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# C<sup>the</sup> Current

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Please submit story ideas or comments to  
^WCH Communications.

The editor reserves the right to edit any  
submitted articles for length and clarity.

## **Special Edition - An Overview of 2008**

**Editor's Note:** Periodically, we will focus a special edition of the Current on a particular issue or an individual group. The focus of this special edition is a brief overview of the last year's accomplishments.

## **Field Remediation Hits “Pay Dirt” in 2008**

Field Remediation (FR) is responsible for cleaning up burial grounds and waste sites along the river corridor. Despite numerous challenges and obstacles, FR and its team of subcontractors completed a very successful year in 2008.

FR efficiencies increased the tonnage of contaminated material and debris removed from along the river by 42 percent over volumes in 2007. Although the impressive productivity has pleased FR Director Tom Foster, he considers the team's safety performance even more rewarding.



*From sunrise to sunset, river corridor crews retrieved nearly 700,000 tons of contaminated soil and building debris away from the river to the Environmental Restoration Disposal Facility.*

## Protecting the Columbia River

## A Note from the Editor

This year Washington Closure Hanford, ESHI and subcontractors have worked very hard and achieved a myriad of significant milestones and project objectives. In this edition, we touch on just a few of the many accomplishments that have been seen across the project.

While unable to highlight each and every event or department, it's important to note that the contribution of every worker is noticed and appreciated. It takes a team effort to reach the goals set for WCH by our client, DOE, and as we move into the coming year we look forward to focusing on many of the objectives, as they are met, in upcoming issues of the Current.

Congratulations on a year of noteworthy achievements across the River Corridor Closure Project.

Editor: Tari Birch

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### Field Remediation continued

"The work in the field poses many risks to our workers who face numerous hazardous materials in an industrial work atmosphere," explained Foster. "I couldn't be more proud of our team's safety performance."

The risks and hazards in FR's waste sites were often anticipated, but workers still had to plan and train for the unexpected. The lack of documentation on what was disposed in waste sites has presented numerous challenges including:

- Retrieving 31 pieces of highly radioactive spent nuclear fuel
- Disarming unexploded ordnance
- Responding safely to a flash fire from pyrophoric contaminants
- Neutralizing pressurized cylinders with hazardous chemicals
- Processing unknown bottled liquids and lab waste.

Amongst FR's accomplishments, the D Area increased productivity by the end of the year and averaged shipping 120 canisters per day to the Environmental Restoration Disposal Facility (ERDF). TPA milestones were met for numerous sites including F Area, 618-7 and 618-1. Work was started at the H Area early and remarkable efficiencies were achieved by year-end. A non-intrusive sampling

plan was delivered to DOE for the hazardous 618-10 & 11 Burial Grounds. FR teamed with Engineering and Waste Operations to develop a barrier to allow more efficient loading and shipment of radioactive waste containers.

"I couldn't be more proud of our team's safety performance."

*Tom Foster, Field Remediation Director*

Additionally, several technologies have been adapted to improve efficiency and reduce worker exposure to radiation. Teams have field tested and deployed the CRATER, an instrument mounted on excavators that detects spent nuclear fuel. The iSolo is a process-improvement instrument to enhance real-time sampling for radon and more timely decisions in the field.

Overall, FR has experienced a very successful year and looks forward to continuing making progress along the river corridor.

## ERDF Accomplishments in 2008

The last year was about fine-tuning operations at ERDF with process improvements and facility and equipment upgrades designed to handle anticipated future volumes of waste. Staff disposed of more than 700,000 tons of waste material



A worker at the 618-7 Burial Ground delivers a drum overpack to a secure enclosure for characterization. More than 800 potentially pyrophoric barrels were retrieved at the site.

## Service Awards Recognized in 2008

The following individuals reached a milestone in their careers at Hanford during 2008.

### 5 Years:

Allen, Mark E  
 Bowman, Nancy J  
 Breazeale, Brian S  
 Dalton, Douglas M  
 Debrine, Kenton P  
 Dolph, Stanley  
 Hamilton, Doyle G  
 Hardy, Richard T  
 Horton, Larry W  
 Hunt, Jerry R  
 Jenkins, Stanley H  
 Matteson, Guy E  
 McPherson, Robert B  
 Overdahl, Rebecca L  
 Phillips, Brian J  
 Samifua, Ronald V  
 Volkman, Kenneth G  
 Willingham, Angela V  
 Wilson, Lester E

### 10 Years:

Anselm, Kim A  
 Cochran, Clair D  
 Cockrum, Marie L  
 Eliason, Kathy S  
 Ferguson, Bradley J  
 Garvie, Paine W  
 Hassell, Harold M  
 Hebdon, Lynn J

### ERDF Accomplishments continued

and began construction of cells 7 and 8, which is nearly complete.

Over the last year, the Waste Operations (WO) team has upgraded processes and equipment to receive larger volumes of waste and improve safety. The improvements included:

- New compaction methods and equipment
- Leachate system upgrades
- Requirements and commitments databases
- New trucks, containers, and scale.

In April, RL and the U.S. Environmental Protection Agency (EPA) granted the most significant change in operations when they approved the revised Waste Materials Management Plan. The two most significant changes approved in the plan were the use of landfill compactors equipped with global positioning systems (GPSs) and the use of a 1-to-1 soil-to-debris ratio in place of the previous 3-to-1 ratio for void fill and compaction requirements.



Merrick Veit, left, and Mike Stoltz carry material used to help maintain WCH's fleet of 700 containers.

The leachate collection system also was revamped. New programmable logic controllers were installed, along with monitoring systems for the sumps and holding tanks. The new system contains an automatic feature to notify managers with a text message when alarms are activated, power is lost, or any number of preset conditions are exceeded.

WO staff completed their review of regulatory requirements and more than 500 regulations that governed ERDF operations. To help track action items, the team compiled all requirements into a comprehensive database that provides the

“Overall, this was a fantastic year for Waste Operations and we’ve got everything in place to help our generators be even more successful in 2009.”

*Jeff Armatrout, ERDF Operations Manager*

specific regulatory requirement, the approved plan with the requirement identified, the implementing procedures, and routine action-item tracking to ensure commitments are implemented.

Several actions completed during the year helped increase capacity. The project purchased four

additional long-haul trucks to add to its existing 18-vehicle fleet and added 100 roll-off containers, with 150 more on order for delivery in 2009, which will bring the total container count to 850.

Service Awards continued

Lipinski, Richard S  
Milton, Cynthia R  
Shiflet, Dona K  
Stocker, Darrell E  
Yasek, Donna M  
Young, Charles E  
Zimmer, Joan M

**15 Years:**

Ard, Jeffrey A  
Brenberger, Paul H  
Brosee, Manfred N  
Casbon, Michael A  
Diaz, Peter A  
Gravelle, Paul C  
Hadley, Karl A  
Humphrys, Dean W  
Koep, Phoebe J  
Manley, Tony E  
Marceau, Thomas E  
Marquez, Patricia C  
McClure, Darlene A  
Nielson, Renee J  
Parnell, Scott E  
Reffalt, Sean L  
Rowse, Laurie J  
Snow, Gary B  
St John, David A  
Tucker, Cheryl L  
Williamson, Brian L  
Williamson, Steven P

**20 Years:**

Dodd, Ryan A  
Harrington, Richard A  
Lindbergh, Vonnie J  
Obenauer, Dale F

ERDF Accomplishments continued

A second, fully automated scale was placed in service in May 2008 to augment the older scale.

The process improvements and equipment upgrades have nearly doubled ERDF capacity. In a crunch, it could handle up to 400 cans per day.

In addition to the upgrades and enhancement, the team also got a significant amount of disposal and construction work done.

Construction of cells 7 and 8 began in March and by the end of December, nearly all of the physical work was done. The balance of the work will be completed in late March or early April.

During the year, more than 700,000 tons of waste was disposed (almost 38,000 containers), with drivers covering nearly 1.4 million miles in the process. One of the real challenges on the disposal side was handling, treating, and disposing of soil contaminated with lead (33,368 tons), chromium (7,025 tons) and mercury (2,179 tons).

The decision to screen the chromium content of the chromium-contaminated soil stockpile with X-ray fluorescence resulted in identifying 5,000 tons out of an estimated 7,025 that required no further treatment, saving the project significant time and money.



*ERDF operations workers treated more than 32,500 tons of lead-contaminated soil from the 618-7 Burial Ground.*

A new treatment plan, developed for lead-contaminated soils at the 618-7 Burial Ground, subsequently saved months in the treatment of nearly 1,000 tons of soil from 618-1.

FR staff were able to demonstrate to regulators that the 618-1 waste was similar to the 618-7 waste, allowing them to take advantage of the “plug-in” approach approved by EPA and implemented by WO. This allowed the use of the same treatment plan developed for the 618-7 waste. It usually takes six-nine months to develop a

site-specific treatment plan for a particular waste stream, such as lead. The new plug-in approach, or use of existing treatment plans, can be applied to future waste sites and waste streams, such as chromium, saving months in the process.

“Safety on the project has been a real bright spot here at ERDF,” said Jeff Armatrout, ERDF operations manager. The cells 7 and 8 construction crew worked 10 consecutive months without an injury, fifty of the ERDF drivers completed the 10-hour OSHA construction industry training, and 45 supervisors, managers and craft workers completed certification as a Safety Trained Supervisor. The ERDF team – disposal, transportation and construction – worked six consecutive months without an OSHA recordable injury.

“Overall, this was a fantastic year for Waste Operations and we’ve got everything in place to help our generators be even more successful in 2009,” Jeff said.

*Service Awards continued*

**25 Years:**

- Bergstrom, Kevin A
- Blackburn, James E
- Buescher, James P
- Claybrook, Gary A
- Collom, Landon R
- Dodson, David J
- DuVon, Douglas K
- Flieger, Frederick L
- Gale, Stuart J
- Goulet, Lynn M
- Gutmanis, Arnold V
- Kalinowski, Michael E
- Kerkow, Richard B
- Lichy, Patricia A
- LoParco, Joyce D
- Powers, Faith A
- Riley, Daniel A
- Schilperoort, Daryl L
- Weiss, Richard L
- Wilcox, Dean L
- Wilson, Ralph C
- Wojnarowicz, Joseph J

**30 Years:**

- Brown, Leslie A
- Harding, Edward M
- Ludowise, John D
- Marshall, Bradley J
- Perry, Donald W
- Phillips, Carl A
- Plung, Daniel L
- Stankovich, Michael T
- Vedder, Barry L
- Winters, John N

**IT Deals with a Deluge of Spam**

The amount of e-mail that comes through the server is something most of us don't think about. Our work heavily revolves around this tool and, so long as it works, not much thought is given to what is going on behind the scene to keep it running smoothly. One group of WCH employees, however, pays close attention to what goes into keeping the system up and running with the least amount of interference possible and that's the Information Technology (IT) group.

Approximately three years ago, IT transitioned WCH from being a part of Fluor Hanford's (FH) e-mail organization. About seven months earlier, at the start of the new contract, WCH's domain name was changed from "bhi-erc.com" to "wch-rcc.com" to more closely align with the company name and at that time there was a noticeable drop in the amount of spam. That was the first step toward cutting back on the annoying and sometimes harmful, unwanted e-mails.



*Jim Blunt, WCH Network Analyst, assisted IT in developing a successful program to reduce spam.*

The next step that IT took was migrating the e-mail servers from Exchange 5.5 to Exchange 2003, followed by moving the user's client to Outlook 2003. These two things gave end users the ability to block much of their incoming spam on their own.

Finally, a little less than a year ago, the Sophos e-mail appliance was implemented; Sophos filters both inbound and outbound e-mail traffic. As a result of this change, there has been a record four million spam and viruses blocked in less than one year. This milestone came much faster than IT anticipated based on the standard

rate of spam detection that was experienced in the past. Jim Blunt, WCH network analyst stated, "We didn't have any increase in the amount of spam we were receiving, we simply started blocking more of it."

When broken out into how this affects manpower and equipment, it becomes apparent that this change has been

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*"We have saved at least five hours a week of manpower time with the increased flexibility this system gives us."*

*Jim Blunt, Network Analyst*

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beneficial toward the effort of protecting WCH's system and at the same time, creating cost savings by not needing to replace infected computers.

"We have saved at least five hours a week of manpower time with the increased flexibility this system gives us," said Jim. "The previous system was much more cumbersome, but now we are able to quickly release business-related e-mails that have been quarantined."

After comparing 18 different options (nine hardware and nine software), the WCH IT team implemented a very successful program to protect our e-mail system.

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## D4 – Movers and Shakers Along the River Corridor

The number of demolished buildings by WCH (115) along Hanford's River Corridor doesn't tell the entire story, as impressive as it is. The D4 project, which stands for deactivate, decommission, decontaminate and demolish, involves hazard mitigation and extensive infrastructure work often unseen before Hanford's river corridor structures are removed.

The Surveillance, Maintenance and Utilities team from D4 is involved in critical steps before most

building and field projects can move forward. Significant utility systems have had to be preserved and re-routed, particularly in the 300 Area. Original plans to demolish buildings and utilities have changed to support PNNL, forcing D4 to work around buildings and PNNL employees.

Another example is the timely coordination of a high-voltage electrical system at the north end of the 300 Area that prepared the way for the Field Remediation project to start a burial ground and meet a Tri-Party Agreement milestone in September.

Before the structures are torn down, significant work involves removing hazardous materials from the buildings. Workers must have special training to remove and

work in areas contaminated with beryllium, asbestos, hazardous chemicals and radioactive materials. When the structures are isolated from utilities and decontaminated, the proverbial tip-of-the iceberg can be taken down.

The skyline dramatically changed in 2008 in both the 300 and 100 areas. Crews demolished two multi-story powerhouses, used explosives to dramatically bring down stacks and structures at 100 N, and lifted contaminated tanks from a support structure to N Reactor on the bank of the Columbia River.

"The D4 team had an amazing year," said Bob Smith, Project Director. "The risks and complexity



D4 crews dismantle piping and equipment in the 184-N Powerhouse in the 100 Area. The work was completed on time and met a September TPA milestone.



The successful demolition of the 384 high bay in the 300 Area overcame numerous challenges in 2008.

2008

*D4 – Movers and Shakers continued*

are even more difficult in the coming year as we tackle facilities like 324, 327 and N Reactor – but this team has shown it can safely address the challenges it faces. I know they will continue to make great progress along the river corridor.”

## Procurement Exceeds Small Business Contract Goals

In fiscal year 2008, WCH awarded more than 90 percent of its subcontracted work to small businesses, exceeding by a substantial margin its 65 percent goal with the U. S. Department of Energy.

“Our 65 percent goal is very aggressive and to exceed it by such a wide margin is good for us and for those small businesses we subcontract with,” said Dennis Houston, Washington Closure procurement manager.

Of the \$117 million subcontracted in FY08, more than \$107 million went to small businesses. Of that, 47 percent went to small businesses located in Benton County.

In addition, one of Washington Closure’s subcontractors, Terranear PMC of Exton, PA, recieved the U.S. Department of Energy Protégé of the Year award. DOE’s mentor-protégé program is designed to promote economic and technological growth, promote and foster long-term business relationships, and increase the number of small disadvantaged businesses that receive DOE, other federal agency and commercial contracts by teaming small businesses with DOE contractors.

In its work to protect the Columbia River and complete cleanup in the 218-square-mile River Corridor by 2015, Washington Closure will demolish 486 contaminated buildings, clean up 370 contaminated waste sites and expand ERDF as necessary.

Washington Closure expects to subcontract an equivalent amount in the next year.

### Annual Socioeconomic Statistics

