CH2M HILL Plateau Remediation Company (CHPRC) is responsible for the environmental cleanup of Hanford’s Central Plateau. CHPRC is committed to safely and sustainably protecting the environment and the public while meeting the goals of cleanup — demolishing facilities, cleaning up waste sites, treating contaminated groundwater and managing legacy waste and fuels to eliminate risks to the Columbia River. CHPRC’s environmental performance is managed, monitored and improved through its Environmental Management System (EMS). The system outlines CHPRC’s commitment to environmental stewardship and fosters the Target Zero safety culture by seeking to reduce environmental impacts of company operations. In this issue of On the Plateau, find out how CHPRC projects are not only achieving cleanup of the Central Plateau but also finding innovative ways to reduce environmental impacts and increase efficiencies while getting the work done.
Projects honored for sustainability efforts

Protecting the environment is not only part of the CHPRC mission; it is also an objective for every CHPRC project across the Hanford Site. Four CHPRC projects were recently recognized by the U.S. Department of Energy (DOE) Environmental Management (EM) Environmental Sustainability (E-Star) Awards program. The program recognizes excellence in pollution prevention and environmental stewardship.

EM Best-in-Class Winners

Upgrades to the SAM 940 survey technology

Health physicists from the Soil and Groundwater Remediation Project (SGRP) worked with Berkeley Nucleonics Corporation to modify a survey instrument, the SAM 940 isotope identifier. The equipment is used to survey waste sites for radiological contamination. The upgrades streamlined operations and reduced costs by eliminating multiple visits to sites (which also reduces environmental impacts). The equipment more efficiently detects radiological contamination and reports data for determining if a site is clear of contamination. Previously, after excavation, remediation crews demobilized from the site while sampling was performed; crews had to return if further contamination was identified to resume remediation. So far at the 10 waste sites where the SAM 940 has been deployed, there have been zero returns for further radiological remediation.

MASF modifications save millions of gallons of water usage

Last year, an EMS target was established to reduce the amount of water discharged from the Maintenance and Storage Facility (MASF) process sewer systems. MASF is where the Decommissioning and Demolition Project (D&D) is testing technologies and techniques for retrieving contaminated sludge from the K West Basin in the 100K Area. Engineers determined modifications to a valve system to the MASF air compressor, along with general maintenance and repair, could conserve water without replacing the existing unit. Modifications to the system were completed in April 2009. Immediately, the discharge flow from the compressor was reduced from an average of 8.3 gallons per minute (gpm) to less than 2.7 gpm, as documented by the monthly discharge monitoring reports. With this modification, the MASF team has conserved over 3 million gallons of water a year and subsequently reduced energy consumption by reducing the amount of water that had to be pumped to MASF.
EM Honorable Mentions

Pump-and-treat systems go wireless

Wireless communications towers were installed at several extraction wells to communicate flow rates, water levels and other information wirelessly to a groundwater treatment facility. The setup eliminates the need to string signal cables across highly sensitive or historic areas. The wireless technology is being incorporated into the designs of other groundwater treatment systems at the site.

Super dump trucks reduce disposal costs

The use of super dump trucks is reducing worker risks and costs associated with disposing of contaminated soil removed from waste sites. In late 2009, 12 new super dump trucks were procured and deployed as a trial. The new super dump trucks haul more material than roll-on/roll-off containers and allow for direct-dumping into the Environmental Restoration Disposal Facility (ERDF). Members of the SGRP and Waste and Fuels Management Project were recognized by the Eastern Washington Chapter of the Academy of Certified Hazardous Materials Management for the Excellence in Hazardous Materials Management award.

Aerial survey reduces impacts in waste site remediation

The use of aerial surveys at the BC Control Area received the “Manager’s Award for Exemplary Service” from the DOE Office of River Protection. Aerial technology was used to characterize 13 square miles of the waste site, reduce environmental impacts, support targeted remediation and accelerate schedule by eliminating the need to have additional crews walk the area with instrumentation. This aerial approach saved $700,000 and six months of schedule time when compared to ground-based methods.

Reusing equipment reduces costs

At the Plutonium Finishing Plant, crews are not only trying to clean out and complete demolition preparations for one of the Hanford Site’s most contaminated facilities, they are also seeking ways to return unused and contaminant-free items to the vendor or redeploy them to others on the Hanford Site. Last year, when the last of the special nuclear material was removed and the project performed an unprecedented downgrade in security, miles of security barriers were removed from their long-standing location surrounding the complex. As part of the effort, more than 700 concrete blocks and associated gravel fill were relocated and used to upgrade security elsewhere onsite. The work reduced the impacts and costs associated with procuring and receiving new blocks onsite.
The most important advice I can offer a person faced with potential job loss is to think about your next step now. The more up front and prepared you can be, the better you will do — whatever your choices. Facing potential job loss is hard on people. You keep hoping things will be okay. Sometimes they just aren’t. I know. I’ve been through it three times in my life.

At WorkSource, we understand, and we’re here to help. Our doors are open daily. You can find resources on our website. We are willing to adjust job hunter workshop numbers and times in the future to meet demand. When you come to our front desk, a guest resource specialist will greet you. If it’s your first time, you will receive a new visitor packet and be directed to someone who will begin working with you and introduce you to our services and resources.

So how can WorkSource help you now?

We can offer you help to:

• Update your resumé with current information and a more professional appearance.

• Brush up on your computer skills so you are more marketable.

• Determine the kinds of jobs that match your skill set so you have more choices.

• Fine tune your job skills to prepare you for a new or different position.

WorkSource and your company are committed to providing you with tools and resources to support you as you prepare for the future and the workforce restructuring transition. Try not to be discouraged. Take advantage of company resources as well as resources available in your local community and on the web.

About WorkSource

WorkSource Columbia Basin is located at:
815 N. Kellogg Street
Kennewick, WA 99336
Phone: (509)734-5900
http://www.wa.gov/esd/coreservicesseeker.htm

Hours:
8:00 a.m. – 5:00 p.m. daily
(Thursday until 7:00 p.m.)

Upcoming Events:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>May 16</td>
<td>Self-Select Program window opens for employees with HEWT benefits.</td>
</tr>
<tr>
<td>June 6</td>
<td>Self-Select Program window closes.</td>
</tr>
<tr>
<td>June 13</td>
<td>CHPRC announces number of reductions needed.</td>
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<tr>
<td>August 1</td>
<td>Worker Adjustment &amp; Retraining Notifications (WARN) are issued.</td>
</tr>
<tr>
<td>September 19</td>
<td>Involuntary Reduction of Force (IROF) notifications are issued.</td>
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For more information about workforce restructuring, visit http://prc.rl.gov/rapidweb/HR/index.cfm?PageNum=171.
Make Earth Day every day!

At home and on the job, you, too, can be a leader in CHPRC’s effort to reduce impacts to individuals and the environment.

On the Job

When planning and executing work, remember that the choices you make in how you do work, the equipment you use, the supplies you order, what you discard — it all makes a difference. Join the monthly EMS challenges and review your project’s EMS targets and objectives to find out what you can do to help. Targets and objectives are available on the intranet at http://prc.rl.gov/rapidweb/EMS/index.cfm?PageNum=9.

The Green Team

The CHPRC Green Team is committed to bringing you the latest in green practices and opportunities. You can find out more about green initiatives at the monthly President’s Zero Accident Committee meetings, Safety Tailgates, Thinking Target Zeros and online at http://prc.rl.gov/rapidweb/EMS/index.cfm?PageNum=29.

Off The Clock

Outside of the office, there are opportunities all around town. Check out the Mid-Columbia Earth Month web site to find out about environmental stewardship, education and outreach opportunities: http://earthmonthmc.org/.

Bioproduct of the month

This month, the Green Team focus is on environmentally friendly plotter paper. You can find it under Paper Office Products and research other bioproducts at the Green Catalogue available at http://prc.rl.gov/rapidweb/EMS/index.cfm?PageNum=30.
Pollution Prevention Heroes

Here is a snapshot of innovative ways CHPRC’s projects and employees identified ways to increase environmental protection and reduce their carbon footprint. If you or someone you know has made a difference in pollution prevention, send accomplishments to EMS.

• The 100K Soil Remediation group staged a 6,500-pound rail out of the way for hazard analysis and radiological survey then recycled it rather than transport it to ERDF. The practice saved space in ERDF and $57.00 per ton in transportation fees.

• Rather than make and route hard copies of data packages, the Sample and Data Management team began transmitting them electronically through the Integrated Document Management System. In August, the group processed 2,337 samples in 591 data packages with each package averaging 30 pages. That’s more than 17,000 pages or about 35 reams of paper saved.

• Following a review of project chemical material listings, an altered less toxic solvent was identified for refurbishing an area beneath the acid and caustic material storage tanks at the Effluent Treatment Facility (ETF) process area. The substitute solvent reduced the potential for exposure to personnel. As an added bonus, the less toxic waste material may be appropriately managed by the Department of Ecology-approved towel recycling service contracted through the Centralized Consolidated Recycling Center.

• Building 2701ZE at PFP was scheduled for demolition. It was powered by a backup diesel generator fixed to a concrete pad and was found to be of use to the Mission Support Alliance (MSA), resulting in a cost avoidance to the Hanford Site in excess of $50,000.

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• Rather than disposition as waste several 50-pound bags of floor absorbent, the Chemical Management Group recycled the floor absorbent by transferring it for use at MSA.

• When designing four pre-engineered metal building shells for the EPC/SGRP Complex outside the 200 East Area, “green” practices were employed: a cool environmental paint color to reduce/eliminate “heat islands;” greater-than-30-percent wall/roof insulation; additional gypsum board exterior sheathing under metal wall/roof panels to minimize air/pest infiltration; building north-south orientation; high-traffic doors in lunchrooms to reduce heat loss; and sectional doors of high thermal performing style/material.

• Items at a lay down area south of PFP and adjacent to a SGRP 90-day storage pad were evaluated for potential reuse, recycling or disposition as waste. Some items were identified for new or continued use rather than disposal. For example a Soil Vapor Extraction vacuum pump system helped CHPRC avoid about $25,000 in future Deep Vadose Zone Treatability Test Project costs.

• A Work Site Assessment of sample equipment cleaning operations and waste management at the Waste Sampling and Characterization Facility resulted in the elimination of a hexane bath hazardous waste stream, a two-thirds reduction in the volume of a nitric acid bath waste stream and the elimination of a Resource Conservation and Recovery Act of 1976 (RCRA) satellite accumulation area. The changes saved over $98,000.

• A package of Dearcide 735, which would typically have been designated as an ignitable Dangerous Waste, was found to be appropriate for use in water treatment preparation at the ETF cooling tower. It was the sole ignitable container in the ETF facility and would have required the Annual Ignitable/Reactive Waste Inspection by the Fire Marshal.

CHPRC employees attend bi-weekly Environmental Compliance Officer meetings to discuss ways to improve environmental expertise and develop relations to further facilitate environmental compliance actions across the projects. The team includes 22 Environmental Compliance Officers representing CHPRC’s projects and organizations.
Events
Vehicle “crAsh” Demonstration (VAD)
10 am & 2 pm & 5:30 pm
Bicycle Rodeo
3:30 pm

Classes
EXPO 2011 is offering two free classes this year. Contact Pam Newell at 376-9604 to register today!

Personal Safety & Self Defense
May 17-18 12-1 pm
This one hour seminar will be presented by a 4th degree black belt and cover the basic concepts of personal safety and self-defense.

Safe Driving
May 17-18, 3-5 pm
Hanford Patrol presents new and experienced drivers with information to improve their driving awareness.

The first chapter of the Hanford Story video collection is available online at www.youtube.com/hanfordsite. The video shows the site’s history, today’s cleanup activities and a glimpse into the possibilities of future uses of the 586-square-mile site in Washington State. Watch and see how CH2M HILL is helping DOE clean up and stabilize nuclear reactors and plutonium processing facilities and stop contaminated groundwater from reaching the Columbia River.

Vanpool openings
Van #239 - Pickup at Richland Y Ben Franklin Transit Park and Ride to 7-11 on Duportail and Wright, to Stevens Center out to 200 East Area. 2750 to MO-414 to B Plant to 2025E. Call or e-mail Bill Schneider 373-2992 or Tim Heidcamp 373-9191.

Find out about Mid-Columbia Earth Month opportunities at http://www.earthmonthmc.org/