



Last Monday's somber skies mirrored the mood of some at FFTF and in the community as liquid sodium was drained from the first of FFTF's three secondary cooling loops.

## FFTF's final chapter begins

*Karin Nickola, Fluor Hanford*

A message to Fast Flux Test Facility staff members from Fluor Hanford's Bruce Klos, acting project director for the FFTF closure project, began with a succinct statement on Monday, April 7: "At approximately 8:40 this morning, draining of sodium from the first of the FFTF secondary loops was initiated."

Thus, in the same highly professional manner that FFTF personnel have operated the reactor and maintained it in a standby mode for 10 years, they ushered the Fast Flux Test Facility into a new and final decommissioning phase that could be finished in as little as six years.

"The staff at FFTF is *extraordinary*. They have not lost their edge," said Klos. "Despite years of uncertainty, they have continued to perform with exceptionally high standards. This was evidenced in the flawless manner in which the loop-one sodium drain was carried out."

Efforts by supporters to stall the decommissioning, in the hope of eventually restarting the reactor, were halted by decisions of federal courts. The draining of sodium is considered by many to be the point of no return in the decommissioning process.

During full-scale operation of the reactor from 1982 to 1992, three cooling loops kept liquid sodium in the re-

*Continued on page 2.*

## FFTF's final chapter begins, cont.

actor core at about 1,000 degrees Fahrenheit. In standby mode, with fuel assemblies removed, the loops were used to maintain the liquid sodium at about 400 degrees (sodium solidifies at 208 degrees Fahrenheit).

Each of the three cooling loops has a primary and a secondary side. The primary side passes through the reactor core and transfers heat to the secondary side via a large heat exchanger.

Draining of the liquid sodium starts with the secondary side of each cooling loop. As the secondary loops are drained, immersion heaters in the reactor vessel will help keep the liquid sodium at the desired temperature until it's time to drain the primary systems. Two sodium-filled fuel-storage vessels will also be drained after the fuel is transferred to dry cask storage.

Draining sodium from the secondary side of the cooling loops is a fairly straightforward process. After appropriate initial conditions are established — primarily temperatures and pressures — it's a matter of opening loop and dump-heat-exchanger drain valves to permit gravity flow to an in-plant drain tank.

Nearly 17,000 gallons of liquid sodium flowed into the drain tank on April 7. The following day, the drained sodium was pressure-transferred to the Sodium Storage Facility, where it will be allowed to cool and solidify. The sodium is expected to remain "frozen" for several years. Eventually, it will be converted to sodium hydroxide for use in pre-treating the Hanford high-level tank waste before vitrification in the Waste Treatment Plant.

Several sodium-cooled reactors have already been decontaminated and decommissioned in the United States and Europe. Shared information provides a framework from which FFTF staff members can optimize plans. Whatever the chosen path, however, FFTF decommissioning must follow a process outlined in Sections 7 and 8 of the Tri-Party Agreement — which means adhering to the *DOE and EPA Policy on Decommissioning of Department of Energy Facilities Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*.

## Turning the corner

About 225 people are working at FFTF. Many of them helped the facility achieve world-record fuel performance and earn operational and engineering awards in the years that it operated. Today, these people are challenged with adjusting to a new and different mindset. But they are accomplishing it with pride and their usual high standards.

Perhaps there are new world records to be set in decommissioning the reactor. In any case, the employees know they have a job to do, and they will do it with gusto. ■



**Fluor Hanford spokesman Bruce Klos responds to questions from reporters at an afternoon news conference on April 7, the day sodium draining began. Local interest in the process — considered by many to be the end of efforts to restart the reactor — remained high.**

# DOE files suit against state

The U.S. Department of Energy, through the Justice Department, filed suit last Wednesday against the State of Washington's Department of Ecology. In doing so, DOE officials said they moved to protect cleanup programs governed by the Tri-Party Agreement and DOE's accelerated cleanup program. The action challenges a recent determination by Ecology director Tom Fitzsimmons relating to transuranic waste cleanup.

The suit was filed in United States District Court, Eastern District of Washington, and in state court. Washington had filed its own lawsuit at the end of February, challenging certain DOE shipments of material to Hanford — shipments from other DOE sites that are also important to the accelerated cleanup plans.

"Recent actions by the State of Washington could have a chilling effect on cleanup operations at Hanford and elsewhere," said Jessie Roberson, assistant secretary for Environmental Management. "The Department of Energy has fundamentally changed the cleanup program for every site in the country."

Since 2000, DOE has shipped more than 550 drums of transuranic waste out of the state as part of its integrated and accelerated approach to cleanup. "The department is making good on its intention that, for every drum of waste brought in to Hanford, two would leave," Roberson said. "Some groups would like for you to believe that the shipment of waste is unsafe. It is not. Shipments are highly regulated and safe. In fact, it is disingenuous for those groups to make statements that shipments of waste going *into* Washington are not safe, but those going *out of* Washington *are* safe."

Roberson said Washington was the first state to sign on to the DOE's accelerated cleanup program, but she's not certain the state understands the unintended consequences of its recent lawsuit, which could affect shipments of transuranic waste around the country, including shipments leaving Washington.

"We believe we can work with the state on this issue to reach an eventual agreement, but in light of Washington's actions, we felt we had to file this lawsuit to protect our interests," Roberson said. ■

# Think small when powering today's electronic soldier

On the battlefield, having a reliable source of power to operate the many advanced electronic devices a soldier carries is essential. But today's heavy and cumbersome batteries fall short of satisfying the military's needs. In search of both a lightweight and reliable alternative, the Department of Energy's Pacific Northwest National Laboratory has developed the smallest power system yet, all wrapped up in a micro-sized package.

PNNL researchers, with funding from the Defense Advanced Research Projects Agency, have developed the world's smallest catalytic fuel processing reactor system to provide a low-watt power source for hand-held wireless equipment, sensors and other small but essential devices required by today's troops.

The tiny power system — about the size of a cigarette lighter — converts liquid fuel to electricity via a microscale fuel processor coupled with a microscale fuel cell developed by Case Western Reserve University in Ohio. An integral part of the system is PNNL's revolutionary fuel reformer, about the size of a pencil eraser, which enables the system to convert fuel and water into hydrogen-rich gas. The fuel cell then generates electricity by converting hydrogen and oxygen from the air into electrical power and clean water.

“Our miniaturized fuel processor incorporates several chemical processes and operations in one device,” said Evan Jones, PNNL principal investigator. The fuel processor system contains two vaporizers, a heat exchanger, a catalytic combustor and a steam reformer, all within a package no larger than a dime.

The military envisions many useful applications for this emerging miniaturized energy-generating technology. According to Terry Doherty, director of PNNL's Department of Defense programs, soldiers could power personal, lightweight cooling systems while wearing protective suits and gear, prolonging their comfort and efficiency during a reconnaissance.

*Continued on page 5.*



**PNNL's revolutionary microscale fuel processor, which consolidates several chemical processes and operations into one package, is considered the world's smallest integrated catalytic fuel reformer.**

## Think small when powering today's electronic soldier, cont.

"Vital personal communications devices could function for extended periods without the added weight of bulky, inefficient batteries," Doherty said. He added that miniature sensors powered by the same technology could be scattered before advancing troops to monitor ground vibrations or detect dangerous toxic agents and relay this information electronically to soldiers. This technology broadens the possibilities for using self-sustaining items such as mobile devices in remote or difficult-to-access locations.

While methanol has proved to be the most effective fuel source, other liquid fuels such as butane, jet fuel or even diesel may be used. And, because the hydrogen power source is only produced as needed, there is no need to store or carry the volatile gas, reducing risk and creating a lighter load.

Testing has revealed that performance from the reformer and fuel-cell prototype is impressive. "This system can produce an equivalent power to batteries, but at one-third the weight," Jones said. Similar micro fuel-cell systems currently under development are providing power equal to that of batteries weighing 10 times as much. Researchers suggest that additional improvements could result in even greater performance. Development will now focus on creating a deployable system suitable for military use or industrial application. ■

# FFTF's timeline

**1969** Construction begins.

**1978** Construction is completed.

**1980** Initial operation.

**1982-1992** Successful operation as a national research facility testing advanced nuclear fuels, materials, components, protocols for nuclear power-plant operations and maintenance, and reactor safety designs. Produced a variety of medical and industrial isotopes. Produced tritium for the U.S. fusion research program. Conducted cooperative international research work.

**1993** Department of Energy orders shutdown.

**1994-1997** Fuel is removed from reactor for storage. Twenty-three of 100 operating systems put into lay-up status.

**1997** Facility is maintained in standby condition as DOE evaluates potential role in tritium production.

**1998** DOE determines FFTF will not assume a role in tritium production.

**1999** DOE completes plan for FFTF program scoping.

**1999-2001** Environmental Impact Statements evaluate potential impacts associated with potential expansion of DOE nuclear infrastructure capabilities for proposed missions. Plans developed for both shutdown and restart. Refueling system upgraded. Tri-City community leaders attempt to secure mission and funding source for FFTF.

**April 4, 2003** DOE orders sodium drain.

**April 7, 2003** Secondary loop sodium drain begins.

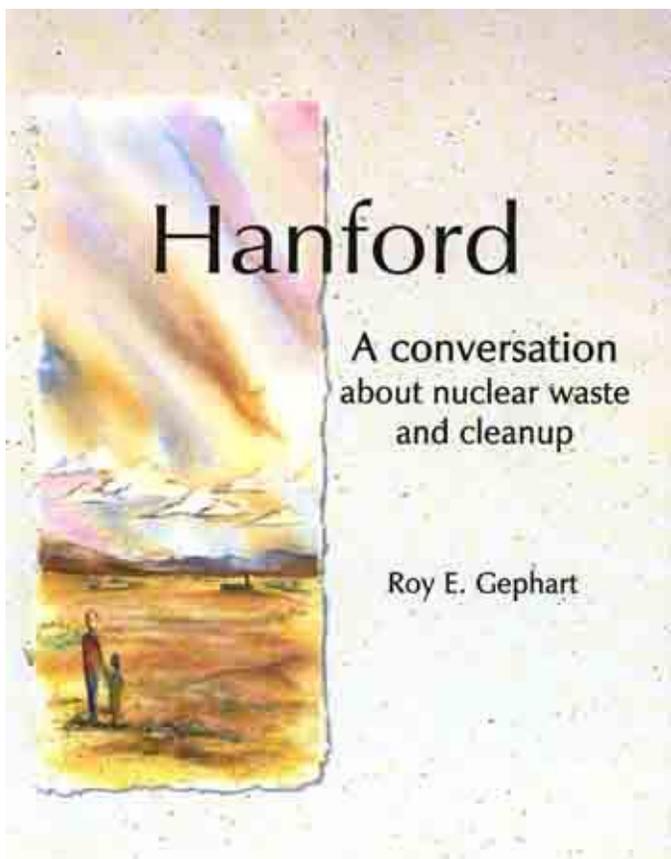
# Book on Hanford cleanup the result of 30-year career

A conversation — an informal exchange of ideas and information — may educate, enlighten and engage the participant on a broad spectrum of topics and on many levels. In his new book, *Hanford: a conversation about nuclear waste and cleanup*, Roy Gephart intends to educate, enlighten and engage his readers with a mix of history and science that will promote further conversations about the legacy that future generations will inherit.

The book is an information resource, written for the general reader and the technically trained individual. The many illustrations and photographs complement the 400 pages of text and help to put the legacy of Hanford wastes in perspective, from their origins during the Manhattan Project and the Cold War to the current cleanup mission. Gephart hopes his readers will become “informed consumers of Hanford news.”

But Gephart also hopes that the events and lessons presented in the historic framework of twentieth-century America will guide his readers in “how to think about Hanford issues” rather than “what to think”. He notes that the history of Hanford reveals how little we sometimes understand the consequences of events when we are caught up in them.

“The approaches we take to cleanup will affect the legacy that future generations inherit, just as the decisions made by previous generations have affected our inheritance,” Gephart said. “The bottom line has to be protection of human health and the environment. It is an ominous responsibility for us.”



*Hanford: a conversation about nuclear waste and cleanup* is a product of the evolution of information paralleling Gephart's own experiences. Gephart is a geohydrologist and senior program manager at the Pacific Northwest National Laboratory. His 30 years of experience in environmental studies and nuclear waste management across the DOE complex have included his current work at PNNL and work with former Hanford contractors ARCO, Rockwell and Westinghouse. He writes and presents lectures on these topics in national and international forums.

Gephart believes that making decisions about environmental issues such as nuclear waste cleanup is far more complex than making decisions based solely on scientific evidence. Present and future health risks, social consciousness and ethics all come into play. Reflecting his concerns, he has devoted chapters of the book to these issues.

*Continued on page 8*

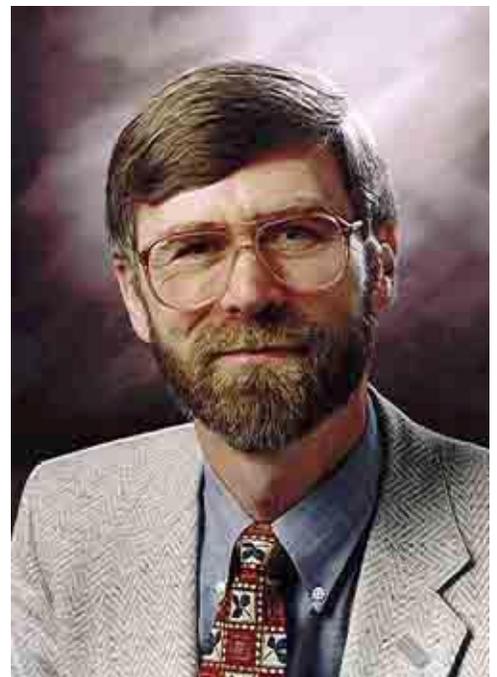
Watercolor artist Chris Walling of Richland illustrated the front cover of Gephart's book. To see it in color, go to our web site, [www.hanford.gov/reach](http://www.hanford.gov/reach)

## Book on Hanford cleanup the result of 30-year career, cont.

Gephart will hold book signings on April 26 at The Bookworm: 11 a.m.-12 p.m. at the Richland store at 1908D George Washington Way, Richland, and 1-2 p.m. at the Kennewick store at 201 North Edison.

On May 8 at 7 p.m., Gephart will talk about his book and sign copies for the public at the Columbia River Exhibition of History, Science and Technology, 95 Lee Blvd., Richland.

Copies of *Hanford: a conversation about nuclear waste and cleanup* are available from book outlets including the publisher, Battelle Press. To order from Battelle, send an e-mail message to [press@battelle.org](mailto:press@battelle.org) or visit the Web bookstore at <http://www.battelle.org/bookstore>. The cost is \$34.95 plus \$4.50 shipping. Discounts are available for large orders. Contact Joe Sheldrick at Battelle Press, (614) 424-4089. ■



**Gephart**

# Stay alert to indicators of weapons of mass destruction

Would you be able to recognize potential indicators of threats involving weapons of mass destruction? Do you know the correct emergency actions to take?

Weapons of mass destruction employ chemical, biological and radiological material that can be dispersed in the air we breathe or the water we drink, or on surfaces we physically contact. The following general information does not cover all possible indications of a threatened use of weapons of mass destruction.

Dispersion methods could include placing an open container in a heavily used area; using conventional home, garden or commercial spray devices; or detonating an improvised explosive device to disseminate chemical, biological or radiological material.

When chemical agents are used, medical symptoms appear rapidly, within minutes to hours, and the evidence or signature of the material can be observed in colored residue, dead foliage, pungent odor, and dead insects and animals. But when biological or radiological agents are used, the onset of symptoms may take days to weeks and there are typically few characteristic signatures.

**You can help law enforcement and emergency responders in evaluating potential threats by staying alert and watching for the following indicators:**

- Unusual packages or containers, especially those found in unlikely or sensitive locations, such as near heating, ventilation or air-conditioning units or air-intake systems.
- Unusual powders or liquids, droplets, mists or clouds, especially those found near heating, ventilation or air-conditioning units or air-intake systems.
- Signs of tampering with equipment such as locked heating, ventilation or air-conditioning units or air-intake systems, or tampering in targeted areas such as stocks of food or water supplies.
- Reports of suspicious person(s) or activities, especially those involving sensitive locations within or around a building.
- Surveillance of targeted areas, including hotels, entertainment venues, aircraft, water sources, office buildings or apartment buildings.
- Theft of chemical products and equipment.
- Unexplained or unusual odors that may range from fruity and flowery to sharp and pungent, garlic or horseradish-like, bitter almonds, peach kernels and new-mown grass or hay.
- Unusual or unscheduled spraying or discovery of spray devices or bottles.

*Continued on page 10.*

## Stay alert to indicators of weapons of mass destruction, cont.

### Be on the lookout for potential indicators of weapons of mass destruction:

- Maintain a heightened sense of awareness.
- Put more emphasis on the security of your immediate surroundings.
- Do periodic inspections of building facilities and heating, ventilation or airconditioning units or air-intake systems for irregularities.
- Review emergency operations and evacuation plans and procedures for all locations and organizations to ensure that plans are up to date.
- Promptly report suspicious activities to appropriate law-enforcement authorities.

### Here are some emergency procedures to follow when a potential threat has been identified and confirmed:

- Maintain a safe distance or evacuate the area. If you are outside, move to an upwind location; if you are inside, keep outside doors and windows closed.
- Call the Patrol Operations Center at 373-3800 or the Pacific Northwest National Laboratory single-point-of-contact number, 375-2400, after reaching a safe area.
- Do not handle or disturb suspicious objects.
- Remove possibly contaminated external clothing (including hats, shoes and gloves).
- Follow emergency operations plans and instructions from emergency-response personnel. ■

# In WTP Project facilities, there's more than meets the eye

## Concrete buildings are giant maze of metal, piping and infrastructure

The workforce of the Bechtel National-led Waste Treatment Plant Project believes it's always what's inside that counts — especially when it involves building the world's largest nuclear waste treatment plant atop Hanford's central plateau.

Most will only see the buildings' massive concrete exteriors; few will ever see the intricacies and craftsmanship involved in this decade-long construction project.

Since construction began in October 2001, the thick concrete foundations of the plant's High-Level Waste and Low-Activity Waste facilities have been completed, and basement walls are now going up. Placing the foundation concrete for the Pretreatment facility, which will separate Hanford's tank waste into high-level and low-activity streams for glassification, began last month.

"Extensive design, procurement and planning efforts, as well as the effort of skilled craft workers are required for each concrete placement," said Carl Wagner, the High-Level Waste facility's lead civil field engineer. "Reinforcing steel, embed plates, ductwork, piping and wiring are a few of the components encased in concrete placements."

The majority of material inside each building foundation and wall is a vertical and horizontal maze of thick reinforcing steel bars known as rebar. "The rebar and concrete work together, to resist any lateral earthquake forces and transfer them into the building's surrounding soil," explained Phil Schuetz of the High-Level Waste project. "Steel embed plates are secured to rebar or formwork and encased in concrete. We position the embeds where we plan to anchor structural steel beams, tanks, plant equipment and instruments."

Another hidden maze of infrastructure rests inside each facility — stainless-steel piping and ductwork. Construction crews must also secure piping and structure ductwork before each concrete placement.

*Continued on page 12.*



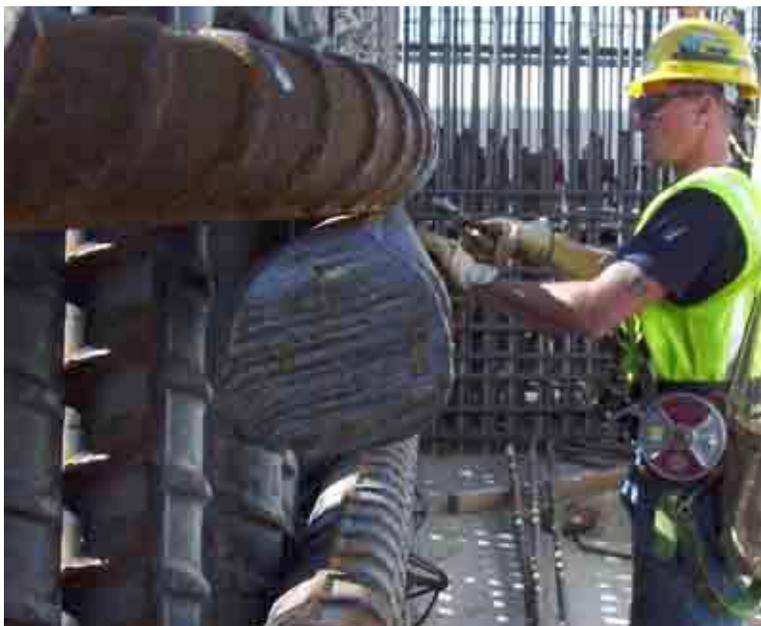
The Low-Activity Waste Vitrification facility is one of three major processing buildings under construction by Bechtel Hanford as part of Hanford's Waste Treatment Plant Project. With the foundation and outer basement walls complete, the construction crews' efforts are now focused on placing the concrete for the facility's interior basement walls.

## In WTP Project facilities, there's more than meets the eye, cont.

“We make sure each segment of piping is properly attached to rebar and embeds before every concrete placement,” Wagner said. “If they are not fastened down, it's like trying to hold a beach ball underwater — it floats to the top.”

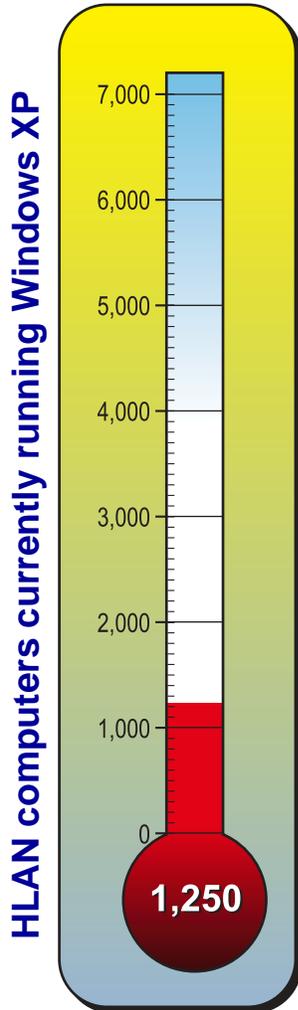
Extensive field surveys and engineering inspections take place before each concrete placement to ensure all components are aligned correctly and the concrete meets nuclear quality specifications. WTP construction crews prepare for a concrete placement by erecting formwork to safely hold the concrete in place until it hardens.

Workers remove the formwork when the concrete solidifies into a foundation or wall segment, bringing the WTP and Hanford's cleanup mission one step closer to completion. ■



**Ironworker Justin Sorenson of the Hanford Site Waste Treatment Plant Project fastens thick reinforcing steel bars atop the High-Level Waste Vitrification facility foundation. The rebar is the infrastructure for one of the facility's interior basement concrete walls.**

## Hanford XP Migration Project Update



- See the Roadmap to XP for an overview of the XP migration process at <http://www.rl.gov/xp> under the “Installation” tab.
- Join us for an XP Migration Overview session where we’ll explain the migration process and answer your XP questions. For current dates and times, please go to <http://www.rl.gov/xp> and look under the “Training” tab.
- Look at the FAQ web pages for answers to the most frequently asked questions concerning the XP project. They are located at <http://www.rl.gov/xp> under the “FAQ’s” tab.
- Starting immediately, all new computers ordered, as well as all redistributed computers, will be configured with Windows XP and Office XP unless other arrangements have been made through your organization’s XP Point of Contact. See the XP Web pages for a listing of the XP POCs.

XP Project Home Page	<a href="http://www.rl.gov/xp">http://www.rl.gov/xp</a>
XP Application Testing Matrix	<a href="http://www.rl.gov/xp">http://www.rl.gov/xp</a> under the “APP Testing” tab
XP Project Mailbox	^Windows XP Project

# Hanford employees to join Earth Day cleanup

Hanford employees will be rolling up their sleeves to join other regional volunteers in participating in the Community Cleanup Day scheduled for April 19. Hanford contractors are supporting the Tri-Cities' observance of Earth Day with spring cleanup and beautification projects at a variety of locations in the region.

The Fluor Hanford Community Involvement Team will help clean up a two-mile stretch of Interstate 82 in the Adopt-a-Highway program and will clean up a park in West Richland, the facilities of The Arc of the Tri-Cities and homes of senior citizens. Team Battelle will help spring clean yards for senior and disabled citizens. Fluor Hanford, Battelle and Bechtel are all sponsors of the Community Cleanup Day activities.

If you have a spring cleanup project going at your home, here are a few events to assist you on April 19:

- 9 a.m. – 1 p.m., household hazardous waste collection for Benton County residents at the Tri-Cities Coliseum
- 9 a.m. – 1 p.m., free public document-shredding event provided by Columbia Industries at the Tri-Cities Coliseum
- 9 a.m. – 3 p.m., household and yard waste disposal for West Richland residents at Flat Top Park.
- April 19-26, Northwest Tire Recycling will offer discounts for recycling tires at 880 Curie St. in Richland, 371-1475.

If you would like to join any of the Hanford teams in their cleanup efforts, call Calvin Dudney of Fluor Hanford at 373-6267 or Sandra Cannon of Battelle at (509) 529-1535.

To participate in community cleanup events, call the contacts of the individual cleanup projects listed below and on the Web site at [www.tcfn.org/earthday](http://www.tcfn.org/earthday). At this site you can also download forms to register for a community cleanup project or sign up to participate in a cleanup project.

- The Tapteal Greenway is sponsoring a work day on April 19 to help maintain the trails at the Chamna Natural Preserve. Contact Ginger Wireman at 946-9692 or 736-3008 for more information.
- The Benton Franklin Volunteer Center is scheduling senior and disabled citizen yard cleanup projects. Call the Volunteer Center at 582-0631 to adopt a yard.
- The Atomic Ducks Dive Club needs certified divers to help clean the trash out of the Columbia River on April 19. Non-divers are also needed for shore support. Call Carol Porter at 373-7402 during the day or at 943-5019 in the evening.
- Groups are encouraged to participate in the Adopt-a-Highway litter cleanup on or around April 20. Call Tim Arntzen at 545-3405 to schedule your group.
- Throughout April, cell phones and accessories that are no longer needed can be donated to the National Donate a Phone Program, through which they are repaired and provided to domestic violence victims. Phone collection containers will be placed at the Richland Public Library and Mid-Columbia Public Library branches. For more information, log onto [www.donateaphone.com](http://www.donateaphone.com). ■

# 60 Hanford 1943-2003

The Hanford Site celebrates 60 years of protecting America



## Turkey day at early Hanford

In November 1944, Hanford mess-hall chef Bill Sims was featured in the *Sage Sentinel* preparing a plump turkey for a Thanksgiving feast in one of the many mess halls that served the site's wartime employees.

The meal – turkey and ham with all the trimmings – cost just 60 cents.

It was 60 years ago last month that Hanford workers broke ground for the first site facilities that would be instrumental in bringing World War II to an end. Today, Hanford employees are making history again by participating in the world's largest environmental-cleanup effort.

## Fitness presentations continue in April

Fluor Hanford Safety and Hanford Environmental Health Foundation Health Education Services are teaming to present several "Make Your Move" presentations on understanding fitness and exercise. Attendance at one of these presentations will meet the April safety meeting attendance requirement for Fluor Hanford employees. For further information, call Carol Powe of Fluor Hanford Safety at 376-8886, or Judi Staley of HEHF Health Education Services at 372-0097. Fluor Hanford work groups that cannot attend the scheduled presentations may call HEHF Health Education Services at 373-3729 to schedule a more convenient time.

### 'Make your Move' schedule

- Wednesday, April 16, MO-293, 100K  
**9:30-10:30 a.m.**

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- Thursday, April 17, MO-278, 200W  
**9-10 a.m.**

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- Thursday, April 17, 2101-M, Bijou, 200E  
**10:30-11:30 a.m.**

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- Monday, April 21, MO-250, 200W  
**8-9 a.m.**

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- Wednesday, April 23, 3763, 300 Area  
**9-10 a.m.**

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- Wednesday, April 23, 4706, 302, 400 Area  
**10:30-11:30 a.m.**

## Security Ed Challenge

# What are the three primary Security Areas at Hanford?



The Department of Energy Safeguards and Security places barriers between security interests and threats. At Hanford there are three primary Security Areas. Do you know what they are?

- A. Personnel, Security and Assets
- B. Property Protection, Limited and Protected
- C. Entry, Badges and Information
- D. Contraband, Weapons and Prohibited

Do you know the answer? Send an e-mail message with the correct answer (indicate "Ed's Security Area Challenge" in the subject line) to C. E. (Chet) Braswell, or clip this article, circle the correct answer, add your name and HID number, and send your response to Security Education at MSIN L4-09. Prizes will be awarded to randomly drawn correct entries. The names of prize-winners and the correct answer will appear in a future *Hanford Reach* article soon.

References: Initial Security Briefing and <http://apweb02.rl.gov/rapidweb/phmc/sas/index.cfm?PageNum=212>

**Congratulations to Debbie Kane of Fluor Hanford, the winner of the March 31 Security Ed Challenge. Kane won a MiniMag Light for correctly identifying the two actions to take when downloading software or files from the Internet and the software or files have limitations:**

- **Notify your immediate manager**
- **Contact the General Counsel's Office or Information Security so they may review the terms for use and determine whether you can lawfully use the software on your government computer.**

**If you have any challenges you would like Security Ed to consider, e-mail them to Security Ed at ^Security Ed or send them by plant mail to Security Ed at L4-09.**





## LETTERS

Employees are invited to write letters of general interest on work-related topics. Anonymous letters will not be printed. We reserve the right to edit letters or not to accept letters for publication. Send your letters to the *Reach*, B3-30, or to \*Hanford Reach on e-mail. Letters are limited to 300 words, and must include your name, company, work group and location. Opinions expressed are those of the author and not of DOE-RL, ORP or their contractors.

### Front-end work for Tank C-106

Regarding the front-page articles, "Fieldwork under way on first waste tank to be closed" (March 24) and "Pumping begins on Tank C-106" (April 7), I compliment you on excellent reporting. My hat is off to the folks in the "whites" out in the field getting the work done as they perform a tough, nasty job under any circumstances.

I'd also like to offer thanks to the folks on the front end of the process that enabled the hands-on work to commence. Congratulations to the folks at CH2M HILL Hanford Group who initiated communications with the Fluor Hanford Site Fabrication Services organization starting in October 2002. These conversations led to fabricating most of the items needed to support pumping. Enhanced Work Planning was indeed a key. Weekly progress meetings ensured that the fabrications were successfully completed.

Many, many folks created drawings, estimated, scheduled and planned packages. Team members procured, then received all the thousands of items that were used to create the fabricated items needed for pumping. Among the shop-fabricated items used for pumping Tank C-106 were a supernate pump (that replaced the stubborn heel-jet pump), a flammable gas exhauster (modified by the shops), work platforms, spray ring washers, connector (jumper) assemblies, cover plates, shielding plates, over-ground transfer hose supports, shims, and several versions of "heel jacking tools" fabricated to persuade the heel-jet pump to head over to the burial ground.

The folks ahead of the actual tank-farm work in the shops, at purchasing, at central stores, in receiving and in transportation worked overtime to maintain the schedule and all did a great job for the site. The folks at Site Fabrication Services received support from practically every organization on site to maintain schedule.

**Kirk Higginson**  
*Fluor Hanford*

### On-site help with EEOICP claims

I would like to take this opportunity to thank the staff at the Volpentest HAMMER Training and Education Center for being so helpful as we prepared for, and began staffing, an on-site office to help workers who want assistance with filing claims under the Energy Employees Occupational Illness Compensation Program, or EEOICP.

I also want to clarify that the EEOICP is for those workers or survivors of workers who have, or had, cancer or chronic beryllium disease and worked at Hanford or one of the other Department of Energy facilities. The headline of an earlier article in the *Hanford Reach* indicated that our office was there to provide assistance to the beryllium group. While that is true, we are also available to assist those workers who wish to file cancer claims.

We are in Room 4 of the Resource Training Center at the HAMMER Facility each Wednesday. Workers can call our main office at 783-1500 to obtain more information about the EEOICP or to schedule an appointment with our on-site caseworker. There are also brochures available near the HAMMER cafeteria.

**Eunice Godfrey, Manager**  
*Energy Employees Compensation Resource Center*



## NEWS BRIEFS

### Congressional Art Show on display

Artwork by high-school students in the region will be on display in the lobby of 2440 Stevens Center from Monday, April 14, through Friday, April 18. The Congressional Art Show, sponsored by Congressman Doc Hastings, is co-hosted by the Department of Energy Office of River Protection and CH2M HILL Hanford Group. The artwork showcases the creative talents of students throughout the 8th Congressional District and will be judged by a local panel of experts. The winning piece of artwork, which will be announced Friday, then will hang in the halls of Congress for the coming year. Employees are encouraged to stop by 2440 Stevens Center and view the show.

*News Briefs continued on next page.*

# Regular Features



## **NEWS BRIEFS** **continued**

### **WSU Tri-Cities MBA program explained**

Washington State University Tri-Cities will host an information night on its master of business administration and master of technology management degrees at 6 p.m. Wednesday, April 17, at the Red Lion Hotel (formerly the WestCoast Hotel and Cavanaugh's) on Columbia Drive in Kennewick.

Business-program coordinator David Lemak will join other WSU Tri-Cities faculty in explaining the MBA program and all requirements for admission. The WSU MBA program has been offered for more than 13 years in the Tri-Cities area and is accredited by International Association of Management Education. ♦



## **C L A S S E S**

### **PROTRAIN offers the following software classes:**

- **Crystal Reports 8**  
Introduction — April 21  
Advanced — April 22
- **Primavera Project Planning**  
P-3 602 — April 21  
P-3 603 — April 22  
P-3 604 — April 23
- **Office XP classes now available.**  
For more information, contact Sarah at 375-0414 or at sarah@pro trainsys.com.

### **Peak Performance offers courses at HAMMER**

Instructors Rick Martinez and Larry Birckhead of Peak Performance Systems, Inc. will offer two training sessions at the Volpentest HAMMER Training and Education Center. To register for either of the offerings below, please contact Rick Martinez, 627-3273, or Libby Sickler via e-mail at Libby\_J\_Sickler @rl.gov, and provide student name and P-Card billing information.

- **Resolving Differences with Others** — April 30, 7:30 a.m.-4:30 p.m. in classroom 28 of the Administration Building. This one-day class gives you the power and the tools of the professional mediator. The process and techniques you will learn are becoming core competencies for employees in many companies. The instructors have been certified by the Mediation Training Institute International ([www.mediationworks.com](http://www.mediationworks.com)). The cost is \$245 per person.
- **Cheetah Meetings: Good Meetings Guaranteed!** — May 2, 7:30-11:30 a.m., in classroom 15 of the Administration Building. You will learn proven techniques for holding effective meetings that build teams, and that get the results desired. Included are all the forms, assessments and procedures you and your team will need along with some potent tools that will dramatically improve your meetings. The cost is \$150 per person.

### **Radiochemistry Society courses April 28 and 29**

The one-day course, Fundamentals of Radiochemistry and Separation Technology for Engineers, Scientists and Managers, will be offered by the Radiochemistry Society on April 28 or 29 at the Red Lion Hotel in Richland. The course will provide scientists and engineers with the formal training and tools for nuclear-related decision-making and the opportunity to network and share experiences and difficult challenges that they may have encountered. Larry Burchfield and Michael Fox are the instructors. On completing the course, participants will be awarded one continuing-education unit. The course, limited to 75 students, costs \$300. For more information and to register, visit <http://www.nwtechnical.org/courses.html>, or call 528-3048.

### **Presentations course April 30 and May 14**

The eight-hour course, Effective Presentations, will be presented by Joe Estey at the Hanford Training Center on April 30 and May 14. This course

*Classess continued on next page.*

# Regular Features



## CLASSES continued

provides participants with the insights, skills and knowledge to speak inspirationally and confidently on any topic. The course, costing \$180 per person, is ideal for those wanting to improve their communication skills. To register, contact Joan Howard at 946-2102 or at [jhoward@energxfanford.com](mailto:jhoward@energxfanford.com) or Lynn Collins at 946-9654 or at [lcollins@energxfanford.com](mailto:lcollins@energxfanford.com).

### **OSHA Region 10 classes**

In conjunction with the annual conference of the Voluntary Protection Program Association Annual Conference, the Volpentest HAMMER Training and Education Center will offer the following Occupational Safety and Health Administration Region 10 classes on May 6.

- **Permit Entry Confined Spaces** — 8 a.m.-5 p.m. This course covers the duties of entrant, attendant, supervisory personnel and rescue team. Case histories are presented along with demonstrations of accidents. Testing and ventilation will be stressed. The cost is \$165. The presenter is Rick Gleason of Prezant Associates.

- **Sampling for Hazardous Materials** — 8 a.m.-5 p.m. This awareness-level course will address regulatory issues. Air, soil and water sampling, as well as sampling methodology, are covered. The cost is \$165. The presenter is Maura Doherty of Marine & Environmental Testing.
- **Homeland Defense - Bio-Terrorism** — 8 a.m.-12 p.m. Using a risk- management approach, attendees will learn how to protect their company from a terrorist attack. Students conduct a vulnerability assessment and threat analysis to determine possible dangers in their facility. The cost is \$80. The presenter is Joseph Teeples of We're Into Safety.

To register for any of these sessions, contact Lynda Stoneberg at (360) 902-5554 or at [ston235@lni.wa.gov](mailto:ston235@lni.wa.gov).

### **MicroShield course offered May 6-8**

Project Enhancement Corporation will conduct a MicroShield course, all-inclusive level, at the Volpentest HAMMER Training and Education Center May 6-8. MicroShield is used for analyses involving gamma and X-ray radiation. The cost is \$1,050 per participant. The course offers 10 continuing-education credits for certified health physicists in the recertification program. To register, or for more information, contact Yvonne Miller at (240) 686-3059 or at [ymiller@pec1.net](mailto:ymiller@pec1.net). ♦

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# Regular Features



## **Donate blood at HAMMER May 7**

The American Red Cross will hold a blood drive on Wednesday, May 7, 9 a.m.-2 p.m. in the vehicle bay of the Al Alm Building at the Volpentest HAMMER Training and Education Center. Call Libby Sickler at 376-7117 to schedule an appointment.

## **USCG Boating Safely class to be held April 19**

The U.S. Coast Guard Auxiliary will teach its eight-hour Boating Safely class on Saturday, April 19, 8 a.m.-4:30 p.m. at the Richland Police station on George Washington Way. The cost is \$20 per person and \$10 for each additional family member using the same text. For registration and early text pickup, call 948-3162.

## **IAAP Administrative Conference April 23.**

The International Association of Administrative Professionals (IAAP) Administrative Professional's Event™ will be held from 7:30 a.m. to 1:15 p.m. on April 23 at the Richland Shilo Inn. Joe Estey of Prolepsis Training will present team dynamics and elements for team effectiveness, successful leadership and attitude and motivation for success. Representatives of Avery Dennison will give a presentation on the latest office-product solutions. A continental breakfast and lunch will be served. Entertainment includes music and magic during lunch. To register, contact Robin Kuntz at [rlkuntz@bhi-erc.com](mailto:rlkuntz@bhi-erc.com) or at 373-2379, or Brenda Kenton at [blkenton@bhi-erc.com](mailto:blkenton@bhi-erc.com) or at 373-5909. Registration ends on April 18.

## **AQP/ASQ scholarship applications available**

Applications for the local chapters of the Association for Quality and Participation (AQP) and American Society for Quality (ASQ) \$1,000 scholarship are

being accepted now through April 15. The scholarship will be awarded to a college-bound high school senior pursuing a career in a field related to quality and participation. Applicants must be seniors, graduating from high school in Benton or Franklin County, with an overall GPA of 3.5 or higher and a combined SAT score greater than 1,000. The application process includes a written essay as well as submittal of two letters of recommendation. For more information, check the AQP Web site at [http://www.3-cities.com/~gates/AQP\\_ASQscholarship.html](http://www.3-cities.com/~gates/AQP_ASQscholarship.html).

## **May 10 golf tournament to benefit Girl Scouts**

Girl Scouts Mid-Columbia Council is holding the Fourth Annual Girl Scout Golf Classic Tournament on May 10 at the Tri-City Country Club in Kennewick. The Girl Scouts Mid-Columbia Council supports programs for girls — camps, sports activities, cultural and science and engineering events — in more than 14 counties in Washington and northern Oregon, including the Tri Cities. The shotgun start is at 1 p.m. Entry fees are \$100 per player, \$400 per foursome. Prizes will be awarded. A silent auction will be held. For more information, call the council office at 783-7721.

## **NMA Fashion Show scheduled for April 24**

The Hanford Chapter of the National Management Association will hold a fashion show and wine-tasting on April 24 at the Red Lion Hotel in Richland to raise funds to support community youth programs such as the Boys and Girls Club, Mid-Columbia Science Camp, Crystal Apple Awards, Washington Business Week, Partners and Pals, Junior Achievement and the Boy Scouts and Girl Scouts. The social begins at 7 p.m. and the fashion show is 7:30-8:30. Wine-tasting will precede and follow the fashion show. Tickets are \$15 for the fashion show only, \$25 for the fashion show and wine-tasting, and \$10 for donation and

*Calendar continued on page 23.*

# Regular Features



## **CALENDAR** **continued**

an opportunity to win door prizes. Contact Brenda Pangborn at 372-3841 or Karen Welsh at 376-2151 to purchase tickets.

### **Volunteers needed to judge student business projects**

Judges are needed to judge Pasco High School students' business projects during Enterprise 2003, May 1 and 2. Enterprise 2003 is a week-long program in which all Pasco High School juniors form mock companies and learn to make decisions about product development, marketing and finances. Volunteers are needed to judge marketing presentations on May 1, 9:30-11:30 a.m. at the Trade, Recreation and Agricultural Center in Pasco; stockholder presentations on May 2, 8-10:30 a.m. at Pasco High School; and trade shows May 2, 11 a.m.-12:30 p.m. at TRAC. For more information, contact Kelly Greenhalgh at 547-5581, ext. 4612.

### **Northwest Technical Conference April 30-May 1**

The Radiochemistry Society will host the Northwest Technical Conference on April 30 and May 1 at the Red Lion Hotel in Richland. The conference will include presentations on nuclear medicine, the environment, homeland security, decontamination and decommissioning of nuclear facilities and waste management. Other topics will include the use of radioisotopes for public benefit and the role of the Waste Treatment Plant in the region's

economy. Featured speakers will include the senior managers from the Department of Energy Richland Operations Office, the Office of River Protection and Hanford contractors. Visit **<http://www.nwtechnical.org/>** for the conference agenda and registration information.

### **Volunteers needed for 2003 Health and Safety Expo**

Thirty volunteers are needed to act the parts of victims and drunk drivers for the vehicle-crash demonstration at the Health and Safety Exposition May 6-8 at the Trade, Recreation and Agricultural Center in Pasco. In addition to the vehicle crash demonstration, 12 volunteers are needed to help with the bicycle rodeo. Smaller-sized volunteers are needed to wear the costumes of the Vince and Larry crash-test dummies. Coordinators of the 2003 Expo also need 15 easels to display signs. If you are interested in volunteering, or can lend easels, contact Janette Pettey at 376-2884 or at [janette\\_k\\_pettey@rl.gov](mailto:janette_k_pettey@rl.gov).

### **Adopt a fish to support children's fishing derby**

Safe Harbor Crisis Nursery is seeking donations to stock the Columbia Park Fishing Pond in time for a fishing derby on Saturday, June 14, for children up to 16 years of age. Derby registration is free. Help the Safe Harbor Crisis Nursery host this fishing derby by adopting fish for \$1 apiece. All donations may be sent to SHCN, 1111 N. Grant Place, Kennewick, WA 99336. All contributions are tax-deductible and proceeds in excess of costs will be used to support SHCN. ♦

*Features continued on next page.*

# Regular Features



**H**.anford **E**.mployee **R**.ecreation **O**.rganization

## GENERAL INFO & ACTIVITIES

### MAIL YOUR TICKET REQUESTS TO THE APPROPRIATE LISTED TICKET SELLER

— It saves the ticket sellers' time and your tickets will be sent to you the same day. Do not combine the charge for tickets to two different events on the same check. If you do, it will be returned.

**HRA DISCOUNTS** — Log on to <http://apweb02.rl.gov/hrd/> to see the discounts list.

**HERO POLICY FOR NSF CHECKS** — Associated non-sufficient fund bank fees will be passed on to check issuers. HERO will not absorb the cost.

**POSITION ON THE HERO BOARD** — The position of treasurer on the HERO Board is vacant. Applicants must have accounting experience. If you would like to apply and have your manager's consent, send an e-mail message to Phyllis Roha.

**DISCOUNTED MOVIE TICKETS** — Limit now 10 per purchase. Carmike tickets are \$5 each with restrictions applying only to Sony DDS movies. Regal tickets are \$5.50 each and applicable restrictions are identified in the *Tri-City Herald* with a star. Yakima Mercy tickets are \$5 each with no restrictions. Regal and Carmike tickets are valid in Seattle and Spokane as well as the Tri-Cities. For Regal or Carmike tickets, send checks (no cash) made payable to HERO to Linda Meigs (H3-12), Linda Sheehan (T4-40), Nancy Zeuge (X3-74), Michelle Brown-Palmore (A7-51), Ginny Wallace (S7-03), Marta Caballero (S5-14) or Patti Boothe (T6-04). Sunnyside Movie Theater is now offering tickets for two admissions for one show, for \$9.50 with no show restrictions. These tickets are also good for Ellensburg and Walla Walla. For Yakima Mercy or Sunnyside tickets, send checks (no cash) to Nancy Zeuge (X3-74), Jim Hopfinger (S7-39) or Tricia Poland (T5-04).

**YAKIMA CHRISTMAS PARTY, LAST CHANCE** — You have shown some interest and shared some ideas but our Yakima HERO representative is still looking for input to re-establish the Yakima Christmas Party for 2003. Contact Jim Hopfinger by e-mail or at 376-1499 with any sug-

## UPCOMING TRIPS

• **Canadian Rockies Train Tour** — May 9-17. The price is \$2,199 pp including round-trip airfare from Pasco. Price includes 14 meals, tours, transfers and taxes. Payment is due as soon as possible. Fly to Vancouver, British Columbia, and explore the beautiful Canadian Rockies by train. Visit Kamloops, Jasper, Ice Fields Parkway, Lake Louise, Banff and Calgary. Visit <http://apweb02.rl.gov/hero/activities.cfm> for more information or contact Phyllis Roha at 376-6413 or by e-mail.

• **New Orleans Getaway** — May 19-23. \$1,099 ppdo includes airfare, lodging and six meals during this five-day getaway to the "Jazz Capital of the World." A deposit of \$160 per person will reserve your spot. Contact Linda Meigs for details.

• **Hood River Murder Mystery Dinner Train** — August 16. Reserve your table for a sumptuous dinner and a murderously funny evening filled with entertainers. Dinner includes appetizer, salad, main course and dessert. The price of \$135 per person includes round-trip bus from Tri-Cities plus the dinner train. A \$25 per person deposit will secure your space. Final payment is due July 1. For more information, send an e-mail message to Linda Meigs or call Marla of Carlson Wagonlit Travel at 783-4645.

• **French Riviera** — Oct. 6-15. The price is \$2,284 pp for twin, \$2,254 pp for triple and \$2,584 for single. A deposit of \$430 is due to hold your space, and the balance is due July 23. Credit cards are accepted. Tour the French Riviera, Italian Riviera, Monaco, St. Tropez, Cannes, Grasse and Nice. We will fly round-trip from Pasco. We only have to unpack once as we will be staying in Nice and taking day trips to all the other exciting places. There will be free time also to do your own exploring. Included are seven breakfasts and five dinners. Start saving now for an exciting adventure. E-mail Nancie Simon or call 373-2587 for more information.

*HERO continued on next page.*

# Regular Features



- **Disney World/Disney Cruise** — Oct. 19-26. The price ranges from \$1,302 to \$1,852 ppdo, depending on the type of room you want. The price includes round-trip airfare from Pasco, four days in Walt Disney World with entrance into all the parks, a three-day cruise to the Bahamas and Castaway Cay (Disney's private island), taxes and transfers. Don't wait to send in a \$250 per person deposit to hold your spot. Contact Jim Hopfinger for more information.

- **Reflections of Italy** — Departure date is Nov. 3. \$2,782 ppdo includes airfare, lodging and 13 meals during this 10-day journey to Italy, beginning in Rome, "the Eternal City." A deposit of \$430 per person will reserve your spot, with final payment due Sept. 4. Contact Linda Meigs for details.

- **Switzerland** — Nov. 3-11. The price is \$1,879 pp including round-trip airfare from Pasco. Price includes 11 meals, tours, transfers and taxes. A \$250 deposit is due May 3 and the balance is due Sept. 4. The medieval city

of Bern is our host city. Highlights of the tour include the Swiss Parliament, the famous Bear Pit, the Rose Gardens, Lake Geneva and the medieval Castle of Chillon. Enjoy breathtaking Alpine views with a ride on the Panoramic Express Train to Gstaad. Then on to Interlaken, Grindewald, Zurich, Burgdorf Castle, Lucerne and an optional tour to Germany and the mystical Black Forest. Visit <http://apweb02.rl.gov/hero/activities.cfm> or contact Phyllis Roha at 376-6413 or by e-mail for more information.

- **San Antonio Christmas** — Dec. 8-12. The price is \$1,229 pp for twin, \$1,209 pp for triple and \$1,599 for singles. Includes round-trip airfare from Seattle, transfers, three breakfasts, and three dinners. A cancellation waiver and travel insurance are available for an additional \$60. Highlights of the trip will be Paseo Del Rio, the Alamo, a Mexican marketplace, the LBJ Ranch, Cavern Carolers and Fiesta De Las Luminarias. A deposit of \$100 is due by July 31. Contact Cheri McGee for details. ♦

*Features continued on next page.*

# Regular Features

## **VANPOOLS**

Vanpool ads are run for two weeks. Ads must be resubmitted to run in subsequent issues of the *Hanford Reach*. The deadline for submission is Thursday, 10 days prior to publication.

Day and Zimmermann Protection Technology Hanford reminds employees to wear their badges. Vanpool and carpool drivers are responsible for ensuring their passengers are badged. If a passenger forgets his or her security badge, access is denied at the barricade. The individual is required to go to a badging station for a temporary badge or go home to retrieve the badge. For more information visit the Safeguards and Security Web page at <http://apweb02.rl.gov/phmc/sas>.

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### BENTON CITY

Rider wanted for 8x9s vanpool to 200W, \$55 per month. Call **Charlotte Burruss** at 373-4046. 4/7

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### KENNEWICK

Riders wanted for Van No.123 to 200E, 8x9s shift. Safe, dependable and friendly. Current stops are Huntington Transit Station, Federal Building, 2750-E, MO-414 2704-HV, and 2701-HV. Call **Eric** at 373-4497 or at 735-6755 (home). 4/14

Riders are needed for Van No. 196. Picks up along a route from South Kennewick in the vicinity of Vancouver and 36th to 200E. Current route is Vancouver, Olympia, Kennewick Ave., Clearwater, West Hood, Canal and Edison and Highway 240. Current drops are 2750, teamster area/carpenter shop, 225-B, 2704-HV. Current rate is \$58 to \$64. Contact **R. John Townley** at 372-0223 or by e-mail. 4/14.

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### RICHLAND

Vanpool No. 89 has two openings for riders to 200 ETF, 8x9 shift. Leaves the Richland Wye at 6:10 a.m. and stops at the Federal Building parking lot. Drops off at 272-AW and MO-979. Call **Jim** at 376 3188 or **Bill** at 373 4449. 4/7

Vanpool No. 116 has an opening for a rider, 8x9 shift. Leaves Joe's Chevron at the corner of McMurray and Jadwin at 6:05 a.m. and travels to 2750-E, 2719-EA, MO-286, 2701-HV and 2704-HV. Returns to the Chevron station about 5:05 p.m. Mondays-Thursdays and at 4:04 p.m. on Fridays worked. Contact **Nester Wise** at 373-9599 or **Colleen Federico** at 376-3623. 4/7

Vanpool to 200E needs a rider, 8x9. Rate as low as \$33.50 per month. Leaves former Hanford bus lot (across from 2440 Stevens) at 6:25 a.m. and drops off at 2750-E and MO-276 (behind 2750-E). Arrives at bus lot at 5 p.m. on Mondays through Thursdays and at 4 p.m. on Fridays worked. Contact **Dave Hedengren** at 373-5094. 4/14

Vanpool No. 216 to 200E needs a rider, 8x9, 7 a.m.-4:30 p.m. Picks up door-to-door in Richland. Van starts on the south end of Jadwin, winds its way up Thayer and Williams, over to George Washington Way and out to 2750-E and 2704-HV (if rider is a backup driver). If you want door-to-door pickup and are in those areas, call **Michelle Calvert** at 376-5400. 4/14

Spacious seating for 200W Area 8x9 riders available on Van No. 117. Vanpool departs from and returns to the parking lot adjacent to 1019 Wright in Richland. E-mail or call **Gary Bush** at 372-2531. 4/14

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### WEST RICHLAND

Van No. 120 is looking for two riders, 8x9s, leaving Flat Top Park at 6:10 a.m. for the following destinations: 272-AW, MO-273, 2750, 272-B and 2727-E. Contact **Glenn Garman** at 372-0054 or **Curt Hedger** at 373-7935. Come sit back and enjoy the ride, and keep your gas bill down. 4/7

Save money and help save the environment. Van No. 211 has an immediate opening for a rider from Flat Top Park to 200W. Stops at 222-S, MO-720, 234-5, and WSCF. Contact **John Smith** at 373-5612 for information. 4/7

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### YAKIMA

Carpoolers wanted between Yakima and on the way to 2750-E. Call **Ray** at 373-9271. 4/7 ♦