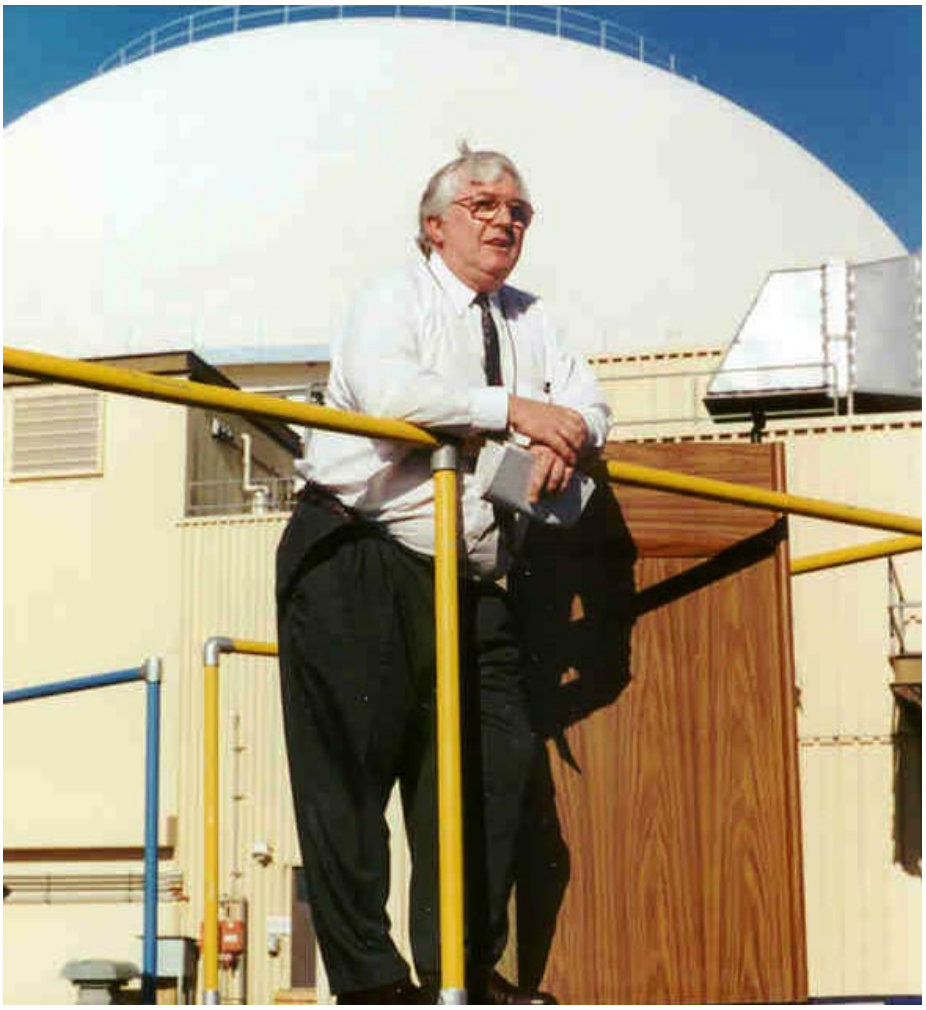
September 10, 2001

The HANFORD REACH

A publication of the U.S. Department of Energy for all Hanford Site employees



FFTF SAFETY NOTED: "That's the safest nuclear reactor in the United States," commented Dr. Harry Pettengill as he presented the Fast Flux Test Facility staff the Star of Excellence award at the national Voluntary Protection Programs Participants' Association conference in New Orleans. Pettengill, shown here at FFTF when he awarded the Department of Energy VPP Gold Star to the FFTF staff in July, is director of the DOE Office of Regulatory Liaison, which administers the DOE Voluntary Protection Program. DOE's VPP program was one of many represented by more than 2,000 government and private-sector participants at the August 27-30 annual conference.

SUPPLIES FOR SCHOOL KIDS: Fluor Community Involvement Team volunteers help organize more than 23,900 items of school supplies for delivery to 58 schools and agencies. The crayons, spiral notebooks, glue, rulers, pencils, pens, folders, notebook paper and markers worth more than $26,000 were donated by Hanford employees and community members during the Backpack Basics drive. Local Fluor employees also gave more than $725 in cash and the Fluor Corporation donated 250 backpacks. Left to right are James Tamez of RYSC-AmeriCorps, Chuck Forrester of Fluor Hanford and Diane Hart of the Volunteer Center.

The HANFORD REACH

Distribution questions:
call the Mailroom, 375-5170

See the *Hanford Reach* on the Web at:
www.Hanford.gov/reach/index.html

Keith Klein, Manager
DOE Richland Operations Office

Harry Boston, Manager
DOE Office of River Protection

DOE Richland Operations Office
Guy Schein, A7-75, 376-0413, fax 376-1563

DOE Office of River Protection
Diane Stock, H6-60, 376-4751, fax 372-1215

Fluor Hanford
Editorial office: B3-30, 376-4639, fax 376-5704
Craig Kuhlman, manager of Communications
Dennis Cresswell, editor
Cornelia Brim, associate editor
Sally Green, designer

Bechtel Hanford, Inc.
Sue Kuntz, H0-09, 375-4673, fax 372-9115

Bechtel National, Inc.
John Britton, 371-3677

CH2M HILL Hanford Group
Ace Etheridge, H7-07, 372-8058, fax 372-8036

Hanford Environmental Health Foundation
Helen Holden, H1-52, 376-4414, fax 372-3139

Pacific Northwest National Laboratory
Katie Larson, K1-55, 375-3698, fax 375-2221

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Hanford Reach, B3-30
Fluor Hanford
P.O. Box 1000,
Richland, WA 99352
Fax: 376-5704
e-mail:
Hanford_Reach@rl.gov
Phone: (509) 376-4639

PFP staff takes a 'pause for success'

Jean McKenna, FH

Thanks to a teaming effort involving Fluor Hanford, the Pacific Northwest National Laboratory and DOE, a new system to remotely monitor the pressure, temperature and safeguards information in each of PFP's new triple-container plutonium canisters will be in place this fall. The system, which uses PNNL's radiofrequency tag linked with a pressure monitor developed by Vista Engineering Technologies, a local firm, is expected to save about $10 million during the 15 years the canisters are expected to be stored in PFP's vault.

The Plutonium Finishing Plant staff and management recently set aside an entire day to participate in their second "production pause" for the sake of worker safety. Using the Integrated Safety Management System theme, "getting work done safely," the group focused on how to improve safety by recognizing and changing individual behaviors.

Their first production pause had been organized in March to get the staff members together to resolve a variety of safety and conduct-of-operations problems in the plant. The action was so successful that an employee recommendation was made to schedule these production pauses periodically to work on continuing safety improvements.

The day was organized around a series of three meetings:

- First, an "all hands" meeting convened outside on the patio. PFP director Bob McQuinn and deputy director Scott Sax outlined the purpose and objectives for the day.

- George Jackson, vice president for the Fluor Hanford Nuclear Material Stabilization Project, presented a poster with his signed, personal commitment to the workforce for getting work done safely. He promised to "examine my leadership style and change any behavior that interferes with my people's involvement in getting work done safely." The poster was signed by members of the PFP senior management staff, who had also signed their own commitments.

- PFP and Hanford Atomic Metal Trades Council safety representative Rich Layman then announced and presented to Jackson a letter of support from HAMTC to PFP for the plant's objective to attain Voluntary Protection Program Star Status.

"The key to achieving VPP Star Status," said Layman, "is first a management commitment to the workforce to make safety number one. That has been done, and HAMTC has committed its support. Now the workforce will partner with management to raise and maintain PFP safety to VPP Star Status."

Team meetings were held next so that PFP work-team members could address ways to recognize and change individual behaviors affecting safety. As each meeting ended, team members were asked to share a personal commitment to either continue a positive behavior that promoted safety or to change a negative behavior they felt adversely affected safety.

Association meetings were held last, providing individuals an opportunity to meet with all other PFP workers in their professions to discuss what had been learned during the day. These meetings included, for example, groups of workers such as nuclear chemical operators, radiation control technicians, engineers, secretaries and managers — from first-line supervision through senior management. ✦

New Image Viewer available

A new image viewer is available to Hanford Local Area Network users for image processing, digital cameras support, and photo services. The graphic software ACD See 3.1Suite from ACD Systems, Inc., is a multi-format image viewer and the fastest picture viewer, graphic converter and image-sharing tool available for Windows.

With ACD See you can:

- View your images in a slide-show format
- Manage images in a standard directory structure
- Create image databases for viewing or storage
- Play multimedia files with a click of the mouse
- Acquire images from a scanner or digital camera
- Create and print sheets of thumbnail images
- Send pictures by e-mail.

In addition to ACD See 3.1, the suite includes:

- Image Fox, which allows you to preview images and listen to WAV sound files in standard Windows Open/Save dialog boxes without running an external image viewer or audio program

- PicaView, which saves you time by letting you preview image thumbnails and WAV sound files in Windows Explorer without opening your image files. It also gives you full-screen viewing, image printing and conversion.

The ACD See 3.1 suite is available on HLAN through Software Distribution, Electronic Software Acquisition, **http://apweb03/esa/**, at a cost of $42. ✦

SNF Project rated 'excellent' in Quality Assurance audit

Michele Gerber, FH

Dan Truman, left, leader of the National Spent Nuclear Fuel Program, reviews spent-fuel quality assurance

The Spent Nuclear Fuel Project has surpassed last year's performance during its 2001 Quality Assurance audit by the Department of Energy's National SNF Program Office.

In the summer of 2000, Hanford's SNF Project became the first cleanup project at Hanford to pass an audit performed to the standards of the Office of Civilian Radioactive Waste Management, known as OCRWM.

The July 2001 audit rated the Fluor Hanford SNF Project's QA program "effective" in all 21 applicable criteria. A team of five auditors and one observer from the NSNFP Office spent a week at Hanford assessing areas of the Hanford program to ensure compliance with requirements for procedures, personnel training, procurement, manufacturing processes, document control, surveillance, corrective actions, test controls and other criteria.

Robert Blyth, QA manager for the National SNF Program, congratulated Keith Klein, manager of the DOE Richland Operations Office, on "a job well done." Blyth told Steve Veitenheimer, director of the DOE-RL Spent Nuclear Fuels Division, "The NSNFP [National Spent Nuclear Fuel Program] audit team was extremely impressed with...Fluor Hanford's implementation of their Quality Assurance Program."

Blyth said there were no concerns during the audit, and the audit team concluded that the Fluor Project Hanford Spent Nuclear Fuel Quality Assurance program was effectively implemented and accepted.

Standards rigorous

Hanford's SNF Project has to meet the very prescriptive OCRWM standards because, according to DOE plans, Hanford's "product" (containers filled with dry spent nuclear fuel) will ultimately go to the geologic repository for commercial spent nuclear fuel at Yucca Mountain, Nev. OCRWM standards are based on NQA-1 industry standards of the American Society of Mechanical Engineers, which are applied to commercial nuclear power plants.

According to Ron Ruth, Fluor Hanford's QA manager for the SNF Project, "This means that our program was audited and judged according to the toughest standards imposed on SNF in this country, and we passed with no outstanding findings noted! I want to thank all SNF Project personnel who supported this NSNFP audit and to commend them for a job extremely well done."

The audit report praised the SNF QA Program, stating, "It has matured to the extent that other DOE SNF site complexes should take a proactive approach to examine, learn from and institute the philosophy of 'doing it right the first time.'"

Bob Heck, Fluor Hanford vice president for the SNF Project, added his congratulations. "The Hanford SNF Project is doing extremely challenging work that is vital to the Columbia River," he said. We must ensure it's being done to the strictest technical and quality-controls standards." ✦

SNF Project makes steady progress

The SNF Project has now processed 22 Multi-Canister Overpacks of spent fuel, each removing about 290 fuel assemblies from the K West Basin. These fuel movements represent more than 3 million curies of radioactivity and more than 100 tons of irradiated uranium. The project expects to complete at least 25 shipments by the end of September.

Oregon universities, PNNL sign cooperative research agreement

Oregon's higher education institutions and Pacific Northwest National Laboratory at Hanford are joining forces to improve human health, promote sustainable industrial practices and create high-tech businesses in the Northwest.

In a memorandum of understanding signed in Richland last week, the Oregon university system, Oregon Health and Science University and PNNL agreed to form a cooperative relationship for research and educational activities. Among the areas of initial focus will be two collaborations in life and physical sciences, and one in the economic development arena.

Discussions are under way to create a new program in functional genomics, which will link OHSU's advanced technologies for monitoring gene expression with PNNL's state-of-the-art protein analysis methods. By integrating information obtained with these technologies, researchers will create a unique database that could hold clues to disease prevention. Through the collaboration, advanced computer data mining programs will be developed that allow scientists to examine the information and search for answers to human health and susceptibility issues.

In a second collaborative effort, PNNL and several Oregon research universities with microtechnology and "green chemistry" research programs will collaborate on the development of micro-chemical and -thermal systems in an effort to achieve sustainable processes and products. Microtechnology-based systems are lightweight, compact and efficient and have the potential for revolutionizing heat exchangers, heat pumps, combustors, fuel processors and many other devices. Incorporation of these micro-scale devices will enable industries and communities to thrive economically while protecting their local environments.

The Northwest Virtual Entrepreneurial Support Network will be established to share technology, management, money and marketing resources in Oregon and Washington in an effort to create successful high-tech businesses. The network will identify, develop and commercialize intellectual property derived from the partnership. Partners are PNNL and the Oregon Technology Transfer Council, which comprises the technology transfer officers from Oregon's research universities.

"The Oregon institutions and PNNL have much in common including the mission and desire to advance science and technology through the pursuit of research," said PNNL Director Lura Powell. "This is an important step forward in realizing our vision of PNNL as a partner and accessible resource for the Northwest."

Future collaborations will include educational and training opportunities, staff and faculty development programs, short courses and conferences, and visiting scientist programs in addition to collaborative research and jointly operated research institutes. ❖

Lecture features discussion of new biomaterials role in repairing or replacing limbs and treating disease

Sue Chin, PNNL

Campbell

Not many years ago, when someone lost a leg or an eye because of an accident or disease, the usual replacements were wood, glass or metal. “It was better than nothing, but they didn’t do much to improve the user’s quality of life,” said Allison Campbell of Pacific Northwest National Laboratory. “Today, however, thanks to numerous scientific advances, artificial limbs, implants and transplants are making a big difference in the lives of the users, and the future is even brighter.”

Campbell will talk at 7 p.m. Wednesday, Sept. 19, at the Columbia Basin College Theater in Pasco about the evolution of materials used to repair joints, replace missing parts of the body and effectively deliver therapeutic agents for treating cancer and other diseases. Campbell’s presentation, “Biomaterials: Past, Present and Future,” is free and open to the public and will kick off the third annual Community Science and Technology Seminar Series sponsored by PNNL and CBC.

A biomaterial is any natural or manmade material that incorporates all or part of a living structure and performs, augments or replaces natural functions. Materials research has advanced significantly from the crude beginnings of artificial limbs and other body parts. Replacing them are novel materials such as metal alloys, metal composites, ceramics and polymers. Biomaterials also can be designed to deliver lifesaving therapeutic agents to affected or diseased tissues. “Advances in the development of these new ‘biomaterials’ has improved the quality of life and even saved the lives of millions of people,” Campbell said.

According to Campbell, however, there are still potential problems with infection, degradation and rejection associated with currently available materials. “Today’s rapidly changing and complex medical industry demands a new generation of materials that can solve these problems.” And science is delivering,” she added.

Scientists are researching new technologies and materials that, together, have the potential for transforming medicine and health. At PNNL, researchers are focusing on developing permanent or temporary “scaffolds” for tissue and organ reconstruction. For example, researchers are working on a quick-setting biomaterial that forms a paste which, when hardened, forms a scaffold onto which natural bone can grow. PNNL researchers also are developing new materials for use in the delivery of therapeutic and biological agents. “We are developing biomaterials that aid in healing, deliver therapeutics, restore lost function and correct deformities,” Campbell said.

PNNL’s research into the next generation of biomaterials is being conducted in the state-of-the-art Biomaterials Science and Engineering Laborator,y where Campbell has conducted extensive research in biomaterials. Her research projects include the development of coatings that fight infection common in artificial joint implants, bone substitutes and techniques to control formation of crystals and other mineral deposits on joints.

Campbell received her Ph.D. in physical chemistry from the State University of New York at Buffalo. Her undergraduate work was completed at Gettysburg College in Pennsylvania.

The Community Science and Technology Seminar Series is supported by the Columbia River Exhibition of History, Science and Technology and by the local chapter of Sigma Xi, the international honor society of scientific and engineering research. ✦

New PNNL-developed technology treats dairy wastes, odors

A technology developed by Battelle and brought to the Northwest by researchers at the Department of Energy's Pacific Northwest National Laboratory is transforming a waste lagoon into a waste treatment facility at an Outlook dairy in Yakima County.

The InStreem technology, shown here at a Washington state dairy, cleans waste lagoons by enhancing naturally occurring biological activity.

Siince January, the George DeRuyter Dairy has been outfitted with InStreem, a technology that enhances naturally occurring biological activity to clean waste lagoons. Henry Pate of Battelle's Florida Marine Research Laboratory developed InStreem. Battelle also operates PNNL for DOE.

Lagoons traditionally have been used to store manure and liquid effluents from dairy herds. In the spring, wastes stored over the winter months are pumped onto fields where crops use the manure's nutrients. However, more nutrients such as nitrogen and phosphorous may be applied to crops than can be used effectively.

"InStreem is designed to use a dairy's existing infrastructure to convert lagoons from waste storage facilities to facilities that solve waste problems," said John Jaksch, PNNL program manager for the project in the Pacific Northwest. "In doing so, this technology addresses one of the dairy industry's most pressing issues."

Unlike conventional treatment methods, InStreem converts existing lagoons into extended aeration systems, establishing conditions favorable for both aerobic and anaerobic degradation of wastes. The aerobic process is designed to remove excess nitrogen and the anaerobic process is designed to remove other nutrient constituents, such as phosphorous. InStreem maintains an oxygen-deficit condition in the lagoon and does not over-aerate, while still allowing nutrient reduction to take place and bacteria to work on reducing the manure sediments. One InStreem unit treats a lagoon 1 to 1.5 acres in size.

To date, the demonstration is exceeding Jaksch's expectations. "In three months, the depth of solids dropped from 6 feet to 6 inches, and that was during the coldest part of the year," Jaksch said. "And since InStreem uses a small 5-horsepower engine to circulate the entire lagoon, it's energy-efficient."

In addition, InStreem has been successful tackling a problem common to all dairies — odor. "Within two weeks of operation we noticed a huge reduction in odor," said DeRuyter, owner of the dairy. "Odors on the lagoon banks now are barely detectable."

Continued on page 9.

New PNNL-developed technology treats dairy wastes, odors, cont.

Equipped with 10, 48-inch aeration discs powered by the 5-horsepower motor, the floating InStreem unit displaces water in adjustable horizontal and vertical planes around a barrier dividing the lagoon. In dairy applications, the technology replicates fixed-site municipal wastewater biological treatment technologies used at more than 400 community waste treatment plants across the United States and Canada.

The DeRuyter dairy is a large operation with about 2,600 head of cattle. DeRuyter uses a flush system in which the feed and loafing areas are flushed hourly with water. Manure is carried by water through a solids separator. The solids are turned into compost and the wastewater, laden with suspended manure solids, is returned to the lagoon where it is recycled back into the flush system after processing.

The DeRuyter demonstration will run for one year. Soil Search of Finley is assessing the demonstration by monitoring the site for nitrates, nitrites, ammonia, total phosphates, sulfates, chloride, biological oxygen demand, chemical oxygen demand, total and dissolved solids and fecal coliform bacteria. Soil Search provides nutrient management and precision farming services for the dairy industry in the Pacific Northwest.

“We chose DeRuyter’s because it enabled us to demonstrate the technology under difficult conditions,” said Jaksch. “Also, through an existing relationship with DeRuyter, Soil Search has more than four years of sampling data on the lagoon, providing invaluable background data for measuring InStreem’s performance.”

Soil Search has obtained the rights to sell InStreem in Washington, Oregon, California, Idaho, and in North and South Carolina, and began selling the units in eastern Washington this summer.

“Based on results to date — reduction in odors and bottom sediments — I didn’t see any reason to hold back,” said Larry Dickinson, chief executive officer and founder of Soil Search. “The industry is under tremendous pressure to control odors and InStreem repeatedly has demonstrated its effectiveness in doing so.”

Jaksch echoed Dickinson’s optimistic assessment based on early results, but cautions that this is a one-year scientific experiment. “We want to gather data for the entire seasonal life cycle, benchmark it against existing waste lagoon management practices and other alternative approaches and technologies, then nail down the technical and economic story for the dairy industry,” Jaksch said.

The Choctaw Manufacturing and Development Corp. in Hugo, Okla., manufactures the units, while Tierra Environmental Services, a New Mexico firm, is the national distributor. Originally, InStreem was tested at a hog farm and a polluted bay in North Carolina. ❖

Part two of a series:

Recycling and pollution prevention go hand in hand

National Pollution Prevention Week, Sept. 17-23, is an opportunity for individuals, businesses and local governments to emphasize and highlight their pollution-prevention and waste-reduction activities and achievements, expand their pollution-prevention efforts and commit to new actions.

Fluor Hanford, the cities of Richland and West Richland, the Richland School District, DynCorp Tri-Cities Services, the Fluor Hanford Waste Services organization and employees of the 222-S Laboratory will sponsor events to raise community awareness of pollution prevention.

How much can one light bulb save?

According to information from the Environmental Protection Agency, replacing a 60-watt incandescent light bulb with a 15-watt energy-efficient compact fluorescent lamp can annually save 157 kilowatt hours and prevent the release of 300 pounds of carbon dioxide, 1.4 pounds of sulfur dioxide and close to a pound of nitrogen oxide to the air.

The purchase of that compact fluorescent bulb will also bring you a 37.5 percent annual return on your investment.

In the first installment of this series, we showed how recycling can save energy and water in addition to the raw materials used in manufacturing. This article explores some things you may not have known were recyclable, and why it's important to our planet that we recycle.

Switches, batteries, thermometers and fluorescent lamps represent the tip of the iceberg when it comes to products and equipment containing mercury. Mercury, the harmful effects of which have been documented for decades, is the essential element used in the majority of fluorescent and high intensity discharge lamps. These and other types of lamps, including incandescent, may also contain toxic metals such as cadmium and lead, rendering them environmentally hazardous.

Mercury can be safely recovered and reclaimed from the widest range of spent materials — so what was once waste can be used again. And other valuable materials, including steel, copper, aluminum, lead, glass, plastic and phosphor powder, can be recovered and reclaimed for industrial use.

Consider these recycling facts:

- **Ninety-five percent of a fluorescent lamp** can be recycled. As lamps are crushed, the material moves to a separator, which vibrates it and separates it into crushed glass, crushed metal

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and end caps. Particulate debris and phosphor powder from the crushers and separator pass into a dust collector where inductive heating is used to maximize mercury removal. Exhaust air containing mercury vapor is fed through carbon filters that remove mercury. Phosphor powder is removed from the dust collector and used in the manufacture of cement products. Mercury-laden carbon filters are removed from the carbon absorption tanks and the mercury is extracted.

• **Eighty percent of an electrical ballast (non-PCB)** can be recycled. Ballasts are placed on a conveyor system where the metal casing is removed. Next, the ballast goes into a chiller to cause the potting compound to become brittle. The potting material is removed as waste, then the clean ferrous metal is shipped to a mini mill, the copper to a refinery and the aluminum to a smelter.

• **Ninety-nine percent of a lead acid battery** is recyclable. The batteries are off-loaded onto conveyor systems for chopping and crushing. They're separated in a liquid process where the lead sinks to the bottom and the plastic floats to the top. The plastic is then ground and washed and sent to a plastic recycler where it is reused to make battery casings. The lead is used to make new lead for batteries. Sulfuric acid from the batteries is neutralized and then disposed of.

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Week of events celebrates pollution prevention

Monday, Sept. 17

• Brown-bag session at 2704-HV, noon - 1 p.m., "Shop SMART" (Save Money and Reduce Trash) seminar. Call Bertrand Griffin II at 373-4327.

Tuesday, Sept. 18

• Brown-bag at the HAMMER Training Center Administrative Building, Room 14, noon - 1 p.m. Shop SMART seminar. Call Kathy Hinkelman at 376-7631.

• Waste Services presentations, MO-279 in 200 West, "Water and energy conservation," 11 a.m. - noon and 1-2 p.m. Call Gayle Valante at 373-1621.

• Watch for the KidZone article on pollution prevention in the *Tri-City Herald.*

Wednesday, Sept. 19

• Elementary students will pick up trash at Lewis & Clark, Marcus Whitman, William R. Wiley, Richland High, Jefferson and Tapteal schools in Richland, and Westgate and Washington elementary schools in Kennewick.

• Environmental ventriloquist Keith Ramsay will perform at the Richland Public Library at 7 p.m.

• Shop SMART seminar at the Richland City Council chambers, 7 p.m. Call Gail Baasch at 942-7730 to reserve your spot.

Thursday, Sept. 20

• Pasco High driver education classes will be learning about the littering laws.

• Brown-bag at 222-S Lab, "Energy and Water Conservation," noon - 1 p.m. Call Bertrand Griffin II at 373-4327.

• Energy and Water Conservation presentation, FFTF, 1:30 - 2:30 p.m. Call Al Hill at 372-8963.

Saturday, Sept. 22

• Environmental Trade Show at Home Depot, 9 a.m. to 2 p.m., featuring vendors, exhibitors, entertainment and activities for kids (coloring contest and building projects). There will be a recycled clothing boutique as well as collection containers for cell phones, eyeglasses, phone books and hearing aids. Tri-City Motor Sales will demonstrate an electric car and local utilities will have ideas on saving water and energy.

• Household hazardous waste collection event, 9 a.m.-1 p.m., Tri-Cities Coliseum parking lot.

Sunday, Sept. 23

• Recyclables treasure hunt at the Three Rivers Children's Museum, 650 George Washington Way. ✦

Recycling and pollution prevention go hand in hand, cont.

• **Seventy-five percent of an alkaline battery** is recyclable. The batteries are shredded in a granulator. The steel is separated magnetically and sent to a steel recycler. The rest of the shredded battery is sent to a zinc smelter to be used in the smelting process.

Hanford's Centralized Consolidation/Recycling Center accepts all types of batteries, lamps, mercury and mercury-containing equipment for recycling. Also, the center manages contracts for used shop towels, used oil and propylene glycol.

HNF-EP-0863, Rev. 1, "Management Plan for Recyclable Materials Administered by Hanford's Centralized Consolidation/Recycling Center," describes the standards for management of recyclable materials both before and after consolidation at the center. Contact Candice Marple at 373-6742 for more information. ❖

Don't get tangled in the World Wide Web

Keeping kids safe on the Information Superhighway

Owning a computer is no longer a luxury but a necessity in our society. Computers are everywhere in businesses, schools and at home. Children as young as preschool age are learning to use computers as an educational tool and a link to limitless information as well as for entertainment. Unfortunately, they may also pose a great danger.

Young children and teenagers have traditionally been prime targets for criminal acts. Children are particularly vulnerable because of their trusting nature and their thirst for attention and affection. With more than 45 million kids expected to be surfing the Web by 2002, Internet safety is a paramount concern for parents and law enforcement.

The Sexual Assault Response Center, a United Way of Benton and Franklin Counties agency, has released results of a survey funded by the National Center for Missing and Exploited Children. The survey found that:

- One in five kids between the ages of 10 and 17 received sexual solicitations online in the past year.
- Only 25 percent of those told a parent about the incident.
- One in four of the kids was unwillingly exposed to photographs of naked people or people having sex. Forty percent of these children told a parent.
- One in 17 kids was harassed or threatened while online.
- Seventy-seven percent of the youth targeted were age 14 or older.
- Nearly half of the offenders were other youth.

Something even more disturbing is the small number of incidents being reported to authorities. According to the survey, only 11 percent of the parents knew of a specific

Continued on page 14.

Internet safety tips for children

Never arrange to meet in person someone you've met online.
Never post pictures of yourself on the Internet.
Never give identifying information such as name, address or phone number.
Never download pictures or respond to e-mails from unknown sources.
Never respond to messages that are suggestive or obscene.
Remember that things you read online may not be true.

What parents should watch out for

Children spending large amounts of time online, especially at night.
Pornography on your child's computer.
Phone calls to your child from adults you don't know
Calls from your phone to numbers you don't know, sometimes long distance.
Mail, gifts or packages to your child from someone you don't know.
A child turning off the computer monitor quickly when you enter the room.
A child who becomes withdrawn from the family.
A child using an online account belonging to someone else.

What you can do

Talk to your kids about sex offenders online.
Spend time with your children online.
Keep the computer in a common room of the house.
Use the parental controls set up by your Internet provider.
Access your child's account and monitor his or her e-mails periodically.

authority to report Internet crimes.

In order to keep our children safe from cyber predators, we need to educate our children, educate ourselves in order to recognize a child at risk and report these crimes to the proper authorities.

The cyber sex offender uses the Internet to prey on innocent victims. While the traditional pedophile searches for victims on playgrounds and in shopping malls, the online predator can target children from the comfort of his or her own home. The Internet criminal has the added luxury of remaining completely anonymous.

No matter the venue, the process an offender uses is the same — to “groom” a victim and sometimes the victim’s family into believing he is a friend or confidant, perhaps harmlessly chatting about things they have in common and sending pictures or gifts in order to gain the interest and trust of the victim. Once the relationship is established, the abuse begins.

Sexual exploitation may begin with “sex chat” or exchanging photographs, and then escalate to a face-to-face meeting. But even if the two never meet, there could be other crimes going on through the Internet without the victim’s knowledge. Internet crime investigations have uncovered hundreds of victims who have been exploited through photographs. Until the investigators contacted the victims, these victims had no clue they were involved.

It is extremely important to instruct children about the dangers of Internet predators. Every family should have a set of Internet rules and software safeguards in order to be safe. It is important to communicate anything unusual and report any incidents to the proper authorities.

To report Internet crimes, contact your Internet service provider and the Cyber Tipline at **www.missingkids.com/cybertip**, or call 1-800-843-5678.

The education program at the Sexual Assault Response Center now offers an Internet safety program for kids and parents. For more information or to schedule a presentation, call 374-5391. ❖

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.

Fishy photo

There is something "fishy" about the picture that appeared with the article, "PNNL captures fish passage with acoustic camera," on page 8 of the Aug. 27 issue of the *Hanford Reach*. I wonder how many people were led by the caption to believe the photo was taken by the camera in question. No matter how good the photographs are, they're not going to show shadows of the fish on the river bottom. This photo was taken by a regular camera, which I think is misleading considering the context it appears in.

Kirt Clem
Lockheed Martin Services, Inc.

Editors' note: Clem is correct. The photo illustrating the article was not taken with the PNNL-designed acoustic camera.

Wants safe commute

I leave my house at 6 a.m. to ensure that I can drive leisurely and safely to work. My workday starts at 7 a.m. in the 200 East Area. Today (Aug. 29), between Energy Northwest and the Wye Barricade, I had several different cars tailgate me, pass me on the right and then cut me off while they dodged in front of my car. I was driving around 60 mph, attempting to get into the right lane but passing cars would not let me over.

After going through the Wye Barricade, coming up the 200 East hill, I had the opportunity to practice my driving agility skills once again. Visibility was clear. Two cars were coming down the hill, yet four different cars had individuals so excited and motivated to get to their jobs that they just had to pass a whole string of cars to be in front.

What is wrong with you people? Does your life stink so much that you don't care whether or not you get killed in a car accident?

If you don't give a rip about yourself, have you ever thought about all of your family, friends, co-workers and acquaintances who would be saddened or devastated at your lost life? If you don't care, then what about the other people whose lives you endanger when you indulge in such dangerous behavior?

I don't want to seem uncaring or unfeeling but I appreciate my life and I want to keep it.

Those of you who don't seem to care whether you live or die, would you please take your unacceptable and undesirable behavior elsewhere! Believe it or not, there are those of us who want to get to work and back home safely and in one piece!

Ann Young
CH2M HILL Hanford Group

Emergency techs good

On June 21, I had a medical emergency. I was able to make it to the 200 West Area Health Care Center on my own (a really dumb thing to do) where all of the medical personnel in the world (or maybe it just seemed that way) went into high gear to save my life.

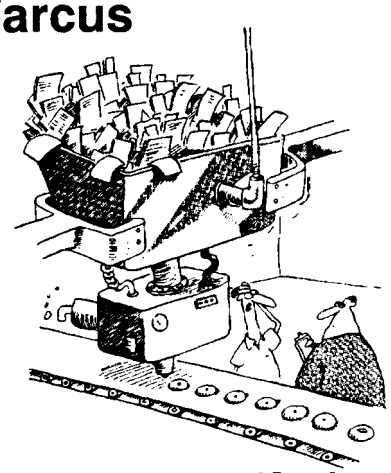
My condition was such that I was in a high state of fear, confusion and embarrassment. The staff at the Health Care Center and, later, the Hanford Fire Department paramedics who transported me to the Kadlec Medical Center displayed a level of competency unparalleled in my experience. They not only treated my medical problem — more importantly, they addressed my fear and embarrassment with great compassion and understanding.

Thanks to their dedication and superior abilities, two months after being stricken, I am back to work and well on my way to a full recovery.

Thank you!

Floyd Frankenfield
Fluor Hanford

Farcus



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Readable? I thought you wanted the manual to be *eatable!*

Regular Features

B R A V O

Griffith

VPPPA recognizes Hanford employee

The Voluntary Protection Programs Participants' Association recognized Jack Griffith, a Fluor Hanford employee of the River Corridor Project, for his outstanding health and safety activities and presented him with the 2001 Safety and Health Achievement Award. Griffith was one of nine people recognized on Aug. 27 for workplace safety and health excellence during the 17th Annual National VPPPA Conference in New Orleans, La.

More than 2,000 people attended the four-day VPPPA conference, including hourly employees, safety and health managers, occupational safety and health professionals and government personnel.

The VPPPA Safety and Health Achievement Award program recognizes hourly workers for their knowledge of safety and health issues and for their VPP outreach efforts within their worksite and community. Recipients of these VPPPA awards are not safety and health professionals and spend less than 25 percent of their time at work on safety.

Griffith has been instrumental in co-coordinating the River Corridor Project DOE-VPP application and strategic VPP plan. He is co-chair of the VPP Steering Committee and a member of the Hanford Site VPP Champions, a gathering of representatives from all the Hanford Site contractors. Griffith is also co-chair of the River Corridor Project Zero Accident Council. He is a member of the President's Zero Accident Council and is a union member of Local 2403 Carpenters and Millwrights.

As the point of contact for the Hanford Health and Safety Expo, he has increased River Corridor's participation from a three-person booth to a 30-person booth. Outside work, Griffith teaches motorcycle safety for the Team Oregon Motorcycle Safety Program and the Puget Sound Motorcycle Education Program. He is also a volunteer at the Columbia River Exhibition of History, Science and Technology, where he keeps a popular mechanical manipulator exhibit in good repair. ✦

N E W S B R I E F S

File local mileage reimbursement requests electronically

Beginning Sept.1, PHMC employees are no longer required to submit a hard copy printout of your local mileage reimbursement request to Fluor Hanford and CH2M HILL Hanford Group, Inc. Travel. Just enter the data in the new Employee Reimbursement System and submit it for electronic management approval. On a weekly basis, Travel will retrieve approved local mileage expense reports, review them and approve them for payment.

PHMC business travel expense reports still require a hard-copy report to be mailed, with receipts attached, to Fluor Hanford Travel at H3-12 or CHG Travel at H6-06. Your business travel reimbursement cannot be processed until the hard- copy report plus receipts have been received.

Contact Fluor Hanford Travel at 376-7692 or CHG Travel at 376-4152 for more information. ✦

Junior Achievement informational meetings begin tomorrow

If you think you might be interested in becoming a Junior Achievement volunteer, plan to attend one of three informational meetings this month. The first meeting will be held from noon to 1 p.m. on Sept. 11 at the Stampede Room of the EESB on the Battelle campus. For more information on this meeting, contact Rosemarie Bartlett at 375-6606. The other two meetings will be held from 3:30 to 4:30 p.m. in room 153 of 2420 Stevens on Sept. 19 and Sept. 25. For more information on these meetings, or about becoming a Junior Achievement volunteer, contact Karen Welsh at 376-2151.

AQP meets Sept. 11 at the Shilo

Jamie Cox, director of The Empowerment Group, will share strategies for coaching team members and creating "can do" attitudes at the Sept. 11 meeting of the local chapter of the Association for Quality and Participation at the Richland Shilo Inn. The networking and social hour begins at 5 p.m., the buffet dinner is at 6 and the presentation starts at 7. The cost is $16 for AQP and the American Society for Quality members, $19 for non-members, or $5 for the presentation only. Call 547-6548 to make reservations or register through the chapter's Web site at **http://www.3-cities.com/~gates/AQPQuest.htm**.

CREHST lecture series focuses on salmon

The Columbia River Exhibition of History, Science and Technology (the CREHST museum) is sponsoring a four-part lecture series inspired by its popular traveling exhibit called "Reaching Home: Pacific Salmon, Pacific People." The lecture series begins with a presentation this Wednesday, Sept. 12, from 7 to 9 p.m. at the CREHST facility near Howard Amon Park. This week's presentation, called "Why are we here and where are we going," is by research scientist David Geist of Pacific Northwest National Laboratory. Presenters for Sept. 19 will be Native Americans Rex Buck of the Wanapums and Jay Minthorn of the Umatillas. The next two Wednesdays will feature officials of the Washington Fish and Wildlife Service and the *Tri-City Herald.*

NMA meeting scheduled for Wednesday, Sept. 12

Joe Ruffini, a consultant for Lucent Technologies, will be speaker at the Sept. 12 dinner meeting of the Hanford Chapter of the National Management Association at the Red Lion Hotel in Richland. The topic is "Ya don't know what ya don't know." The social hour begins at 5 p.m., and the business meeting starts at 7. There is no charge for chapter members. The cost for guests is $20. Call Lisa Hart at 376-3484 to make a reservation.

Symposium focuses on small business subcontracting opportunities

The Fluor Hanford Supplier Advocacy Office is sponsoring a Community Informational Symposium from 8 a.m. to 12 p.m. on Sept. 13 at the Conference Center, 415 Hills Street in Richland. The symposium is organized in two separate presentations and two breakout sessions, which will focus on small business subcontracting opportunities with Fluor Hanford. Make your reservation by calling the Fluor Hanford Supplier Advocacy Office at 376-4697 by tomorrow, Sept.11.

Steelband classes for adults offered

The Tri-Cities Steelband Association is offering steeldrum classes this fall for adults. The classes will be held on Tuesday evenings from 6:30 to 8 p.m. starting Sept. 25. The cost is $110 for a 10-week session. The proceeds from the classes will go toward operating costs for the youth bands Bram Brata' (senior band) and OK 2 Botay (junior band), supported by the Steelband Association.

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CALENDAR, continued

The Tri-Cities Steelband Association is a not-for profit organization with a mission of bringing steeldrum and Carribean music to the Tri-Cities. On Sept. 15, the association will supply music at a lunchtime event for Fluor Federal Services and will receive a company donation. Association bands have performed in the past at numerous Hanford events.

For information on the classes, call Kari Leggett at 967-1078.

Fiesta de la Familia this weekend

Fiesta de la Familia, now in its second year, is a unique and exciting event celebrating Hispanic culture through food, entertainment, dancing, music, crafts, a Mexican mercado, a bridal fashion show, soccer tournament, parade and coronation dinner. It is co-sponsored by Battelle, which operates the Pacific Northwest National Laboratory for the Department of Energy.

The event will take place Sept. 14 through 16 at the Benton County Fairgrounds. Cost is $7 for adults (15 and over), $5 for seniors (60 and over), $3 for children from 9 through 14 and free for children 8 and under.

The event features a business seminar, also sponsored in part by Battelle. The seminar, called "Mucho Dinero: Building Your Business in Hispanic and Non-Hispanic Markets," starts Friday at 10 a.m. at Columbia Basin Advanced Technology Center (the former Workforce Training Center on the Pasco CBC campus).

The seminar will bring together prominent Pacific Northwest business experts to help your business tap into the growing Hispanic market and to help Hispanic businesses reach beyond local Hispanic consumers. The cost is $25, which includes a catered lunch by Casa Chapala. To register, call Stella at Mundo Communications, 783-6310, by Sept. 12, or e-mail estella@mundocom.com. For more information, contact Mindy Strong of PNNL at 375-2599, or e-mail mindy.strong@pnl.gov.

ASQ holds dinner meeting Sept. 18

"Safety Management and Performance Indicators" will be the topic of the presentation at the Columbia Basin Chapter 614 of the American Society for Quality dinner meeting on Sept. 18 at the Richland Shilo Inn. Steve Prevette, an ASQ-certified quality engineer working in Fluor Hanford's Environment, Safety and Health organization, will be the speaker. The social hour begins at 5 p.m., the buffet dinner at 6, and the presentation begins at 7. The cost is $16 for ASQ and Association for Quality and Participation members and $18 for non-members. Make your reservation by contacting Steve Prevette at prevette@owt.com, 544-9475 or 373-9371, by Sept. 14

Walk for Diabetes to take place Sept. 29

The third annual America's Walk for Diabetes, sponsored by the Mid-Columbia District of the American Diabetes Association, will start at Howard Amon Park in Richland on Saturday, Sept. 29. Participants will meet at 8 a.m. at the "fingernail" to check in. The walk is from 9 a.m. to 1 p.m. and will conclude with local entertainment and an "Aussie" lunch, courtesy of the Outback Steakhouse. For more information, to donate, or to sign up as a walker, sponsor, or volunteer, call the American Diabetes Association at 943-0858.

Project IRIS urges United Way giving

The Project IRIS Foundation wants to encourage you to be generous with your donation to the 2001 United Way Campaign of Benton and Franklin Counties. The Project IRIS Foundation is a community-based group dedicated to providing thermal imaging search-and-rescue cameras to area fire departments. These state-of-the-art cameras are built to withstand the abuse of entering

Continued on page 19.

CALENDAR, continued

hazardous environments. The cameras allow firefighters to find fire victims more quickly and safely. The foundation has facilitated the purchase of eight cameras, and is hoping to place cameras in three more local county fire districts.

October is Fire Prevention Month. The foundation asks that, as you make your annual pledge to United Way, you consider designating a part of it to the Project IRIS Foundation.

Ready, set, walk in the Heart Walk Oct. 13

The Tri-Cities American Heart Association Heart Walk 2001 will be held on Saturday, Oct. 13, beginning in Howard Amon Park in Richland. Registration for the 5-kilometer walk (3.1 miles) will take place at the "fingernail" at 9 a.m., and the walk will start at 10 a.m.

Funds raised in the Heart Walk support the lifesaving work of the American Heart Association, Northwest Affiliate, which is dedicated to the reduction of disability and death resulting from heart disease and stroke.

Groups of walkers to raise funds for the American Heart Association are currently being organized by team leaders throughout the Tri-Cities. If you are interested in participating in this year's Heart Walk as a team captain, as a walker in the event, or as a financial supporter of the walkers, contact Karen Welsh at 376-2151 or via e-mail.

Life Sciences Symposium scheduled for October

The 39th Life Sciences Symposium, " Cellular Communication-Information Processing at the Cell Surface," will be held at the Pacific Northwest National Laboratory Oct. 18-19. For more information, contact Teresa Zinn at 375-2797 or visit **http://www.pnl.gov/39lifescience**.

Learning Landscape Child Care Center has openings

The Department of Energy-sponsored Learning Landscape Child Care Center has openings for toddlers and preschool children 3-5 years old. Contact Sharon or Suzanne at 946-4609 to enroll or obtain more information about the center. The center offers an educational curriculum for infants, toddlers and preschoolers. ❖

CLASSES

Informational meetings at City University

Learn about the graduate, undergraduate and certificate courses in project management offered by City University and certified by the Project Management Institute at meetings on Sept. 13 or Sept. 25, both beginning at 5:30 p.m. The informational meetings will be held at City University, 303 Bradley Blvd. in Richland.

For more information, contact City University at 943-9887 or at tri-cities@cityu.edu. ❖

Study CAD at CBC

Columbia Basin College will offer computer aided drafting courses this fall. Courses begin Sept. 17 and end Dec. 5.

- **AutoCAD I**, Tuesdays, 6-10 p.m.
- **AutoCAD I**, Fridays, 8 a.m.-12 p.m.
- **AutoCAD II**, Thursdays, 6-10 p.m.

Continued on page 20.

CLASSES, continued

- **3-D**, Mondays, 6-10 p.m.
- **Drawing Production**, Wednesdays, 6-10 p.m.

Tuition is approximately $200 per 3-credit course. AutoCAD I and AutoCAD II are prerequisites for the other courses. It is possible to test out of AutoCAD I. CAD certificate is available for students who fulfill all course requirements. For more information or assistance in enrolling, contact Steve Jette at sjette@cbc2.org or at 547-0511, ext. 2274.

Continuing Training offered at HAMMER

The Volpentest HAMMER Training and Education Center offers Continuing Training Offering Plan sessions regularly. There is no charge for participation in the sessions, but students must register in advance. Register online at **http://www.rl.gov/trs/ctop/ctop.htm**. Click on the selected session and complete the registration form, or send an e-mail message to Vikki Ballew with student name, Hanford identification number, organization name (not code), company name, session date and session title. Upcoming sessions include:

- **Integrated Training Electronic Matrix (ITEM)** – Dec. 5, 7:30 a.m. in room 16. ITEM is the site-wide program for tracking training requirements. This session includes a general overview of ITEM, discusses how to access various reports and provides an explanation of the role instructional staff members may play in providing input that feeds into the system.
- **A Hands-on Approach to Procedure Process Training** – Oct. 17, 7:30 a.m. in room 11. This interactive session provides an example of how one organization used a novel approach to provide procedure compliance expectations training.

Safety class offered at HAMMER

D2000 Safety Solutions will offer the class listed below. The course will be held at the Volpentest HAMMER Training and Education Center and qualifies for Continuing Education Units.

- **Confined Space Train the Trainer** – Oct. 2-5. Cost is $695. The course covers the OSHA standard 29 CFR 1910.146. The course focuses on tunnels, sewers, boilers and other spaces adequate in size and configuration for employee entry, with limited means of egress and not designed for continuous employee occupancy. Hands-on scenarios are also included. Students will conduct actual confined-space entries.

To register, contact D2000 Safety Solutions at (800) 551-8763 or visit the Web site, **www.d2000ss.com**.

WORKING SOLUTIONS

Surviving the empty nest

Kids grow up, become independent and leave home. Some parents experience feelings of pride and even relief when their children "fly the nest," while others feel bereft. Working Solutions, your work/life benefits provider, has a free packet of articles that can help parents and guardians cope with "empty nest syndrome." The topics include:

- The Empty Nest Gives Parents New Options
- Adult Children: Forging New Relationships
- With Children Grown, Parents Cope with Sudden Vacuum
- The Empty Nest: For Single Parents, Letting Go Can Be a Special Challenge

To access the Information

To access the packet of articles, visit our Web site at **www.todayslife.com**. Your PIN is 5161. Click on " Check out our Monthly Theme" or click on the "Newsletter" button in the menu bar at the top of the page. Don't forget to take the online Web quiz, "Are You Prepared for an Empty Nest?"

You can also get your free "empty nest" articles by:

- Calling the automated Materials Request Line at (877) 318-9400
- E-mailing the form below to articles@wsi-or.com
- Faxing the form below to (206) 362-8081.

☐ YES!
Please send me the FREE "Empty Nest" packet.

Name _____
E-mail _____
Home Address _____ City _____
State _____ Zip _____
Home Phone _____
Work Phone _____
Employer _____
Worksite _____

Working Solutions provides free and confidential counseling, resources, referrals and educational materials through Hanford Family Care Services to help employees and family members meet the demands of life and work. ✦

EMPLOYEE ACTIVITIES

Mark your calendars. The Department of Energy employee recreation association, DOE-REC, has scheduled the following events for the fall months:

- **Spaghetti Feed/Costume Party**, Oct. 19, location to be determined, contact Dianne Henrich or Bob Rosselli
- **Auction and Wine Tasting**, Nov. 16 (tentative date), contact Tony McKarns
- **Children's Christmas Party**, date to be determined, contact Vicki Spitz
- **The Holiday Party**, Dec. 8, Tri-Cities Coliseum, entertainment by Curtis Nettles, contact Linda Denoff.

VANPOOLS

Day & Zimmermann Protection Technology Hanford reminds employees to wear their badges. Vanpool and carpool drivers are responsible for ensuring riders are badged. If a passenger forgets his or her badge, Patrol must be informed at the barricades. For more information, look on the Hanford Web in the Projects and Activities section, Safeguards and Security at **http://www.rl.gov:1050/sas/pg1v3htm**.

KENNEWICK

Rider needed for Ben Franklin vanpool to 200W. Picks up along 10th St., at Rainer and17th, and at the Kennewick Shopko. Drops off at MO-281, MO-279, T Plant and WRAP. Call **Debbie** at 372-2698 for more information. 9/4

PASCO

Vanpool No. 213 has an opening. 7 a.m.-4:30 p.m., 8x9 shift. Starting point is Road 68 (by TRAC) and picks up at the Federal Building. Willing to pick up along George Washington Way in the northern part of Richland. Drops off at 2704-HV, B Plant and 2750-E, but willing to drop off anywhere along the route. Backup drivers are appreciated, but not necessary. Contact **Doug Bailey** at 373-2392 or at douglas_m_bailey@rl.gov. 9/10

WEST RICHLAND

Vanpool No. 120 to 200E needs one 8x9 rider. Leaves Flat Top Park at 6:10 a.m. Drops off at 2750-E, WESF, 2727 and 2025-EA. Contact **Marion** at 372-0383. 9/4