DOE Manager Brockman Addresses Beryllium and Other Safety Issues

Dave Brockman, manager of DOE’s Richland Operations Office, was a featured speaker during a voluntary safety meeting on May 17. Brockman briefed more than 2,000 Hanford Site employees, including CHPRC workers, about the dangers of beryllium and the efforts to improve beryllium protection at the Site.

The daylong event included presentations and speakers who addressed worker health and safety, beryllium and the Hanford Site Chronic Beryllium Disease Prevention Program. One of the presentations featured Tom Peterson, a former ironworker rigger at Hanford who has been diagnosed with chronic beryllium disease. Peterson discussed the debilitating effects of beryllium and urged employees to be more aware of beryllium contamination.

A video that shows the briefing from Brockman is available on the Safety, Health, Security and Quality Beryllium Information page at http://prc.rl.gov/rapidweb/OSIH/index.cfm?PageNum=151. ■

Beryllium  Do you have questions? Or want to learn more?

A comprehensive new web site is available for Hanford employees at http://www.hanford.gov/page.cfm/Beryllium. It includes:

- History of beryllium use at Hanford
- Facilities where beryllium is known or suspected to have been used
- Points-of-contact for beryllium questions and concerns
- Chronic Beryllium Disease Prevention Program (CBDPP)
- Sources and links to learn more about beryllium
- Link to Beryllium Awareness Group website
- Link to provide feedback, ask questions or share your suggestions.
TIS Reporting Changes for Exempts Begin in June

Having a certified Earned Value Management System (EVMS) is a requirement in CHPRC’s contract with DOE. During an EVMS certification review last June, an independent third party issued a Corrective Action calling for exempt employees to record all hours worked, including uncompensated time.

In response, CHPRC worked closely with the Mission Support Alliance to modify the Time Information System (TIS) to provide special coding to account for hours worked in excess of regular shifts and for partial days worked.

Beginning June 28, exempt CHPRC employees and incumbent subcontractor employees who use TIS will be able to:

- Accumulate up to 80 hours of manager-approved Comp Time Worked (CWP)
- Record up to 20 hours of manager-approved Comp Time Taken (CTP) in a week
- Record up to eight hours of negative Comp Time Taken (CTP) for an unplanned absence
- Record comp time, regardless of grade or overtime rules
- Record all casual hours worked as Uncompensated Time Worked (UTW)
- Track accumulated comp time balances in the upper right corner of their TIS records.

The partial day recording can be done in increments as small as one hour. Personal Time Bank (PTB) will continue to be recorded and taken in full-day increments.

Although managers must approve Comp Time Worked (CWP), employee requests will be supported as long as they meet company expectations. The time-reporting changes will give exempt employees flexibility when recording absences and hours worked. The changes will also give DOE a more accurate picture of hours required to complete work scope and help forecast future costs.

Contact your HR field representative at http://prc.rl.gov/rapidweb/HR/index.cfm?PageNum=1 with questions pertaining to your specific situation. Attend a Brown Bag Session to learn more.

DOE Honors CHPRC Subcontractor

In May, DOE recognized Cavanagh Services Group, Inc. as their 8(a)/Small Disadvantaged Business of the Year, an award presented to companies that exceed their contract requirements, provide excellent customer service and contribute to DOE’s mission accomplishments.

“We are very thankful to be honored,” said President Sue Rice, owner of the business. “The award is the result of each Cavanagh employee’s dedication and commitment to exceeding our customers’ expectations. I am so very proud of our team.”

Just over a year ago, the Utah-based business was chosen as one of CHPRC’s pre-selected subcontractors and awarded a five-year contract with a five-year option worth up to $50 million. In early 2009, an additional $7.5 million was awarded to support Recovery Act-funded waste packaging and shipment.

“The work has changed our company and let us expand into new areas,” said Rice. “We’ve increased our workforce by 80 percent, which is incredible for a small business. CH2M HILL was our first client and is our biggest client to date. We are fortunate.”

Sue Rice, president of Cavanagh Services Group, Inc., and Jeb Berg (far left), the Director of Operations, accept the award for DOE 8(a) Small Disadvantaged Business of the Year at the 11th annual DOE Small Business Conference and Expo in May.
CHPRC VPP Participants Make Headlines at VPPPA

Jack Griffith, a HAMTC safety representative, was recognized during the opening session of the VPPPA for his contributions as a member of the conference planning team. Griffith also gave a presentation at the conference that was titled “The Benefits of VPP.”

Chris Thursby, a safety specialist at CHPRC, was elected to one of two Region X VPPPA Director-at-Large positions. Thursby also gave a presentation that was titled “The ABCs of VPP.”

CHPRC principles mirrored in VPPPA keynote address

Bruce Wilkinson, a certified safety professional, delivered the keynote address at the conference. Though he is not associated with DOE or CHPRC, he made some key points in his presentation, "Choosing Your Attitude: Taking Personal Responsibility for Success At Work™," that mirrored the principles we embody at CHPRC.

- **Be Comfortable With Being Uncomfortable**
  Standing up for safety is sometimes difficult, but it is extraordinarily crucial to ensuring we all avoid injury. At CHPRC, this principle is carried out through our Stop Work policy.

- **Safety First**
  Understanding the supreme importance of safety and then integrating it into all aspects of work makes it certain that each task is executed safely. At CHPRC, we implement this principle through the Integrated Safety Management System.

  - **Target Zero: Each Decision, Each Moment, Each Day**

    As Wilkinson said, “…safety is not about saving yourself from something; it’s about saving yourself for something.” His words emphasize the safety behaviors and attitudes we put into practice at CHPRC.

    Wilkinson issued a challenge to his listeners, saying, “Companies that embrace VPP have 54% less injuries than non-VPP companies. How can you get involved at your company?”

    Again, his words are a reminder of the questions we need to ask ourselves every day. How can we help prevent injuries? How can we get involved in VPP?

More Awardees in May

During May, 36 employees were awarded 30 or more yards. Hans Showalter, a HAMTC representative, earned a touchdown (100 yards) for his questioning attitude and pollution prevention efforts.

Of all the employees who have earned yards in the Safe Zone, 22 have accumulated 80 or more yards. It's safe to say we can look for more touchdowns soon.

**Safe Zone Awards Go "Green"**

Help the environment while you stay safe. Use your Safe Zone yards for reusable lunch bags and water bottles that will help reduce your carbon footprint. Visit the Locker Room at [http://prc.rl.gov/rapidweb/SHSQ/index.cfm?pagenum=6](http://prc.rl.gov/rapidweb/SHSQ/index.cfm?pagenum=6) to find out just how much your yards are worth.
Barricades... Where Safety and Security Intersect

During the morning commute to the Hanford Site, as many as 4,000 vehicles pass through the barricades. Every barricade, especially during rush hour, is a place where safety and security intersect, requiring drivers to exercise caution and awareness.

**Safety Concerns:**

- Stops; always assume and prepare for stops. They can occur when:
  - Safety Patrol Officers (SPOs) cannot clearly see someone's badge
  - Badges require inspection, such as foreign national badges, badges with an expiration date or temporary badges
  - Drivers report an incident or ask a question
  - Traffic needs to cross lanes of travel, such as when vehicles move to an inspection area or are directed to turn around and exit the area

- Large side mirrors that can strike an SPO; please stay centered in the lane

- Racing into traffic after leaving the barricade, which can throw gravel and increase the chance of an accident or road rage

- Short lanyards that make it difficult to safely display badges; SPOs cannot see badges displayed below dashboard level or behind steering wheels

- Cell phones, which should not be used while driving; operating a moving motor vehicle while holding a wireless communications device is considered a traffic infraction in Washington State.

**Concerns...** If you have any concerns about safety or security or have suggestions for improvement, contact the on-duty shift commander at 373.3534 or the Hanford Patrol Operations Center at 373.3800.

**Learn more...** Drivers can learn more by viewing a Hanford Patrol video called “Safe and Secure Access: A Different Point of View.” View it online at [http://msc.rl.gov/rapidweb/sas/index.cfm?PageNum=64](http://msc.rl.gov/rapidweb/sas/index.cfm?PageNum=64) or obtain a DVD by contacting Gordy Denman (Hanford Patrol) at 373.2020 or Mission Support Alliance Security Awareness at 376.1820.

**Barricade Etiquette**

- Make sure everyone in your vehicle has a badge
- Approach the barricade slowly and follow speed limits
- Dim headlights and fog lights, if possible
- Enter the left lane for badge inspection when someone has a:
  - Black badge, having an expiration date
  - Temporary badge; the SPO will require a matching drivers license
  - Foreign national (red) badge
- Help the SPO inspect badges:
  - Face the SPO
  - Hold the badge by its edges; avoid covering it
  - Hold the badge in a vertical position above your dashboard and in front of the steering wheel
- Wait until the SPO clearly indicates you can proceed
- Remember that an SPO may have difficulty seeing a badge when air fresheners, parking permits, handicap permits, and other items are hanging near the rearview mirror.
Beat the Heat!

Heat Stress Program

Sunny summer weather is right around the corner, but it can bring extremely high temperatures that can cause heat stress if proper guidelines are not followed. There are two types of heat stress to be aware of: heat exhaustion and heat stroke.

**Heat exhaustion** — This occurs when our bodies struggle to shed excess heat from the environment or from working hard. Victims of heat exhaustion will be sweating and have symptoms such as headache, nausea, dizziness, weakness, irritability or confusion. Heat exhaustion can be treated successfully if it is treated promptly.

**Heat stroke** — A more serious condition, heat stroke occurs when our bodies are no longer able to regulate body temperature. Victims will have hot, dry skin with no signs of sweating and have symptoms including mental confusion, loss of consciousness, seizures or convulsions.

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**How Can Heat Stress be Prevented?**

**Get used to the heat.** The human body takes several days to adjust to working in hot conditions. When hot weather arrives, pace yourself for a few days.

**Wear appropriate clothing.** Make sure it is lightweight, light in color and loose-fitting.

**Stay hydrated.** Start drinking fluids **before** beginning an activity. Don’t try to “water up” by drinking large quantities of water. During hot activities, drink small amounts, such as a cup of cold water every 15-20 minutes. Sugared electrolyte drinks, such as Gatorade, and salt pills are not necessary for hydration.

**Avoid alcoholic and caffeinated drinks.** These types of drinks interfere with the body’s cooling mechanism.

**Take frequent rest breaks.** Shady areas or air-conditioned buildings are best.

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**Proper Work Planning is Critical**

Factors to consider:
- **Weather conditions** — Consider the temperature and humidity
- **Protective clothing** — Is it needed for radiation protection? If so, how many layers?
- **Time of day** — Can the work be performed during a cooler part of the day?
- **Duration of work** — Can work be broken into smaller tasks? Can multiple workers be used?
- **Industrial Hygienist involvement** — An industrial hygienist needs to review each project for potential heat stress.

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**Remember to use sunscreen.** Select an SPF of at least 15.
More Reasons to Consider Carpooling

Ridesharing or carpooling offers a lot of benefits besides saving money otherwise spent on fuel or parking, reducing vehicle wear-and-tear and lessening traffic congestion:

- **Carpooling saves energy—your own!** It takes sharp focus, quick reflexes and split-second decisions to be a driver.
- **Carpooling can be fun.** Socialize, read or take a nap.
- **Carpooling promotes a richer life.** Having a fixed time schedule helps you get the most from your workday and adds time for exercising and relaxing at home.
- **Carpooling reduces your carbon footprint.** If you are a solo commuter, adding two passengers will reduce your footprint by two-thirds. For example, according to Sightline Institute, if your car gets 21.5 miles per gallon, you could reduce your footprint from 1.1 lbs/mile CO₂ to .37 lbs/mile CO₂.

**Compare the costs:**

Ben Franklin Transit vanpoolers pay a monthly fee that covers the cost of the van payment, fuel, maintenance and insurance. The following example shows the average monthly costs for a rider in a 12-passenger van- or carpool versus the monthly cost for an solo driver-commuter:

<table>
<thead>
<tr>
<th>Schedule</th>
<th>12-Passenger BFT Van/Carpool; 70-mile roundtrip</th>
<th>Driver Only (AAA) 30-mile roundtrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five-day</td>
<td>$50.50</td>
<td>$92</td>
</tr>
<tr>
<td>Eight &quot;nines&quot;</td>
<td>$47.82</td>
<td>—</td>
</tr>
<tr>
<td>Four &quot;tens&quot;</td>
<td>$45.14</td>
<td>—</td>
</tr>
</tbody>
</table>

Here are two easy ways to set up a carpool:

- Ask your friends, family and neighbors to participate.
- Look online. Contact organizations like Ben Franklin Transit (BFT) at 943.5442 or http://www.bft.org.

**JUNE EMS CHALLENGE**

It’s time to lace up your walking shoes!

Congratulations to the winners of the May Bike to Work Challenge:

- Lisa Berthoud
- Mary Hartman
- David Kuehn
- Bruce Williams.

Submit your “green” effort to ^EMS so you too can be a winner.

**Answers for Some Common Concerns about Carpooling:**

**Q.** Are there any insurance or liability issues?

**A.** Personal general liability insurance usually covers passengers and most include carpool members. Check your policy or ask your agent. You may also qualify for a carpool discount.

**Q.** What if I have frequent meetings elsewhere during the day?

**A.** Often, you can use public transportation or ride with others who are attending the same meetings.

**Q.** What if I have a personal or work emergency that requires me to quickly get out to the Site or return to town?

**A.** True emergencies are rare, but coworkers are usually more than willing to help when they occur.
In March, we announced a new employee incentive program. The program offers all CHPRC employees and all full-time staff augmentation employees of our 11 pre-selected subcontractors the opportunity to benefit from a job well done.

The program, which will be annually reviewed and approved by DOE, is based on how well we perform. For 2010, our performance as a company will be tracked with 42 performance metrics. These metrics, and our performance as of April 2010, are shown in the charts below and on the next page.

It is important that you know how you contribute to our successes. As you can see, most of the chart’s performance column is green, which means we are on target.

However, yellow or a magnifying glass icon shows areas where we are still below target and where need to focus our attention. If we continue to work safely, stay focused and exceed customer performance expectations, we can change the yellow to green and achieve the maximum incentive.

To view fiscal year 2010 performance metrics criteria as well as a summary of our fiscal year-to-date performance and the projected payout, visit http://prc.rl.gov/rapidweb/HR/index.cfm?PageNum=165.

Thank you, everyone, for making our team a success.

CHPRC FY 2010 Performance Metrics (as of April 2010), continued on page 8
### CHPRC FY 2010 Performance Metrics (as of April 2010), continued from page 7

#### Maintain Environmental Excellence

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Notice of Violations (NOVs)</em></td>
<td>Regulatory inspections resulting in a Notice of Violation</td>
<td>1</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>TPA Milestones</td>
<td>Number of funded TPA enforceable milestones missed</td>
<td>1</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>*EMS Targets and Objectives</td>
<td>All project/functional organization objectives and targets on schedule to be met</td>
<td>≥ 90%</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>*Environmental Spills</td>
<td>Annual reportable environmental spills. Goal based on spills reportable to Wash. State Dept. of Ecology</td>
<td>≤ 2</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

#### Maintain Mission Progress

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plutonium Finishing Plant Decommission and Demolition (D&amp;D)</td>
<td>Building 234-5Z process and laboratory areas ready for demolition; remove gloveboxes</td>
<td>80</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ancillary buildings ready for demolition</td>
<td>≥2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>U-Plant/other D&amp;D</td>
<td>Canyon deck cleared</td>
<td>16,368 (of 29,760) sq.ft. completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U-Plant canyon ready for demolition</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete deactivation, decontamination, decommissioning and demolition (D4) of facilities</td>
<td>≥4</td>
<td></td>
<td>demo started</td>
</tr>
<tr>
<td>Outer Zone D&amp;D</td>
<td>Complete deactivation, decontamination, decommissioning and demolition (D4) of facilities</td>
<td>≥14</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RemEDIATE waste sites</td>
<td>≥12</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dispose of rail cars/locomotives</td>
<td>Initiate planning</td>
<td>not started</td>
<td></td>
</tr>
<tr>
<td>Mixed/Low-Level Waste Treatment</td>
<td>Waste treated for disposal</td>
<td>≥700</td>
<td>642.7</td>
<td></td>
</tr>
<tr>
<td>Transuranic (TRU) Program</td>
<td>Suspect TRU waste retrieved from storage</td>
<td>≥1000</td>
<td>271.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WIPP-certifiable TRU waste repackaged</td>
<td>≥350</td>
<td>229</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suspect remote-handled TRU waste retrieved from storage (indicated by waste records)</td>
<td>≥15</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Soil and Water Remediation</td>
<td>Operable Unit ZP-1 groundwater pump-and-treat system construction complete</td>
<td>Submit design</td>
<td>design submitted to DOE and EPA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100D Area groundwater pump-and-treat system construction complete</td>
<td>Complete 50% construction</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Install wells and boreholes along river and in Central Plateau</td>
<td>≥200</td>
<td>167</td>
<td></td>
</tr>
<tr>
<td>100K Area Remediation</td>
<td>Decommission old wells and boreholes</td>
<td>≥100</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete D4 of 100K Area facilities</td>
<td>≥10</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete remediation of 100K Area waste sites</td>
<td>≥8</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

#### Cost Performance Index (CPI)

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Performance Index (CPI)</td>
<td>Cost to Date (CTD) as reported in 9/20/2010 Monthly Performance Report</td>
<td>≥ 1.00</td>
<td>1.08</td>
<td></td>
</tr>
</tbody>
</table>

#### Schedule Performance Index (SPI)

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule Performance Index (SPI)</td>
<td>CTD as reported in 9/30/2010 Monthly Performance Report</td>
<td>≥ 0.90</td>
<td>0.97</td>
<td>complete</td>
</tr>
</tbody>
</table>

#### Waste to Waste Isolation Pilot Plant (WIPP)

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste to Waste Isolation Pilot Plant (WIPP)</td>
<td>Initiate shipment of waste to WIPP</td>
<td>Shipment initiated</td>
<td>complete</td>
<td></td>
</tr>
</tbody>
</table>

#### Environmental Restoration Disposal Facility (ERDF) Waste Shipments

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Restoration Disposal Facility (ERDF) Waste Shipments</td>
<td>ERDF readiness to serve</td>
<td>Demonstrate full cycle of operations to show capabilities</td>
<td>complete</td>
<td></td>
</tr>
</tbody>
</table>

#### Footprint Reduction

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footprint Reduction</td>
<td>Remediation of North Slope</td>
<td>Initiate remediation</td>
<td>on target</td>
<td></td>
</tr>
</tbody>
</table>

#### ISMS/EMS Verification

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISMS/EMS Verification</td>
<td>ISMS/EMS Phase II Verification</td>
<td>Satisfactorily implement at company level</td>
<td>satisfactory</td>
<td></td>
</tr>
</tbody>
</table>

#### Voluntary Protection Program (VPP)

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Performance Metric</th>
<th>FY 2010 Target</th>
<th>Trend</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Protection Program (VPP)</td>
<td>CHPRC VPP Star application</td>
<td>Submit VPP Star application</td>
<td>pending</td>
<td></td>
</tr>
</tbody>
</table>

**DONE**

**NOTE:**
- *Notice of Violations (NOVs)*
- TPA Milestones
- *EMS Targets and Objectives
- *Environmental Spills
- ISMS/EMS Verification
- Voluntary Protection Program (VPP)

**CHPRC FY 2010 Performance Metrics (as of April 2010), continued from page 7**
“Too much of a good thing” may apply to ice cream or all-night parties, but not to communication.

In fact, several times during the past months, we have seen that instead of having a problem with over-communicating, we have failed to communicate enough. Sometimes we’ve neglected to fully understand and share information about the hazards in our own work area; sometimes the work performed is creating the potential for hazards in adjacent areas. Whatever the reason, we need to strive to ensure that everyone has an understanding of potential hazards and knows how to respond if something should happen.

With each change to our work environment, we need to be diligent about asking questions. We need to know how these changes affect the work we are doing and planning as well as how they may affect a co-located work team.

As we move through the second quarter of the year, the number of work teams in the field continues to increase and the condition of our facilities are changing at an ever-increasing pace. With the infusion of ARRA funding and the increase in personnel, it is not a surprise that our work scope has gone up substantially.

Remember, we succeed together as a company. Nobody works in a bubble. What we do affects others. So, stay focused and ask questions. If something doesn’t look right, please speak with your leads, supervisors/managers and safety professionals. Each one of us is a critical piece of the safety puzzle. If you’re unsure, trust your gut; it’s #2 on Del Vecchio’s top ten.
Landscape and Workloads Change After Security Requirements Downgraded

Open space — it’s now the best way to describe the exterior environment at the Plutonium Finishing Plant Closure Project. With the high-security materials removed from the facility, guards, guns and checkpoints no longer are necessary, nor are guardhouses, defensive fighting positions and security equipment. The landscape shows little sign of the concrete block barricade known as the “Great Wall” — a nearly mile-long row of double Jersey barriers with a six-foot-wide base of gravel fill — that encircled the Plutonium Finishing Plant protected area.

“Removing the inspection stations and patrol has saved us about a third of the time we used to spend for each load,” said Ray Diaz, a transportation supervisor. “We’re still vigilant with our loads, but our workload has improved because we no longer have to stop for inspections.”

CHPRC and Mission Support Alliance embraced EMS principles and have repurposed the people and materials, even the Great Wall itself. Hanford Patrol is using the guard stations, security monitors and much of the equipment elsewhere on the site. The Waste and Fuels Project is using approximately a mile of Jersey barriers as well as the gravel and fill rock.

(right, from top to bottom): Workers remove a section of Jersey barrier, part of a six-foot-wide barricade of concrete blocks and gravel fill that was once part of the heightened security at the Plutonium Finishing Plant Complex facilities. The downgrade in security at the facility included removing security monitors and equipment components from inspection stations and even guard stations themselves. Most of the materials and equipment are already in use at other areas on the site. For example, Jersey barriers are already in use at the Waste and Fuels Management Project site (below).
Equipment Installation Continues at 100-DX Project

The construction project for the 100-DX Groundwater Treatment Facility, the next generation of pump-and-treat systems, continues to show rapid progress. When it is completed, the 100-DX pump-and-treat system is expected to treat 3.6 billion gallons of groundwater during its lifetime at a cost savings of $20 million. The project is an example of teamwork by the Soil and Groundwater Remediation and Engineering, Projects and Construction projects.

Workers began constructing the facility, which is located near the D reactors, in July 2009. Since then, they have completed the 11,500-square-foot process building and built two transfer buildings. For the past few months, workers have been installing equipment for an innovative groundwater treatment system and laying approximately 45 miles of piping between the main facility and a network of 53 wells.

The $20 million project, which is funded by the Recovery Act, will help DOE-RL meet its commitment to contain chromium contamination and prevent it from reaching the Columbia River by 2012.

Chromium Contamination in the Groundwater

How did it get there in the first place?
The contamination dates to the period of time when the D reactors were in operation. The reactors were cooled with water pumped from the Columbia River. Before the water was sent to the reactors, it was treated with sodium dichromate, a corrosion inhibitor.Leaks in the dichromate transfer systems and piping as well as periodic discharges of cooling water around the reactors contaminated the soil and groundwater with hexavalent chromium.

How will the hexavalent chromium be removed?
The 100-DX pump-and-treat system will use an innovative resin filter system (described in the April 2010 issue of On the Plateau) to remove the contaminant from the groundwater.
Six Months of D&D at ALE Shows Significant Results

Since January, Decommissioning and Demolition (D&D) crews have removed more than a dozen facilities, nearly 30,000 square feet, from the 120-square-mile Fitzner/Eberhardt Arid Lands Ecology (ALE) Reserve.

The effort began at the lower reserve. Workers removed eight structures and their foundations, then contoured the sites to match the surroundings, leaving little sign that anything existed. In May, the effort moved to the upper reserve at the top of Rattlesnake Mountain. Workers removed five more structures in just a few days and began demolishing the largest of the ALE facilities, the 6652-C Space Science Laboratory. The building, constructed in the 1950s as part of the Nike radar control center, was also the barracks for the members of the 83rd Battalion Battery C.

Besides the D&D effort, CHPRC is working closely with Pacific Northwest National Laboratory to identify and evaluate culturally significant items. There are hundreds of debris sites, which range in size and contents, on the reserve.

Cleanup at the ALE Reserve, a $10.2 million Recovery Act project, is an important part of DOE’s effort to shrink the Hanford Site cleanup footprint by removing facilities from the outermost areas of the Hanford Site.

The ALE Reserve is an area of native shrub steppe vegetation located on the eastern flank of Rattlesnake Mountain. In the early 1940s, the reserve was a buffer zone for anti-aircraft defense missions for the U.S. Army and closed for public access. The reserve area has historical significance for the Tribal Nations.

Going, going, and nearly all gone …

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ISMS and VPP Principles Improve Safety at Canister Storage Building

Thanks to a concerned worker with a questioning attitude, a newly implemented fall protection system is in place at the Canister Storage Building. The system will protect employees who work on the multi-canister over-pack handling machine (MHM).

The MHM looks similar to a bridge crane and trolley, except that employees access the trolley to operate or maintain the MHM. There is a walkway on top of the bridge so workers can access the trolley's "turret," which houses a control console and mechanical/electrical equipment. The turret moves back and forth on the bridge, which itself can move the length of the building.

Before the new system was installed, fall protection was provided by a handrail on one side of the bridge and, when the MHM was in a normal parked position, by the turret on the other. But workers had no fall protection if the turret was moved, such as during preventative maintenance or an electrical outage.

After Kriss Weeks, the HAMTC safety representative for the Container Storage Building, learned of the safety concern, she issued a stop-work order. Then the effort to identify a solution began. A team of workers, managers and engineers — including Paul Garello, the Container Storage Building operations manager; Charles Givens, a safety engineer; Don Moody, a structural engineer; Dave Johnson, a fall protection technical authority; the concerned employee and Weeks — participated in weekly status meetings and reviewed proposals. The final solution was a harness and cable system that secures workers to the MHM, no matter what position it is in.

"This experience at CSB shows how a questioning attitude can result in a safer workplace for everyone."

The concerned worker saw an opportunity to increase safety and suggested a good way to correct the problem," said Weeks. "This experience at CSB shows how a questioning attitude can result in a safer workplace for everyone."

The team and workers at the Canister Storage Building showed how ISMS, VPP and even stop-work principles can be put to use to improve safety on the job.
Contract Awarded to Build 200 West Pump-and-Treat System

CHPRC awarded a subcontract to Seattle-based Skanska USA Building Inc., worth up to $50 million, to construct the 200 West Groundwater Treatment System, which will be the largest groundwater treatment system at the Hanford Site. The system is a key part of DOE’s strategy to treat groundwater contamination and protect the Columbia River.

“This treatment system will prevent contaminated groundwater in the center of the Hanford Site from spreading to the Columbia River and eventually clean up the groundwater to meet drinking water standards,” said Briant Charboneau, the Soil and Groundwater Project Director at DOE-RL.

The new system, designed by CH2M HILL’s engineers, will include two primary treatment facilities with a combined footprint of more than 52,000 square feet. The system will be capable of treating approximately 2,500 gallons per minute, using a variety of technologies to remove nitrates and metals, as well as radioactive and organic contaminants: resin will be used to remove radionuclides, an air stripper will remove volatile organic compounds and a bioreactor will remove nitrates. During its lifetime, the new system is expected to treat 25 billion gallons of groundwater and extract and treat up to 110,000 pounds of carbon tetrachloride.

“The construction will involve first-of-its-kind technical challenges.”

Workers move fill dirt at the future site of the 200 West Groundwater Treatment Facility.

Project Designed to Earn “Green Building” Certification

CHPRC is pursuing the U.S. Green Building Council’s Leadership for Energy and Environmental Design (LEED) certification for the new 200 West Groundwater Treatment Project. Green building strategies include reducing indoor and outdoor water use, utilizing building materials with recycled content and using low-emissions materials and lighting controls to improve indoor environmental quality. Once certified, the project’s main process building will be the first and only LEED Gold facility on the Hanford Site.

“Skanska has a successful history in the construction of LEED facilities,” said Dorr.
Quick Actions by Workers
Snuff Out Brush Fire

Two workers recently had the opportunity to take their pre-job guidance and put it into action.

On Friday, May 14, Mark Heberlein was driving his rig from the 100K Area to the Environmental Restoration Disposal Facility when he spotted a small puff of smoke in the desert between 100K and the B/C Cutoff road.

Heberlein immediately stopped and called 373.0911, the Hanford Patrol Operations Center, who notified the 100 Area Fire Department. Then Heberlein called his supervisor, Denis Gegg, who drove to the access road to guide fire department personnel to the scene. The fire department arrived soon after and were able to quickly extinguish the fire.

“Because of our pre-job guidance, we were well prepared and knew what we needed to do,” said Heberlein. “An event like this reinforces the importance of pre-job routines. They prepare us for potential hazards.”

Heberlein and Gegg’s safety-focused attention prevented a potentially hazardous situation. Thanks to their quick actions, an early-season brush fire was unable to take hold and spread.

CHPRC extends heartfelt thanks to these two attentive construction workers and to all those who make a practice of watching out for everyone on the Hanford Site.

Editor’s Note: Each month, On the Plateau will feature a CHPRC Hero, someone in an unusual or significant challenge at home or at work. If you know someone worthy of recognition, contact CHPRC Communications at chprc@rl.gov.
### June Event

11 Hanford Day Off

11-12 Columbia River Relay for Life (American Cancer Society); 3520 S. Southridge Blvd. from 6 pm Friday to noon Saturday. Learn more at [http://www.relayforlife.org/columbiariverwa](http://www.relayforlife.org/columbiariverwa).

14 "Quit It" 10-week Tobacco Cessation Support Class; AMH Clinic (1979 Snyder). Classes held Mondays 4-5 pm (except July 5); registration is required. To learn more or register, contact Shannon Haselhuhn at Shannon_l_haselhuhn@rl.gov. Space is limited.


25 Hanford Day Off

### July Event

4 Independence Day

9 Hanford Day Off

14-16 Project Management Professional (PMP) certification prep class, offered by Columbia River Basin Chapter PMI; Hampton Inn, Richland. $900 for members; $950 for non-members. Contact Steve Norton, PMP, at vp-education@crb-pmi.org.

23 Hanford Day Off

23-25 Tri-City Water Follies Hydroplane Racing; Columbia Park, Kennewick.

### August Event

6 Hanford Day Off

6 ARC of Tri-Cities Partners-N Pals Horseback Riding Day; Richland Riders Club. Volunteers needed. Contact Mike Jennings at 372.1502 or mike_j_jennings@rl.gov or visit [http://www.arcoftricities.com/Services/ChildrenYouth/partnersnpals.html](http://www.arcoftricities.com/Services/ChildrenYouth/partnersnpals.html).

8 Show and Shine for Hunger; Columbia Park. To volunteer, participate or learn more, visit [www.showandshineforhunger.com](http://www.showandshineforhunger.com).

10 First meeting Columbia Chapter Radiochemistry Society; Anthony’s Restaurants, Richland. Dinner-6 pm; $10/person. Contact Emily Rostel at Emily_C_Rostel@rl.gov, Larry Burchfield at lab@radiochemistry.org or visit [http://www.radiochemistry.org/about.shtml](http://www.radiochemistry.org/about.shtml) after July 1.

20 Hanford Day Off
Get Ready for Partners N Pals

The annual ARC of Tri-Cities Partners N Pals Horseback Riding Day is coming soon. Each year, more than 130 young people with special needs — ages 7 through 21 — enjoy horseback riding, face painting, clowns and a petting zoo. This year, unlike previous years, their families are also welcome to participate. CH2M HILL is the main sponsor for the event, which will be held Aug. 6 at the Richland Riders Club on Van Giesen Road.

Volunteers are needed for the evening before to help with preparations and on the day of the event, from 7:30 a.m. to 3:30 p.m., to help with everything from event activities, to guiding attendees and setting up the campsite. Last year, more than 250 people volunteered. If you want to help, contact Mike Jennings at 372.1502 or mike.j.jennings@rl.gov. To learn more, visit http://www.arcoftricities.com/Services/ChildrenYouth/partnersnpals.html.

"Stretch and Flex" Challenge Update

Workers at T Plant were among the first-round winners of the Stretch and Flex Challenge. The challenge, announced in February, awards a healthy lunch to facilities or projects that show an increase in participation. At the T Plant, workers began the challenge with an average of 15 attendees per day. By May, the average had doubled.

According to Frank Farinola, who works in the T Plant health and safety organization, “People are better prepared for adverse or unexpected conditions when they are more limber and flexible. I am a firm believer in the Stretch and Flex program.”

It’s never too late to join the challenge. The second round began May 15, but won’t end until Aug. 8. To learn more, talk with your point-of-contact or contact Brenda Kenton, the Stretch and Flex Challenge coordinator, at 376.5750.
Annual Show and Shine for Hunger

The annual Show and Shine for Hunger is ready to take another bite out of hunger in the Mid-Columbia. The event attracts car, truck and motorcycle enthusiasts from the entire Pacific Northwest and gives 100 percent of its proceeds to the Tri-Cities Food Bank. Last year was just the second year of the event, but more than $20,000 was raised. This year, proceeds are expected to exceed $40,000.

“The cash donation... allows us to buy three dollars worth of food for every dollar.” said John Neill, the director of the Tri-Cities Food Bank. “We have no overhead costs because our food bank is 100 percent volunteer-operated, so all of the money we receive can be used to buy food for people in the local community.”

Several CHPRC employees support the event every year. According to Terry Hunter, a Plutonium Finishing Plant work control manager, “It is enlightening to see how giving everyone is.” Kathy Robinson, an employee relations manager, agreed with Hunter and said, “Show and Shine is a very worthwhile community endeavor.”

Show and Shine will be held at Columbia Park on August 8. To learn more or get involved, contact Chuck Wolfe at 373.5735 or visit http://www.showandshineforhunger.com.

10-Weeks to "Quit It"; New Session Begins In June

At AdvanceMed Hanford (AMH), we know many Hanford workers are still using tobacco and looking for a way to quit. We understand the hold that nicotine addiction can have, and know that quitting tobacco is much easier said than done. Quitting is a process that sometimes ends in failure, but with each attempt, users end up closer to being tobacco free.

The AMH “Quit It” tobacco cessation program uses the most up-to-date education and clinical guidelines to provide the highest quality of support and give you the best possible chance at living a tobacco-free life. The U.S. Department of Health and Human Services suggests that the combination of education, support, and the proper pharmacotherapy (nicotine replacement therapy) gives tobacco users the best chance of success. Based on this knowledge, the “Quit It” program provides one-on-one coaching, weekly support groups and appropriate nicotine replacement therapy that is free for participants who are actively involved in the program.

The 10-week session begins June 14 and extends through Aug. 16. Weekly classes will be held Monday afternoons at AMH — 1979 Snyder, Room 136 — from 4:00 to 5:00 p.m. except on the July 5 holiday. Participants must make a one-on-one appointment with Shannon Haselhuhn before the first class and plan to attend at least eight of the classes.

To register and set up your appointment, please contact Shannon Haselhuhn, at 376.3939 or Shannon_L_Haselhuhn@rl.gov. Participants must obtain their manager’s approval.

A 40-person CHPRC team (some members shown below) participated in the six-mile March for Babies walk on April 27. The team raised $9,500 to support March of Dimes, which raises support and awareness for infant health research and provides resources to mothers and families.
Transition to Document Management and Control System Begins

The transition to the new Document Management Control System (DMCS) began June 1, when a Lockheed Martin team replaced the Hanford Document Control System and the Engineering Drawing Management System with the new system. DMCS was designed to replace and consolidate existing document and engineering drawing management systems.

“DMCS will provide a best-in-class solution for Hanford engineering and document management communities,” said Scott Spencer, the CHPRC central engineering lead.

The new system will take full advantage of information technology advances, like server virtualization, and adapt to DOE’s evolving mission, while reducing the overall application systems portfolio. Other enhanced capabilities include:

- AutoCAD integration
- Electronic workflows
- Electronic signatures
- Managed document change process
- Controlled distribution
- Full text indexing
- Support for all electronic document types
- Access permission controls
- Full system audit logs
- Feed of approved documents to Integrated Document Management System as the site’s electronic records system.

DMCS will replace a variety of systems and processes that were developed over a 10- to 15-year period to support the overall document-configuration management functions. As a group, they suffer from technology lag, changing business rules and practices and do not necessarily support today’s best business practices or employ the most efficient software and database components.

The DMCS project is sponsored by CHPRC, Mission Support Alliance and Lockheed Martin functional and technical support groups.

"DMCS will provide a best-in-class solution for Hanford engineering and document management..."
Congratulations, Joyce!

Joyce Etheridge, a certified public accountant (CPA) and CHPRC Director of Internal Audit, was elected to a three-year term on the Board of Directors of the Washington Society of Certified Public Accountants. Etheridge has served as past president and treasurer for the local Central Chapter of the Washington Society of CPAs.

CHPRC Team Competes in 2010 Bloomsday Race

The 2010 Bloomsday Road Race and Corporate Cup is all over except for the sore muscles. The CHPRC team finished in seventh place out of 287 corporate teams.

“We did not successfully defend the Large Corporation Division championship, but I’m sure we’ll be back in the saddle next year,” said Jeff Huth, a CHPRC engineer and member of the team.

Vanpool Openings

One opening available — Vanpool 310 on 8x9 schedule
Pickup/drop-offs: Columbia Basin Racquet Club parking lot, Richland
Destination: Plutonium Finishing Plant Complex
Contact: Robert Jones at 308.4696 or Adam Gaul at 373.0487.

To advertise a vanpool opening, send the following information to CHPRC Communications at chprcc@rl.gov:
- Van number and schedule
- Departure time(s) and location(s)
- Destination(s)
- Contact name/e-mail/phone number(s)

Work with other interested employees to establish schedules and locations. For more information, contact Ben Franklin Transit at 943.5442 or visit http://www.bft.org/vanpool.html.