

WSCF meets challenges of faster cleanup

When challenged to increase its ability to analyze headspace gas samples, Fluor Hanford's Waste Sampling and Characterization Facility applied creativity to speed up the process.

Hanford is sending more shipments than ever to the Waste Isolation Pilot Plant in New Mexico, where transuranic waste is placed more than 2,000 feet underground in a bedded salt formation that has remained geologically stable and free of groundwater for 225 million years. The salt seals the waste from the environment and shields the radioactivity in the containers.

The first shipment was sent from Hanford to WIPP in July 2000, and by April 2003 a total of 14 shipments had been sent. As a result of acceleration, the total had more than doubled by this past June 23, when WIPP received the 29th Hanford shipment.

Fluor Hanford Waste Management conducts several characterization processes to compliantly prepare waste for shipment to WIPP. Headspace gas sampling analysis characterizes organic vapors in the area between the contents of the container and the lid. Containers are kept in a heated environment for three days to prepare them for sampling. Samples must be analyzed by a WIPP-certified laboratory.

The Waste Sampling and Characterization Facility is a full-service Hanford Site laboratory analyzing low-radioactivity and non-radioactive samples. Rigid quality controls govern WIPP work being done at WSCF. Certification is maintained by rigorous annual assessments and by regular analysis of Performance Demonstration Program samples provided by WIPP to monitor certified labs.

Weekly quota quadrupled

As part of Fluor Hanford's accelerated cleanup, WSCF was asked to increase its weekly headspace gas sample analyses from 18 to 80, according to WSCF analytical manager Scot Fitzgerald.

A team was assembled to increase production and decrease turnaround times. Members Bruce Hey, Joe Hale and Markus Stauffer focused on gaining efficiency by speeding up the analysis rather than increasing the number of staff members or instruments.

The team made several modifications to the gas chromatograph/mass spectrometer analytical system — highly specialized equipment for detecting organic vapors. Instrument modifications and process improvements allow a batch of up to 20 samples to be analyzed in 12 hours, compared with the prior average of three days.



Before undertaking a task in a radiation buffer area, Briana Colley assembles sampling equipment at the WRAP facility. Health physics technician Dominic Furino also conducts pre-job activities, and both will don the required personal protective equipment, as discussed in the pre-job safety meeting, a before starting work. Colley is one of six WSCF sampling experts assigned to assist operations personnel with headspace gas sampling.

WSCF meets challenges of faster cleanup, cont.

A key change reduced the length of time for heating and cooling cycles during analysis. A small box-like cryogenic trap was attached to the instrument. Instead of subjecting the entire oven of the gas chromatograph to very low temperatures for a required part of the analytical process, cryogenic cooling can be applied to the box only, causing the vapors to congeal into a liquid or solid state.

Speeding up the process

WIPP approved implementing the proposed changes and tested the new configuration in a surveillance audit using “pipe overpack containers,” or POCs — specialized containers used for some of the waste from the Plutonium Finishing Plant. The test was a success, bringing WIPP approval of WSCF’s new configuration.

“The WSCF staff successfully demonstrated headspace gas sampling of pipe overpack containers for the DOE Carlsbad Office auditors,” said Duane Renberger, Analytical Services director. “This involved teams from the Waste Management TRU program, the Waste Receiving and Processing facility and WSCF.”

“The pipe overpack container headspace gas sampling surveillance by the Carlsbad Field Office was a huge success by any measure,” said Rick Dunn, Waste Management’s director of TRU Programs. “This is a significant achievement — it helps position us to ship about 2,400 pipe overpack containers projected from the Plutonium Finishing Plant over the next year. We have already completed the headspace characterization for a population of 900 of these POCs.”

Karola Kover, Project Office lead, said, “The surveillance was as realistic as possible. This success will help us move forward with our accelerated schedule for sampling headspace gases.”

An expert staff

The Waste Sampling and Characterization Facility has a group of sampling experts assisting operations personnel with headspace gas sampling at T Plant and WRAP — Briana Colley, Len Pingel and Larry Lockard, along with new members Cynthia Johnson, Jim Douglas and Jim Grohs — supporting increased production needs for waste destined for WIPP.

“I’m very proud of the staff of the laboratory for working smart to make first-of-a-kind changes that speed up the processes for analyzing headspace gas samples,” said Christina Caprio, WSCF project manager. “WSCF wants to make its contribution to the WIPP program and help Hanford meet the challenge of preparing thousands of drums of transuranic waste for shipment and permanent disposal.”

WSCF is located in the heart of the Hanford Site’s central plateau, down the road from the Hanford Fire Department’s Central Fire Station. Operated by Fluor Hanford’s Analytical Services organization for the DOE Richland Operations Office, WSCF is staffed by a mixture of chemists and chemical technologists providing accredited radiological, organic and inorganic analyses supporting many Hanford Site projects. ■

Americanism has kept our

country free

The following commentary on "Americanism" was excerpted from an essay posted on the Internet by the Disabled American Veterans organization, and was submitted by DAV member Guy Schein of the Department of Energy Richland Operations Office.

I'll bet you remember the following words from grade school and high school: "These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country. But he that stands it now, deserves the love and thanks of man and woman."

These words spoken by patriot Thomas Paine in 1776 have a meaning that rings in the hearts of the American people. Dangerous and uncertain days faced the 13 American colonies when he spoke these words in 1776. He knew a special kind of patriotic devotion and love of country was needed if the colonists were going to win their struggle for independence.

That special devotion helped them form a new nation dedicated to liberty. Today, we call that unique kind of patriotism "Americanism." For more than two centuries, Americanism has kept our country free.

What is Americanism? It's much more than patriotism alone, and it's more sincere than attitudes of self-righteousness. Americanism is the guardian of our Constitution. It's the driving force behind America's desire to prosper as a free nation.

The foremost characteristic of Americanism is the willingness of so many of our citizens to make sacrifices as individuals for the good of our nation's people as a whole. Such unselfishness is seen most touchingly in the sacrifices of the millions of men and women who died or became disabled while bearing arms in our nation's defense.

Patriotism is another trait of Americanism. But true patriotism goes beyond the waving of our country's flag and the singing of our National Anthem. Those are important gestures, to be sure, but true patriotism demands loyalty to the ideals that lie *behind*

those gestures. It calls forth loyalty to the traditions, the institutions and the courage that make our country great. It is out of patriotism that we exercise the rights we enjoy as Americans — rights first stated in the Declaration of Independence and later assured to us by our Constitution.

We practice Americanism whenever we vote. We also show Americanism when we take pride in our nation's achievements and commit ourselves to America's future ambitions.

Our nation's legendary generosity is a potent feature of our unique national spirit. Numerous government and nonprofit agencies provide assistance to people here and abroad in time of need.

Americanism is also about feelings. It's a shout of joy at an Olympic gold medal victory...sorrowful whispers at the death of a military member...and bitter anger at the false accusations directed at our nation by foreign governments. Each of us practices Americanism every day in our own way.

Citizens of every nation feel patriotism for their countries. But the loyalty and love of country felt by America's citizens are truly unique in today's selfish world. That's why America is the leader of the free world. That's why America has prospered and grown to such greatness in a mere two centuries. And that's why America will continue its world leadership as history writes new chapters in the future.

How can we practice Americanism? By voting on Election Day. By writing a letter or making a phone call to an elected leader. By answering the call to defend America and her Constitution in time of war. Americanism is the willingness to make personal sacrifices for the good of all of our nation's people.

This week, as we celebrate the 227th anniversary of our nation's independence, take a moment to remember all the freedoms we have to be grateful for as Americans, and especially remember those who have fought to protect those freedoms over the past two centuries. ■

Electrical safety requirements apply to energy-saving power strips

WattStopper™ multi-outlet power strips are being distributed across the site as an energy-saving measure. They include a motion sensor that will turn off six outlets on the strip when the work area has been unoccupied for a preset period of time.

The Hanford Workplace Electrical Safety Board and the Hanford Fire Marshall support efforts to conserve energy. They want to remind users, however, that these devices are subject to the same safety requirements as other multi-outlet strips.



The WattStopper power strip

These requirements apply to the WattStopper strips:

- They must be connected directly to permanently installed receptacle outlets, not to other outlet strips or to extension cords. This requirement comes from the UL listing instructions and NFPA 1, the *Uniform Fire Code*.
- They must be protected against physical damage from sharp corners, heat sources and other hazards.
- They must not be permanently connected to building surfaces or furniture.
- They must not be overloaded with electrical equipment beyond their rated capacity.

It is especially important that you use caution if you have high-wattage appliances that could overload the power strip. Space heaters, for example, should not be connected to power strips. Heaters should be connected only to permanent building outlets, because even a single heater could overload a power strip and create a fire hazard. Remember, too, that space heaters used at Hanford must be approved by a fire-protection engineer.

Several medium-wattage appliances could also cause an overload. If you are unsure about how much load you are connecting to a power strip, talk to your manager or contact a maintenance organization near you for help.

Some power strips may have other limitations of use depending on the specific type. Be sure to read and follow the manufacturer's instructions.

If you have questions regarding the safe use of WattStoppers or have other electrical safety questions, contact Paul Case at 376-1168 or Bob Gray at 373-7221. A list of electrical safety points of contact for each of the Hanford contractors is on the Hanford Electrical Safety Program (HESP) Web site at <http://apweb02.rl.gov/rapidweb/phmc/hesp/index.cfm?PageNum=19>.

For more about the acceptable use of multi-outlet power strips and extension cords, see the compliance guide for companies on the Fluor Hanford team, available on the HESP Web site at <http://apweb02.rl.gov/rapidweb/phmc/hesp/docs/32/docs/ESCG-2002-01.pdf>. ■

Biological Exposure Study aids strontium-90 cleanup

Karin Nickola, *Fluor Hanford*

Radioactive contaminant strontium-90 has affected about a square mile of Hanford groundwater — mostly in the 100N Area, where it has entered the Columbia River at N Springs.

The strontium-90 groundwater plume in the 100N Area is the result of millions of gallons per year of cooling water from N Reactor having been released directly to disposal cribs adjacent to the Columbia River. At one time, concentrations in the center of the groundwater plume were at least a thousand times higher than the drinking-water standard. Concentrations did not begin to diminish until the discharge of contaminants was discontinued in mid-1992.

In the midst of the cleanup challenge, another observation is worth noting. Based on the Pacific Northwest National Laboratory's monitoring of the Columbia River for the U.S. Department of Energy, there is no significant difference in the strontium-90 concentrations at Priest Rapids Dam and the Richland Pump-house.

Studies are under way to evaluate the effect of strontium-90 on the aquatic ecosystem. PNNL's Biological Exposure Study, within the Science and Technology Project of Fluor Hanford's Groundwater Protection Program, is one such effort. By performing the study, PNNL is addressing questions that have surfaced in past ecological assessments conducted at the Hanford Site. And information from the study will become available for assessments addressing the relative impacts from both Hanford-related sources and upstream background sources of strontium-90.

"Previous risk assessments relied mostly on strontium-90 biological exposure data for sites and species other than those found at Hanford," said PNNL senior research scientist Amoret Bunn. "New site-specific data generated by the strontium-90 study should reduce uncertainty when estimating risk and provide decision makers with information vital to cleanup decisions involving the 100N Area shoreline."

Uptake and loss

The Biological Exposure Study follows strontium-90 as it makes its way through food and water sources into organisms in the Columbia River. A simple food chain for the Columbia River starts with the periphyton community (the greenish-brown slime found on river rocks), moves to aquatic insects that eat periphyton, and ends with the fish that eat aquatic insects and are directly exposed to strontium-90 in river water.



Periphyton found on rocks, magnified in the inset microscopic photo, represent the bottom of the food chain in the Columbia River. PNNL's Biological Exposure Study team is investigating the effects of strontium-90 on a food web, including rainbow trout that are representative of chinook salmon and steelhead.

Continued on page 6.

Biological Exposure Study aids strontium-90 cleanup, cont.

After investigating in the laboratory the effects of strontium-90 on periphyton, team members of the Biological Exposure Study have turned their attention to investigating the effects of strontium-90 on salmonids — including fall chinook and steelhead. For this portion of the study, the scientists are using rainbow trout. Although not directly representative of salmon, rainbow trout are from the salmonid family and are easier than salmon to work with in the laboratory.

PNNL is quantifying the rate at which rainbow trout take up strontium-90 from water into their gills, gut, bones and tissue. The lab is also quantifying the uptake from strontium-90-laced food sources.

Another important part of understanding how strontium-90 affects aquatic organisms is quantifying how organisms lose the contaminant through depuration (respiration or excretion). During the Biological Exposure Study, organisms are exposed to known concentrations of strontium-90, and then placed in clean water so the rate of depuration can be quantified.

Challenge at 100N

Because of the proximity of the strontium-90 groundwater plume of the 100N Area to the Columbia River, the Groundwater Protection Program is looking for remedial technologies that offer the greatest long-term effectiveness.

“The existing pump-and-treat system at 100N has proven to be an inefficient option for long-term remediation,” said physical scientist Mike Thompson of the Department of Energy Richland Operations Office. “Strontium-90 adheres to soil particles and is very difficult to extract via pump-and-treat technology. And we need to assess the environmental impacts of the strontium-90 that reaches the riparian and aquatic environments to make sound remediation decisions. A workshop we’re planning for August will facilitate an exchange of information on contaminant levels at 100N as well as associated human health and environmental risks.”

The upcoming workshop will be designed to foster discussions on the path forward for 100N groundwater and the environmental protection of the Columbia River. A topic of discussion will be the aquatic eco-receptor study.

“Following the workshop, we plan on initiating a Data Quality Objectives process with the regulators to ensure that planned studies meet the intent of Tri-Party Agreement milestones and the requirements of Superfund,” said Thompson. ■

First full-scale test of bulk vitrification produces glass

Hanford officials have successfully melted a combination of soil and simulated Hanford tank waste into a large block of glass in the first full-scale field test of a potential treatment technology called bulk vitrification.

The method could potentially be used to turn millions of gallons of tank waste into sturdy glass at the Hanford Site, and it is one of three methods that contractor CH2M HILL Hanford Group is investigating for the Office of River Protection for use in treating selected tank waste for disposal on or off the Hanford Site.

The other methods are containerized cast stone and steam reforming. The methods are called supplemental technologies because they would be used to supplement Hanford's Waste Treatment Plant, which is currently under construction. An estimated 30 to 70 percent of Hanford's 42 million gallons of low-activity tank waste may be suitable for treatment using one or more of the supplemental technologies under evaluation.

"Evaluating and deploying one or more supplemental treatment technologies is critical to meeting our commitment under the Tri-Party Agreement to treat Hanford's 53 million gallons of radioactive and hazardous tank waste by 2028," said Billie Mauss of the Department of Energy's Office of River Protection.

Bulk vitrification allows for glassification of the tank waste inside a disposal container suitable for land disposal. Containers used in the full-scale testing are 20 feet long, 8 feet wide, and 8 feet high — about the same size as a large shipping container. Bulk vitrification would allow accelerated tank waste cleanup by reducing the mass of waste requiring vitrification in the Waste Treatment Plant.

A contract team led by AMEC Earth & Environmental, Inc. has conducted lab-scale tests using real Hanford tank waste and is conducting full-scale tests using simulated waste. AMEC will also provide conceptual engineering for a production facility. The first of three full-scale tests was completed earlier this month at a facility in Richland. The second and third tests will be conducted in July.

"The key to evaluating the bulk-vitrification method is to conduct the tests in as real an environment as possible," said Rick Raymond of CH2M HILL Hanford Group. "Through testing and careful evaluation, we will ensure the method or methods we recommend to the Department of Energy for treating Hanford tank waste are safe and effective."

After the full-scale tests are completed, an evaluation of bulk vitrification and other technologies by CH2M HILL will enable ORP to decide this fall on how to best move forward on building and operating facilities to provide supplemental treatment of Hanford tank waste. ■



Dennis Hamilton of CH2M HILL Hanford Group (left) and Leo Thompson of AMEC Earth & Environmental examine pieces of a large block of glass that was made in the first full-scale test of bulk vitrification. CH2M HILL is investigating the treatment method, along with two other methods, for the Office of River Protection. Thirty to 70 percent of Hanford's low-activity tank waste could potentially be treated using a technology or technologies to supplement Hanford's Waste Treatment Plant.

Grants from Tri-Cities Technical Council helping area schools

The Tri-Cities Technical Council is wrapping up its fourth successful year of boosting interest in science and technology in local schools through its grant program.

The program has grown from distributing nine grants in its first year to distributing nearly 30 grants to more than 25 public and private schools in the Tri-Cities this past year. The grants, typically in the range of a few hundred dollars, go a long way toward helping area teachers purchase planning materials and tools for student learning.

Highlands Middle School teacher Mona Alzheimer used the \$300 grant she received from the technical council to purchase a K'NEX set, which is used to build contraptions called "machines" to demonstrate scientific principles.

"My kids were hooked," said Alzheimer. "By the time we were finished, they were describing how these machines worked, actually calculating simple mechanical-advantage problems."

Alzheimer's class took on the challenge of building the largest machine in the book, called the "Big Ball." Directions for that machine are spread out over 20 pages. She described her success in a thank-you letter to the Tri-Cities Technical Council. "The kids dove right in," she wrote. "My rule was that I would not help read the directions. I knew that they could do it. The motivator was the K'NEX set. Thank you for this fantastic tool. I have yet to meet a kid who isn't hooked on it."

"It's tremendously rewarding for all of the volunteers in the technical council to receive this kind of feedback and to know that their efforts are making a difference," said Pam Ankrum, chairwoman of the grant committee for Tri-Cities Technical Council. "The growth of the school grant program over the years is evidence of its success and the need for the community to support its schools, particularly in the area of developing interest in science and technology."

Ankrum also thanked the grant program's partners, Bechtel and CH2M HILL Hanford Group, for their contributions, as well as the following contributors to the program:

- American Chemical Society
- American Institute of Chemical Engineers
- American Nuclear Society, Eastern Washington Section
- American Society of Civil Engineers
- D. Hittle & Associates
- Fluor Federal Services
- Fluor Hanford
- Health Physics Society

Continued on page 9.



Students in a class at Highlands Middle School built mechanical machines such as the "Big Ball" pictured here, using a K'NEX set that was purchased using grant money from the Tri-Cities Technical Council. The council of Tri-Cities area technical professionals boosts interest in science and technology, in part through the nearly 30 grants to local schools for materials and learning tools.

Grants from Tri-Cities Technical Council helping area schools, cont.

- Information Matters
- International Council on Systems Engineering
- Washington Group International
- Washington Society of Professional Engineers.

The technical council is a non-profit coordination, communication and community-service vehicle for professional and technical societies in the Tri-Cities region. For more information about the council, Ankrum can be reached at 377-4513. ■

Make Your Move

Include the family in your healthy activities

Children in the United States are becoming increasingly more obese and less active. In addition, with parents working outside the home, families spend less time together. Family physical activity is a great way to spend more time together while getting everyone active.

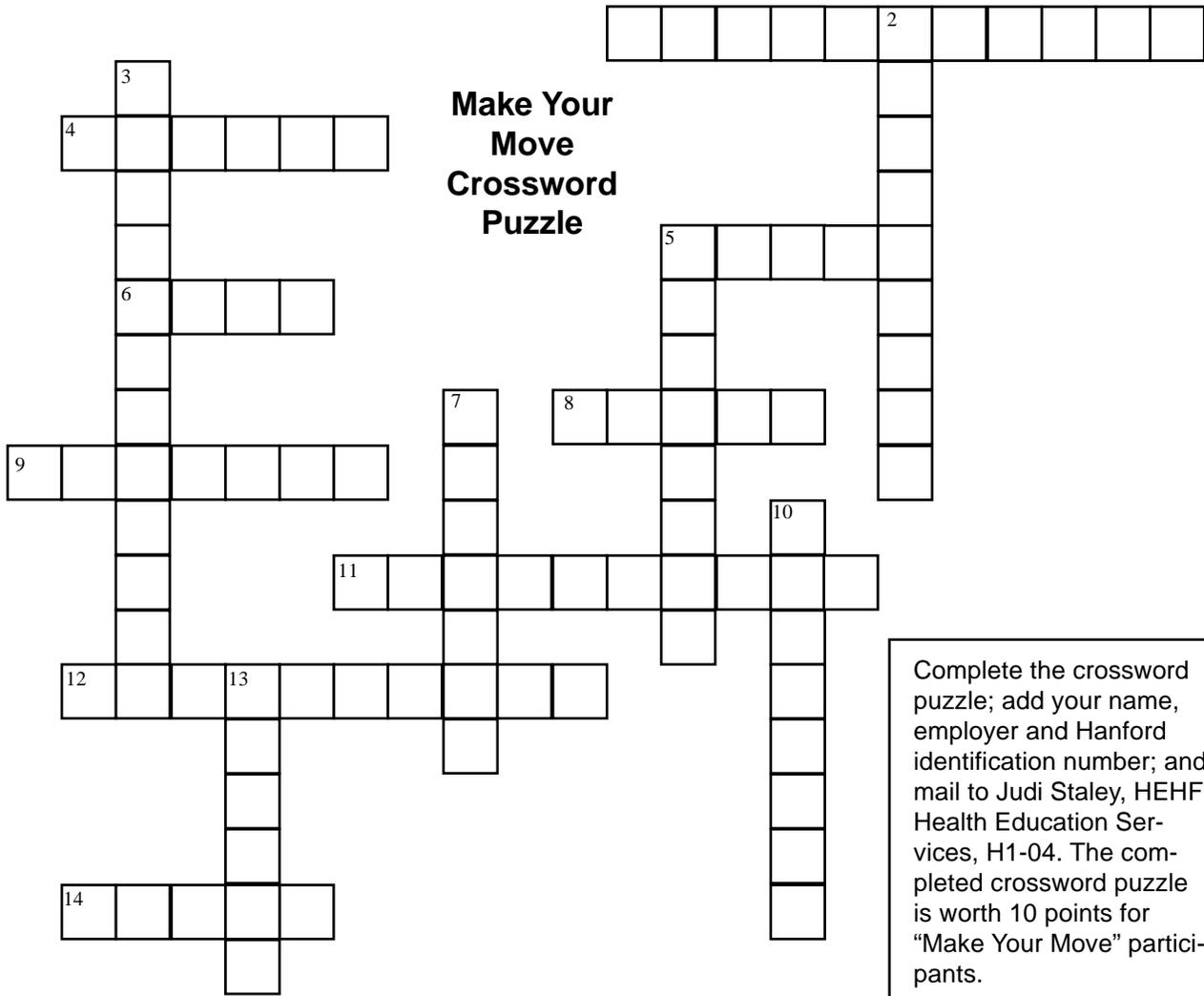


Here are some suggestions for families to spend some active time together:

- Serve as a role model by being active.
- Teach children the physical skills you know.
- Develop additional skills to share.
- Emphasize that physical activity is fun.
- Avoid making negative comments about performance.
- Establish playtime for the whole family.
- Participate in fund-raising walks and runs as a family.
- Check out community activity programs such as those sponsored by a local YMCA or YWCA, athletic organizations, camps, clubs, gymnasiums, recreation centers or youth organizations or centers.
- Try new activities as a family.
- Plan for active vacations and weekends.
- Encourage school activities that make time for fun, development-appropriate physical activity led by a knowledgeable instructor. ■

See Make Your Move puzzle on page 11.

Make Your Move Crossword Puzzle



Complete the crossword puzzle; add your name, employer and Hanford identification number; and mail to Judi Staley, HEHF Health Education Services, H1-04. The completed crossword puzzle is worth 10 points for "Make Your Move" participants.

ACROSS

1. A component of fitness increased by regular stretching that aids in injury prevention
4. What you should always do before stretching
5. Food eaten between meals
6. Type of activity originating in India involving flexibility and meditation
8. The body's period of relaxation, rest and repair
9. A component of fitness that strengthens the heart and lungs
11. A state of relaxation and higher consciousness when all outside distractions are eliminated
12. The way you feel about yourself
14. What you want to accomplish that guides your behaviors and choices

DOWN

2. The first and most important meal of the day
3. Name of this program
5. Component of fitness that strengthens muscles and improves balance and coordination
7. Type of diet that has no scientific basis and claims miraculous results
10. The period at the end of an exercise session when the heart rate and breathing return to normal
13. People you are related to

Submitted By _____

Hanford ID No. _____

Employer _____

Make Your Move

Firefighters coach high school sports after Hanford workday

Armando Plata and Lester “Shag” Williams have a few things in common: both are firefighters and emergency medical technicians in the Hanford Fire Department, both have high school coaching jobs after their shifts end at HFD and both have a big heart.

As HFD firefighters they have to stay in shape, and federal regulations governing the fitness of firefighters mandate that they are allowed one hour of training time four times during their work week. Both Plata and Williams make use of the training facility at the 200W Fire Station to maintain physical fitness for their work, but it also allows them to keep up with, and provide a good example for, the high school athletes they coach after they finish their day’s work at Hanford.

Plata is varsity wrestling coach at Prosser High School and Williams is head coach of the basketball program at Davis High School in Yakima. From November through March, they finish their Hanford work in mid-afternoon and head for the high school gym to train the young men on their teams. Often they do not come home until late in the evening, when many of us with only one job are already sleeping.

“It makes for a long day,” Plata said, “We often do not have weekends and holidays with our families at home, because of tournaments and games.”

Fortunately for both men, their families share the love of high school sports and are involved in running tournaments and games and come along on trips. Both of Plata’s sons were high school wrestlers and his daughter, now a junior at Prosser High School, helps keep the books for the teams. Plata’s wife supervises matches and tournaments. Williams’ wife and daughter also help support the basketball team and attend games.

“The Hanford Fire Department has been good to us in allowing us to coach after work,” Plata said. “The management believes in what we do as coaches.”

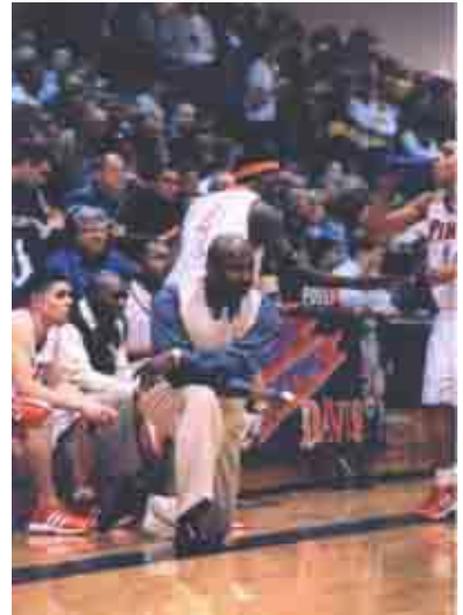
Plata and his brothers wrestled in high school. As with many of the young men he now coaches, agricultural work was not that plentiful in winter — wrestling season — so he was able to participate in the after-school practices and weekend tournaments.

Williams graduated from Davis High School, played basketball for the University of Washington and later for the World Basketball League in Canada.

Williams and Plata share a philosophy about sports — “Sports are great,



Hanford Fire Department firefighter and Prosser High School wrestling coach Armando Plata confers with members of the team during a tournament.



Coach Lester “Shag” Williams watches from the sidelines as the Davis High School varsity basketball team played Richland High School last season. Williams is also a firefighter with the Hanford Fire Department.

Continued on page 13.

Firefighters coach high school sports after Hanford workday, cont.

but they are not everything. You have to keep your grades up so that you have more opportunities in life," said Williams.

Not all high school basketball players will be as lucky as LeBron James, to whom Nike gave \$90 million to advertise its shoes.

That is hard for kids to understand. To illustrate his point, Williams introduces his National Basketball Association-star wannabes to former high school basketball stars who were injured or just plain didn't realize their dream. Some of those former stars who did not pay enough attention to their studies are now out of school, jobless and just "hanging out."

"If you pay attention to your studies and you are a talented athlete, sports can be your way to get a higher education through a scholarship," said Williams.

Plata agrees and cites the example of three Prosser High School wrestlers who were gifted athletes and gifted students, and attended Division I schools on scholarships. One student attends Oregon State University, another is at Duke University and one graduated from Lehigh University.

Plata admits that wrestling does not have the professional career potential of basketball. The talented wrestler competes on the college level and, if he is lucky, makes it to the U.S. Olympic team. This fact and the nature of the sport, with the pressure on individual performance, make it harder to recruit athletes.

Many of their athletes come from single-parent homes, and both men find themselves not only in the role of coach, but also counselor, role model and father. "We are not just teaching them to be better wrestlers or basketball players, we are teaching them how to make it in life," said Williams.

Williams and Plata also find themselves helping their athletes meet some expenses, driving them home after practice and even offering shelter to their players when no one is at the athlete's home after a game or tournament.

Is it worth the time and trouble? Plata and Williams smile and nod.

"Working with young people keeps me young. The payment comes when a kid succeeds in life," concludes Williams.

And the proof is in the performance. This year Prosser's wrestling team came in sixth at state, the highest level it has achieved as a team to date. The Davis varsity basketball team shares the Big Nine championship with Pasco. "With a team that was all under 6 feet in height," adds Williams with pride.

Oh, and both Plata and Williams were named "Coach of the Year" in their respective leagues. ■

Copies of environmental assessment are available

The U.S. Department of Energy Office of River Protection has prepared the *Environmental Assessment for the Accelerated Tank Closure Demonstration Project* (DOE/EA-1462), to assess potential environmental impacts of stabilizing residual tank waste in tank 241-C-106 on the Hanford Site. DOE has concluded that the proposed ATCD Project does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act; therefore, an environmental impact statement is not required. For additional information or a copy of the EA, please contact:

R. W. Lober, NEPA Document Manager
U.S. Department of Energy, Office of River Protection
P.O. Box 450
Richland, Washington 99352
E-mail: Robert_W_Lober@rl.gov
Fax: 509-372-2781

A copy of the EA will be available at the following locations:

Richland Public Library
955 Northgate Drive
Richland, Washington 99352

U.S. Department of Energy Reading Room
Washington State University Tri-Cities
2770 University Drive
Consolidated Information Center, Room 101 L
Richland, Washington 99352

The environmental assessment is also available on the Hanford Internet Web site at www.hanford.gov/netlib/ea.asp.

Fluor and HEHF present seminar on managing stress

Poor stress management can affect our families, friendships and professional abilities. People who do not handle stress well can develop physical and emotional problems. Fluor Hanford Safety and Hanford Environmental Health Foundation's Behavioral Health Services will present a seminar to teach you a number of ways you can take control of your stress so it does not affect you adversely.

You may fulfill your safety-meeting requirement by attending the seminar "Stress," which will be presented at various locations on the Hanford Site:

100K	July 7	9-10 a.m.	MO-293
400 Area	July 17	9-10 a.m.	4706, Room 302
200 West Area	July 21	2-3 p.m.	MO-278
Stevens Center	July 24	2-3 p.m.	2420, Room 153
Federal Building	July 28	2-3 p.m.	Room 142
200 East Area	Aug. 4	2-3 p.m.	2101-M, Bijou Room

For more information, call Carol Powe of Fluor Hanford at 376-8886 or MaRene Luckey of HEHF at 376-4418. ■

Browning met challenge on evacuating a facility

Congratulations to Sylvia Browning of Fluor Hanford, winner of the June 16 Security Ed Challenge. Browning won a wireless door alarm for correctly identifying the two habits personnel are encouraged to get into when evacuating a facility — taking along vehicle keys in case they are directed to leave the area, and looking around and reporting any suspicious items or concerns to emergency personnel. Receiving reports of unusual items or activity is especially important to emergency personnel who conduct building searches.



If you have any challenges you would like Security Ed to consider, e-mail them to Security Ed at [Security Ed](mailto:SecurityEd@fluor.com), or send them by plant mail to Security Ed at L4-09.

Regular Features



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.

Thank you to Hanford 'family'

On Thursday, June 12, our son Robby Schuller, a Fluor Hanford employee, was involved in a terrible accident. He was riding his Harley when a car pulled out in front of him. He was airlifted to Harborview Medical Center in Seattle and treated for a skull fracture, concussion, broken ribs, punctured lung, eye injury and a compound leg fracture. He has since been released and is at our home recovering.

We would like to thank all who participated in the very generous money donation we received, and to say thanks for all the cards and the visits from all the folks who came to see him in Seattle and now at our home in Pasco. Words could never express our gratitude to each and every one of you. The money allowed us to stay in Seattle and be with our son.

The prognosis is good for a full recovery, but it will take some time. Robby also thanks you all for everything his working family has done for him.

God bless all of you, and once again from the bottom of our hearts a big Thank You!

Mr. and Mrs. Robert Schuller



CALENDAR

Hanford Technical Library offers tour July 3

Take a tour of the library on Thursday, July 3, from 8:15 to 9:15 a.m. in room 101R of the Consolidated Information Center at the Washington State University Tri-Cities campus and find out what services are available to you in the library and on your desktop. Contact Cheryl Wiborg at 372-732 or at cheryl.wiborg@pnl.gov for more information.

Conference on plutonium held in Albuquerque

The Science 2003 Conference — The Plutonium Futures — will be held July 6-10 in Albuquerque, N.M. The third in a series, this conference will provide an international forum for presenting and discussing current research on physical and chemical properties and environmental interactions of plutonium and other actinide elements. For more information and to register, visit <http://www.lanl.gov/pu2003>.

Sexual Assault Response Center conducts training

The summer volunteer advocate training for the Sexual Assault Response Center will run July 7-17 at 830 N. Columbia Center Blvd. in Kennewick. This 34-hour training is designed to give volunteers the tools they need to work with sexual assault victims and their families. You can volunteer from your home, if you have access to a phone in the evenings, twice a month for 12-hour shifts.

The training schedule is as follows: July 7 and 9, 5:30-10 p.m.; July 11, 5-9 p.m.; July 12, 8 a.m.-5 p.m.; July 13, 8 a.m.-noon.; and July 14 and 16, 5:30-10 p.m. A \$10 fee helps offset the cost of the training manual.

The Sexual Assault Response Center is a non-profit United Way agency serving Benton and Franklin counties to provide crisis services and preventive education for community members on sexual assault and abuse issues. The agency relies on community volunteers to help run its 24-hour hotline. For more information on the volunteer advocate training, call Christina Stingley or Anna Hahn at 374-5391.

Academy of Hazardous Materials Managers meets

The Eastern Washington Chapter of the Academy of Hazardous Materials Managers' meeting on July 8 in the Gallery Room of the Richland Library will feature a presentation by Dave Bartus, EPA Region 10, titled "Resolving Environmental Issues Using Regulatory Pathways." Networking begins at 6:30 p.m. and the meeting begins at 7. The meeting is free and open to the public. For more information, contact Andrea Prignano at 376-1057.

Calendar continued on next page.

Regular Features



CALENDAR continued

'Evening for the Angels' to benefit Chaplaincy

Tickets are on sale now for an evening of music under the stars July 11 at 8 p.m. in the courtyard of the Richland Red Lion. Proceeds from this eighth annual event, known as "Evening for the Angels," help support the hospice and counseling programs of the Tri-Cities Chaplaincy, a United Way agency. Featured will be Chicago artists, Erich Buchholz, a tenor, and soprano Kathryn Kamp, who will perform a wide selection of Broadway hits, traditional spirituals and opera arias. Chocolates, regional wines, champagne and non-alcoholic beverages will be served throughout the evening. Bechtel and Washington Group are helping to sponsor this event. Tickets are \$40 if purchased in advance, and \$50 if purchased at the door. To make your reservation, call the Tri-Cities Chaplaincy at 783-7416.

Radiochemistry Conference in New Mexico

Two tours of the Waste Isolation Pilot Plant will be offered to attendees of the Radiochemistry Conference in Carlsbad, N.M. The conference will be held July 13-16. The conference will include presentations on nuclear repository sciences, the National Border Program, the environment, renewable energy, decommissioning and decontamination, and waste management. Featured speakers will include prominent members of the public and private sectors. The tours of WIPP, our nation's first deep-geologic repository for safe, permanent disposal of radioactive waste in a 225-million-year-old salt formation, will be conducted on July 14 and July 17. Visit http://www.radiochemistry.org/wipp_tour to take an online tour and follow the links to sign up for the actual tour in July or to register for the conference. The tour fee is \$50 and is separate from the conference fees.

Stratos' CEO gives talk on tech business growth

The Three Rivers Venture Group will sponsor the talk, "Commercializing High-Tech Products" by Allan Stephan, president and CEO of Stratos Product Development Group, on Tuesday, July 15, at 7:15 a.m., at the Richland Community Center Activity

Room, 500 Amon Park Drive. The presentation is free and open to entrepreneurs and others involved with tech business growth, but preregistration is requested. Stratos, a Seattle-based technology commercialization firm, brings tech products to market through investments, design, engineering and business strategy. Stephan has incubated companies in markets including life science, medical devices, health care and computing, and has provided funding, facilities and engineering support and leadership in each venture. Stratos' Web site is at <http://www.stratos.com>. Register to attend the talk by contacting Gracie Downard at 375-2803 or at gracie.downard@pnl.gov.

CREHST summer camps for 5th-through-8th-grade

The Columbia River Exhibition of History, Science and Technology will hold summer camps during the week of July 28-Aug. 1 for students entering fifth and sixth grades, and during the week of Aug. 4-8 for students entering seventh and eighth grades. The theme for the summer camps will be the Lewis and Clark Corps of Discovery and will include scientific activities, creative crafts and artistic projects surrounding the following topics: ancestry of dogs, study of raptors, mapping and exploration skills, the nature of sound and Native American culture. The camp fee is \$40 for CREHST member families and \$55 for non-member families. For more information and to register, call CREHST at 943-9000. Participation is limited to 20 students per session. The camp will be held in Richland's Howard Amon Park near the museum. ♦



NEWS BRIEFS

PTB transfer approved for Darrin Faulk

Darrin Faulk, a Fluor Hanford environmental compliance officer assigned to the Waste Management Project, has been approved to receive personal time bank-transferred hours. Faulk's newborn son has a congenital disorder that required surgery at Children's Hospital in Seattle. The infant's recovery is expected to take several weeks. Fluor Project Hanford employees who would like to transfer PTB hours to Faulk can do so by completing a PTB/Vacation Transfer Request form (Site Form A-6002-807) and sending it to Greg Mitchell of Fluor Hanford Workforce Services and Project Support, H7-24. ♦

Features continued on next page.

Regular Features



SHOEMOBILE

300 Area

along fence east of Wisconsin Street

July 8 1-4 p.m. Sound Safety

200 East Area

northeast gravel parking lot of 2101-M

July 9 7 a.m.-12 p.m. Sound Safety

200 West Area

parking lot east of MO-281

July 9 1-4 p.m. Sound Safety



CLASSES

Refresher course for the electrical PE exam

A refresher course for the electrical P.E. exam begins July 14 at Washington State University Tri-Cities. The course meets weekly on Mondays from 6 to 9 p.m. through Sept. 29. The refresher course will prepare engineers for the next Washington State Electrical Professional Engineers exam in October. Enrollment is limited. Books for the course will be available at The Bookie on the WSU Tri-Cities campus. For more information, contact Karen Davis at 372-7293 or at kldavis@tricity.wsu.edu.

Skills Lab offers classes in July

The Skills Lab will offer the following half-day sessions from 7:30 to 11:30 a.m. in room 31 of the Volpentest HAMMER Training and Education Center Administration Building:

- **Painless Punctuation** — Tuesday, July 15.
- **Successful Business and Technical Writing** — Thursday, July 17. Suggested prerequisite: Painless Punctuation.
- **Goof-Proofing Your Grammar** — Tuesday, July 22.

- **Successful Spelling** — Thursday, July 24.

There is no charge for any of these sessions, but seats are filling rapidly, so reserve space now by calling Kathy Dechter at 376-3250.

Personal Protection Safety Measures offered

The Northwest Public Power Association is presenting "Personal Protection Safety Measures," a two-day class at the Volpentest HAMMER Training and Education Center July 29-30. This course will cover the physiology of electrical shock and treatment; the Occupational Safety and Health Administration's mandated electrical requirements; the role and use of NFPA 70E; and over-600-volt applications. The cost is \$1,145. To register, contact Wendy Carlson at (360) 254-0109 or visit www.nwppa.org. ♦

Employee Activities



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.

HERO BOARD POSITION OPEN — The HERO Board 400 Area representative position is vacant. If you would like to apply, and have your manager's consent, send an e-mail message to Phyllis Roha.

GET READY TO RUMBLE — Tri-City Raceway is offering discounted tickets to its racing event on Saturday, July 12. Adult tickets (normally \$11) are available to Fluor Hanford and Fluor Federal Services employees for \$7. The discounted ticket is good for July 12 only and a maximum of six tickets can be purchased per employee. Come join

HERO continued on next page.

Regular Features



**Employee
Activities**

HERO

continued

America's fastest-growing spectator sport, NASCAR, as the Northwest Dodge Dealers present the NASCAR Big 3 (Late Models, Street Stocks and Mini Stocks) at the fastest half-mile tri-oval west of the Mississippi. Racing begins at 7 p.m. The Tri-City Raceway is located between West Richland and Benton City on Highway 224 (Van Giesen St.). Tickets are on sale now; send your check (made out to HERO) to Alvin Keck (X4-06), Marta Caballero (S6-74) or Linda Meigs/Elizabeth Colbert (H3-12).

COLUMBIA VOYAGER DINNER CRUISE — Fluor Project Hanford team employees are invited to join us July 31 for a relaxing, three-hour dinner cruise down the Columbia River. The price is \$30 per person and includes the cruise and an all-you-can-eat dinner buffet featuring carved baron of beef, teriyaki chicken, desserts, non-alcoholic drinks, taxes and gratuities. A no-host bar is also available. Board at 6:30 p.m. at the dock behind the Red Lion Hotel in Richland. Slowly cruise to the Cable Bridge and return to the dock at 10 p.m. Seating is limited, so don't wait. Make your reservations now by sending a check or money order, made out to HERO, to Cheri McGee at N2-53.

UPCOMING TRIPS

• **Hood River Murder Mystery Dinner Train** — Aug. 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. We are filling a second bus, so hurry and send in your \$25 per-person deposit to secure your space. For more information, contact Linda Meigs (H3-12), Cheri McGee (N2-53) or call Marla of Carlson Wagonlit Travel at 783-4645.

• **Vacation of a lifetime, the French Riviera** — Oct. 6-15. The price is \$2,284 pp for twin, \$2,254 pp for triple and \$2,584 for single, which includes round-trip air fare from Pasco, \$120 cancellation insurance and \$85 in taxes and fees. Payment in full is due at signup. For those who have made a deposit, final payment is due July 23. Tour the French Riviera, Italian Riviera, Monaco, St. Tropez, Cannes, Grasse and Nice. 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. E-mail Nancie Simon at bearclanwa@aol.com or call 627-0657 for more information. ♦



VAN POOLS

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.

KENNEWICK

Vanpool No. 196 to 200E is looking for a driver/backup driver for an existing route starting from South Vancouver and 36th and picks up riders along Clearwater, W Hood, Edison and Canal and Highway 240. On most days duties include starting the van and picking up passengers and the primary driver. On some days you will be driving to 200E. Backup drivers are compensated with a reduction in the fare. Ben Franklin Transit driver training and approval is required. Call John Townley at 372-0223 or 735-2727. 6/30

PASCO

Vanpool No. 139 has two seats available, for 8x9s, from Pasco to 200E and 200W. Route runs from Road 100 to 200W with stops at the Federal Bldg. parking lot, 2101-M, WSCF, T Plant and other places in 200W. Don't drive...take a nap! Call **Bruce Hey** at 373-7197 for more details. 6/23

Vanpool Express to 2750-E needs several riders, 8x9s. Monthly rate as low as \$35 per month with maximum of 14 in the van. Leaves former Hanford bus lot (across from 2440 Stevens) at 6:25 a.m. and drops off at 2750-E only. Contact **Dave Hedengren** at 373-5094. 6/23

RICHLAND

A carpool from the Meadow Springs/Badger Canyon area goes to 200E, 8x9s, shared driving. For details, contact **Vic** at 373-1321. 6/30

Vanpool Express to 2750-E needs several riders, 8x9s. Monthly rate as low as \$35 per month with maximum of 14 in the van. Leaves former Hanford bus lot (across from 2440 Stevens) at 6:25 a.m. and drops off at 2750-E only. Contact **Dave Hedengren** at 373-5094. 6/30 ♦

Features continued on next page.

Regular Features



Discount admission to winery concert

Hanford employees receive a 15 percent discount to the Tingstad and Rumbel concert on Saturday, July 12, at 6 p.m. at the Hedges Cellars Red Mountain Winery, 53311 North Sunset Road in Benton City. Bring your own blankets, chairs, wine glasses and food. Tickets for Hanford employees over 21 cost \$25.50 (general admission is \$30), and are available from the winery or by calling 430-8395.

A photograph of a large firework exploding in the night sky, with many red and white streaks radiating from a central point.

*Have a
safe
and sane
4th of July!*