-3370.

Hanford Advisory Board to meet in Richland

The Hanford Advisory Board is scheduled to meet Dec. 4-5 at the Doubletree Hotel in Richland.

The Dec. 4 meeting will run from 1 to 5 p.m. and from 7 to 9 p.m. Friday's session will run from 8:30 a.m. to 4 p.m.

Public comment segments will be held at 2:15 p.m. Dec. 4 and 3:45 p.m. Dec. 5.

For more information, call 373-5647 or 943-1804.

First look shows Hanford 1998 budget down

By JOHN STANG

Herald staff writer

At first glance, it looks like Hanford's core cleanup budget for fiscal 1998 will be \$47 million less than originally requested.

That's the initial indication from Washington, D.C., after the Department of Energy divided \$5.352 billion in cleanup money among its 12 major environmental management operations nationwide Friday.

Hanford's official share is \$1.138 billion, which includes money to be set aside to eventually pay for converting its radioactive

tank wastes into glass, according to DOE figures.

But how that money is to be allocated among individual Hanford projects is not expected to be nailed down for one or two weeks.

And that clouds the picture on what this \$1.138 billion actually means to Hanford.

That \$1.138 billion could translate to \$1.023 billion in actual core cleanup money to be spent in fiscal 1998.

Here is how Hanford's budget situation has unfolded.

Originally, DOE requested that Congress appropriate \$1.07 billion for core cleanup

at Hanford with an extra \$427 million to be set aside to pay two corporate teams between 2002 to 2007 to convert Hanford's tank wastes into glass.

But the U.S. Senate and House haggled and eventually trimmed that \$427 million to \$115 million.

And the \$1.138 billion allocated to Hanford Friday also includes its glassification set-aside money.

And if the \$115 million set-aside figure holds up as DOE's Richland office allocates its money internally, that would translate to \$1.023 billion in real cleanup money for 1998 — \$47 million less than first requested.

By comparison, Hanford's core cleanup budget for fiscal 1997 was \$1.115 billion.

Another question in these figures is if extra money will go to "cocooning" Hanford's reactors, which could head off some predicted layoffs at Bechtel Hanford Inc.

Bechtel's "cocooning" project consists of decontaminating a reactor complex's interior and destroying the outlying buildings. Then the remaining main reactor building is sealed with the radioactive reactor isolated inside.

Bechtel plans to finish cocooning C Reactor in September 1998, and plans to go to F Reactor next.

But DOE's basic cleanup budget request did not have enough money for Bechtel to go immediately to F Reactor after C Reactor is done. And that delay would cause an undetermined, but significant number of the up to 220 layoffs that Bechtel anticipates in 1998.

But the Senate and House negotiations recommended that \$5 million from a DOE site "closure" account — separate from DOE's core cleanup funds — be allocated to Hanford to keep momentum going on the cocooning project.

Information on the status of that \$5 million or any extra cocooning money was unavailable Friday.

Hanford whistleblower may get more money

By ANNETTE CARY
Herald staff writer

Hanford whistleblower Casey Ruud may be entitled to more money from former Hanford contractor, Westinghouse Hanford Co.

An administrative review board of the U.S. Department of Labor is requiring a judge who ruled on the matter in 1996 to "revisit the matter of appropriate relief."

That could include punitive damages under the Safe Drinking Water Act, because Ruud lost his job after he discussed leakage of nuclear waste into ground water and the Columbia River with a congressional subcommittee. Earlier, the damages had been considered under the Clean Air Act and the Comprehensive Environmental Response, Com-

pensation and Liability Act, which do not allow punitive damages.

The board also ordered Ruud be awarded costs and expenses, including attorney fees.

Ruud said he believed that includes all attorney fees accrued in his 10-year battle with Westinghouse Hanford Co.

"I could not be more delighted," he said Sunday. The ruling vindicates him in his battle with Westinghouse, showing him to be a reasonable person with legitimate concerns about site safety issues, he said.

Ruud and Westinghouse Hanford Co. had reached an agreement nine years ago on the original dispute over Ruud's treatment at Hanford, with the company paying Ruud \$125,000.

The labor board declined to accept that agreement in a ruling

Nov. 10 because of evidence Westinghouse interfered with Ruud's employment after the agreement was signed. Ruud had left the Tri-Cities and gone to work for a small contractor at DOE's Savannah River site in 1990 and 1991, where Ruud said Westinghouse continued to harass him, which eventually cost him his job.

The court found he was prohibited from performing his job training Department of Energy employees at the Savannah River after management there received information about his past whistleblowing activities. He was given five minutes to leave the site, the court found.

The board also agreed with earlier findings Ruud had been harassed by a supervisor at Hanford after testifying before Con-

gress in 1987 about safety concerns that led to work being stopped at Hanford's Plutonium-Uranium Extraction Plant and at the Plutonium Finishing Plant.

After testifying, Ruud was laid off, and the labor board agreed with earlier findings that he was then denied jobs for which he was qualified. Those included positions as a temporary auditor at N reactor and as a permanent senior quality assurance engineer.

The matter had appeared to be settled in 1988. Because of the \$125,000 settlement, a planned Labor department hearing was canceled.

But the case remained open, Ruud said, because the settlement agreement was not sent to the Labor Department for the government to approve. In 1993, with Ruud claiming Westinghouse continued

to harass him after the settlement, the Labor Department required the matter to go before an administrative law judge.

In the 1996 ruling, the judge found Ruud to have "high credibility" and certain Westinghouse Hanford Company witnesses "to be less credible." He also found "heavy sarcasm, apparently infectious among WHC managers, is a hallmark of their attitude toward Ruud."

That ruling found merit in Ruud's complaints he was retaliated against in Savannah River but found that did not invalidate the earlier settlement.

Officials representing Westinghouse could not be reached for comment Sunday.

■ Annette Cary can be reached at 582-1533 or via e-mail at acary@tricityherald.com

Hanford Environmental Restoration

Your comments
are requested
on...

Changes Proposed to Hanford's Tri-Party Agreement
200 Areas Soil Investigation Milestones
Environmental Restoration Project
(M-13-00 and M-20-00)

A revision to major milestones and interim milestones are proposed by the Tri-Party Agencies that will provide an improved process to investigate (characterize) soil waste sites in and around the 200 Area of the Hanford Site. The proposed process will group similar types of waste sites together for characterization and evaluation. This will reduce the number of documents issued and reduce the cost. It will also allow the 200 Area to begin cleanup as work nears completion in the 100 and 300 Areas.

A 45-day public comment period begins
November 24, 1997, and ends January 7, 1998

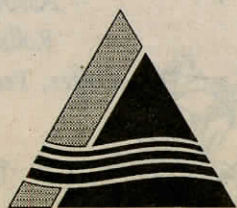
To request a copy of the information or to submit comments
either written or electronically, please contact:

Bryan Foley
U.S. Department of Energy
P.O. Box 550 (HO-72)
Richland, WA 99352
(509) 376-7087
E-mail: bryan_l_foley@rl.gov

OR CALL TOLL FREE:
Hanford Cleanup Line
1-800-321-2008

The Information is Available for Review at:

Richland
U.S. Department of Energy Reading Room
Washington State University, Tri-Cities
Consolidated Information Center, Room 101L
Richland, WA 99352
(509) 372-7443
Attn: Terri Traub



Tri-Party Agreement

Gorton pushes for FFTF studies

By the Herald staff

U.S. Sen. Slade Gorton is urging U.S. Energy Secretary Federico Peña to start the environmental impact studies into whether Hanford's Fast Flux Test Facility should be revived.

In a Tuesday letter to Peña, Gorton, R-Wash., contended the study "would satisfy both proponents and opponents who both desire the formal public involvement that would come with the preparation of an environmental impact statement."

Peña is expected to decide sometime in 1998 whether such a study should be conducted.

The FFTF currently is dormant with studies under way on whether it is feasible to revive it for a short-term tritium production mission as a bridge to a long-term medical isotope production mission.

Long-running Hanford tax fight settled

US Ecology, Benton County reach agreement on taxing waste disposal site

By **KIM BRADFORD**
and **JOHN STANG**
Herald staff writers

US Ecology and Benton County have negotiated an end to their long-running legal feud over how the county will tax the firm's Hanford waste disposal site.

The settlement was acknowledged by the state Board of Tax Appeals last week, said Ryan Brown, a Benton County deputy prosecutor.

The dispute was to go to a hearing before the appeals board Dec. 15.

The fight was over how the county calculates the assessed value of US Ecology's low-level radioactive waste landfill in central Hanford,

which determines the firm's property taxes.

In 1992, the county increased the assessed value of the US Ecology site by 12,015 percent — arguing the company's income, environmental permits and its monopoly on receiving wastes from an 11-state area should be calculated into its value.

US Ecology vehemently disagreed and fought the increased assessment, which ranged from \$14 million to \$46 million annually in the past six years under the county's formula.

In 1996, US Ecology argued the site's value was slightly less than \$500,000.

The settlement between US Ecology and the county eliminates the

"intangible" aspect of calculating the assessed value. This mirrors state legislation passed in the spring.

Consequently, the revised annual assessed values for US Ecology's site from 1992 to 1997 will range from about \$733,000 to about \$206,000, said County Assessor Barbara Wagner.

"We are being assessed the same way as any other taxpayer is being assessed in Benton County. ... We are happy to have the issue resolved," said US Ecology's regional manager, Barry Bede.

The treasurer's office learned of the settlement Tuesday afternoon and had not had time to figure how much back taxes US Ecology will have to pay. Figures should be

ready by next week, when a bill will be mailed, said Treasurer Darwin Parker.

Because the county never collected the disputed taxes, the money was never allocated to any program. Consequently, the settlement will not take away any money spent or budgeted, Wagner said.

US Ecology takes in two types of waste at its site, which is essentially a series of huge burial trenches.

One type is low-level radioactive wastes. US Ecology expects to receive 85,000 to 86,000 cubic feet this year, and about 83,000 cubic feet next year.

The decrease is due to companies creating less wastes because of the high disposal expenses and less waste coming from Oregon's

Trojan reactor site, which being decommissioned, Bede said.

US Ecology's legal service area for low-level wastes includes 11 states.

Meanwhile, US Ecology takes in slightly radioactive dirt and rubble from anywhere in the nation — between 10,000 and 15,000 cubic feet this year. The company predicts about the same amount in 1998.

For each cubic foot of waste received, US Ecology pays a \$6.50 surcharge — \$4.50 to a local economic development fund and \$2 to Benton County.

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Waste meets groundwater

DOE confirms Ecology's belief about tank wastes

By **JOHN STANG**
Herald staff writer

For the first time, the Department of Energy has agreed radioactive wastes from Hanford's underground tanks has reached the ground water.

That ends years of debate whether Hanford's most dangerous wastes have seeped to the ground water, which then would carry them to the Columbia River.

The Washington Department of Ecology has long thought tank wastes have reached the ground water — vehemently pushing that contention in the past year and a half.

Meanwhile, for the past couple of decades, DOE gradually has shifted from saying no tank wastes were in the ground water, to saying it did not know, to saying Tuesday that wastes have seeped down that far.

That conclusion comes from two Pacific Northwest National Laboratory draft reports on five clusters of tanks — the S, SX, T, TX and TY "tank farms" — in the 200 West Area.

Another draft PNNL report on the B, BX and BY tank farms in the northern 200 East Area is expected to reach the same conclusion in about a month, said Mike Thompson, the DOE official in charge of ground water issues.

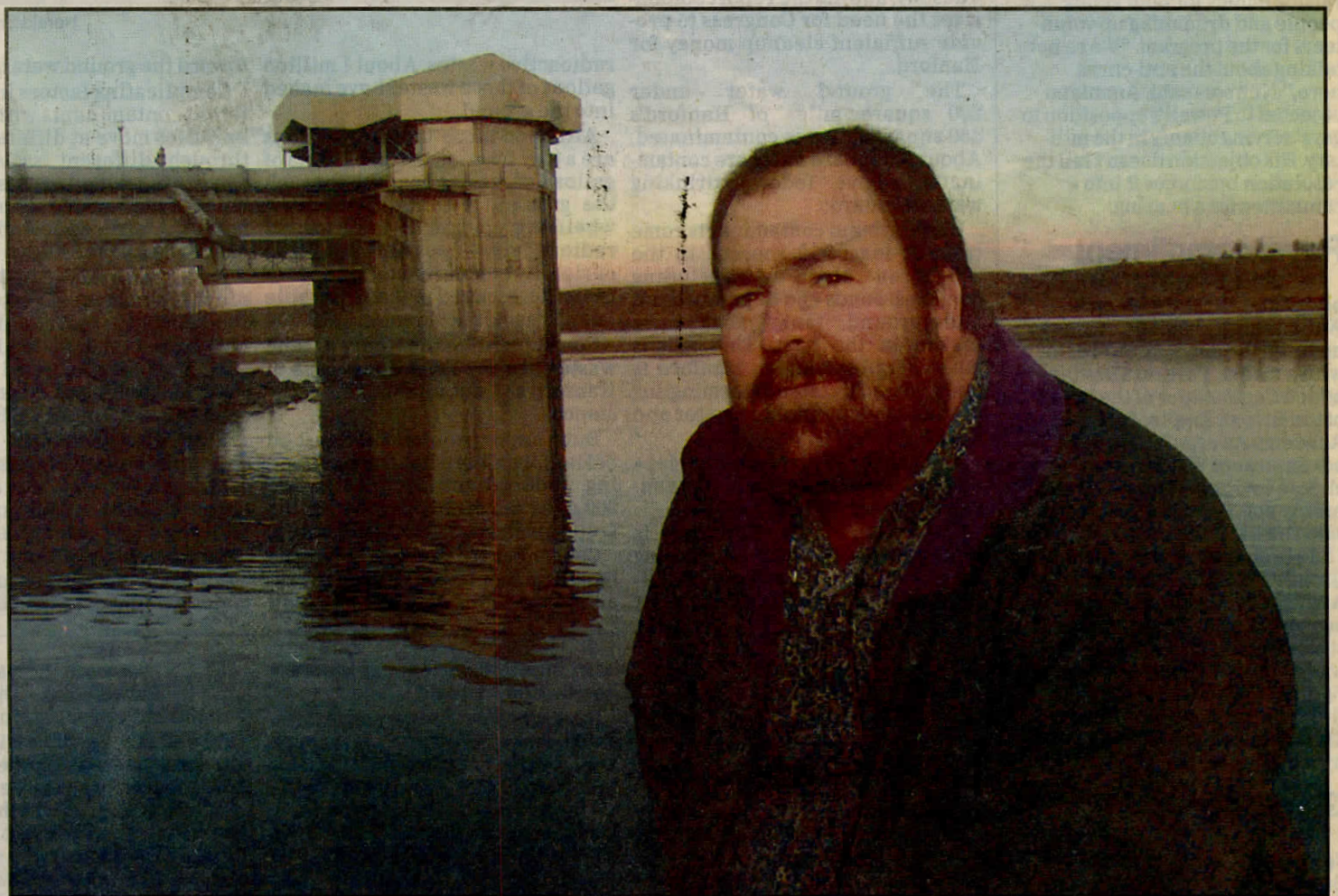
DOE is looking at the same matter at the remaining 12 tank farms, although no timetable is set.

"It's nice to know we're now on the same playing field," said Suzanne Dahl, the Ecology department's tank program manager.

This conclusion is not expected to seriously change Hanford's environmental fix-it plans — at least in the near future.

It will take about 100 years for contami-

■ **IT'S YOUR CALL:** Is the Department of Energy doing enough to stop contamination of ground water at Hanford? Page A3.



Scott Meyer, water operations supervisor for Richland, stands near the city's Columbia River water intake at the end of Snyder Street. Meyer said the pumping station supplies most of the city's water.

Herald/Bob Brawdy

Leakage not contaminating drinking water

By **MIKE LEE**
and **ANNETTE CARY**
Herald staff writers

Officials say radioactive leaks from Hanford tank farms haven't yet hurt Tri-City drinking water.

"There are no immediate health concerns," said Dr. Larry Jecha, director of the Benton-Franklin District Health Department.

But the leaking high-level wastes could reach the Columbia River in 20 years, according to Department of Energy scientists. And most Tri-City drinking water comes from the river.

Ground water under Hanford already is contaminated from 50 years of pumping waste water into the ground, and area cities test their water for contamination.

nated ground water to reach the Columbia River from the 200 West Area.

DOE believes contaminated ground water will take about 20 years to reach the river from the 200 East Area. Dahl somewhat agrees with that estimate but noted some

Richland uses about 7 billion gallons of water a year, about 75 percent of which comes from the Columbia River, said Stan Arlt, city utility services director.

He said the city regularly checks its water for radioactivity and other contaminants.

"The fact that they have ground water contamination is certainly not news to us," Arlt said, but he added, "We don't believe that any of that (contamination) is anywhere near Richland."

The city has a well in north Richland near the Washington State University branch campus, about 17 miles from the tank farms, Arlt said.

Also, the city pumps about twice as much river water into the well field as it pulls out — a safety procedure designed to in effect push away any contaminated ground water.

Pacific Northwest National Laboratory, which is operated by Battelle, also regu-

larly tests Hanford ground water, and Richland spends more than \$10,000 a year to test its supply, Arlt said.

"There's a lot of checks and balances to make sure we're not getting contamination," Arlt said.

In Pasco, public works director Bob Alberts said the city's drinking water is regularly tested for contaminants. The city's water all comes from the river.

"As far as I know, we have good water quality," he said.

Michael Smith, water quality engineer for Kennewick, said the city tested its water for radioactivity in the last month and didn't find any problem. Kennewick gets its water from wells and the Columbia River.

"We don't have any problems related to this (tank farm leak), and our recent sampling shows that we're fine," he said.

reports speculate this time could be shorter.

For decades, some relatively small amounts of radioactive contaminants from throughout Hanford have reached the river, where they have been diluted.

Thompson and Dahl tentatively believe the

leading edge of the most dangerous substances from the tanks have not ventured far beyond the border of the 200 Area. Thompson cited readings from about 800 monitoring

Please see **WASTE**, Page A2 ►