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# *C<sup>the</sup>* *Current*



## **In This Issue:**

***The Hazardous 324 Building Prepares for Demolition***

***All-Employee Meeting***

***Records are Made to be Broken***

***ARRA Focus***

***One Million Tons Loaded Out at D Area***

***Congratulations 300 Area D4 Team***

***Pride and Progress – Phoenix Rising***

***Planting Season's Over Already at Hanford***

***Service Awards***

***New Hires***

Editor: Tari Birch

Contributing authors: Tari Birch, Todd Nelson, Peter Bengtson and Mark McKenna.

Please submit story ideas or comments to *WCH Communications*.

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

## **The Hazardous 324 Building Prepares for Demolition**

A lethal dose of gamma radiation could occur in five minutes from the research waste on the floor of a hot-cell located in the 324 Building. The remotely accessed research labs, or hot-cells in the 324 Building, includes two three-story, heavily shielded rooms with five-foot thick concrete walls and a stainless steel lining. B-Cell is the largest and most contaminated of six hot cells in the 324 Building.

One of the most complex and hazardous projects along the river corridor is the cleanup of Hanford's 324 Building. Originally called the Fuel Recycle Pilot Plant and later known as the Chemical Materials Engineering Laboratory, the 324 Building was built in 1966 for nuclear material research and radioactive waste treatment process development and demonstration. The building contains highly radioactive tanks, piping, and chemical processing equipment located in shielded hot cells.

Washington Closure Hanford (WCH) is awarding a subcontract worth up to \$43.5 million to Northwest Demolition and Environmental to stabilize and remove the highly radioactive hot cells in the building. This subcontract is the largest award by Washington Closure to address the most difficult, complex and hazardous work we expect to face in regard to demolishing Hanford's old nuclear facilities.

After verifying the levels of contamination remaining, workers are ready to stabilize the huge hot cells. The hot cells will be filled with grout, cut into blocks and removed for burial after the building is demolished around the monolithic structures.

For nearly 60 years, the 300 Area was the center of Hanford's radiological research and fuel fabrication. Located just 1.5 miles north of the City of Richland, the former industrial complex is along the west bank of the Columbia River. The research and fabrication work resulted in highly contaminated facilities and waste sites, and a large inventory of radioactive material.



*Dave Jenkins next to lead-shielded 60,000 pound casks used to deliver high-level radioactive material to 324 for experiments in hot cells.*

*Protecting the Columbia River*

## Service Awards

The following individuals reached a milestone in their careers.

### 5 Years:

Kreutz, Brian W  
Morton, Ashley T  
Tarr, Ivan G

### 10 Years:

Beck, Sandra L  
Wilson, Gwen L

### 20 Years:

Garrett, Debra L

### 30 Years:

Jenkins, David O  
King, Don A

## New Hires

WCH welcomes the following new employees who have joined our project:

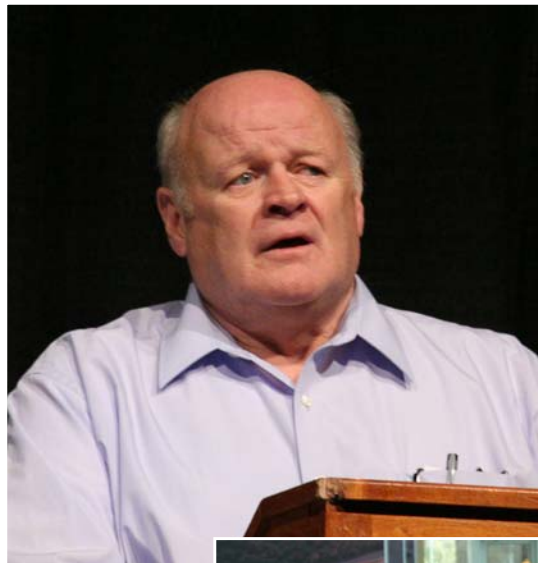
Troy Clary: WCH, Project Controls Engineer – Project Integration

Michael Webb: WCH, Sr. Quality Assurance Engineer – SH&Q

Colin Murdock: WCH, Project Analytical Lead – Environmental Protection

Janice Strain: WCH, Office Assistant – Field Remediation

## All-Employee Meeting



Neil Brosee, WCH President, addressed River Corridor Closure Contract employees at the recent All-Employee meeting. Neil and other directors discussed progress made, a look-ahead at work, and plans for assisting employees in the transition process as the RCCC winds down.



**FACTOID**

ERDF's truck fleet consists of 30 transportation shuttle trucks, 20 disposal shuttle trucks and 25 truck and pups.

## Records are Made to be Broken

Since the beginning of the year, the disposal operations team at the Environmental Restoration Disposal Facility has been breaking records nearly every week.

It started in mid-January when they broke the 400-container mark with 413 containers disposed. Every other week until mid-March, they set a new record, breaking the 500-container mark with 501 on March 9. And, on March 16, they disposed of 578 containers of waste.

*“It takes a strong commitment by the entire team ... to make this a safe operation.”*

*Jeff Armatrout,  
ERDF Operations Manager*

Actually, “containers” isn’t entirely accurate. “If we were to put all that material in orange containers, it would equal 644 containers of waste,” said ERDF Operations Manager Jeff Armatrout.

Not every load arrives in an orange ERDF container. The count also includes truck and pups, which are the equivalent of 1.5 containers, and super dump trucks used by CH2M Hill Plateau Remediation Company, which measure out at slightly more than one container. It also includes waste requiring special handling that comes in on flat-bed trucks.

“Two years ago, our goal was to average 200 containers a day,” said Jeff. This team has done a fantastic job, not only in getting this facility ready to handle increased waste volumes, but in actually making sure we do it safely,” he said.

“Our biggest concern is not the radioactive or hazardous waste, it’s the traffic. In addition to disposal traffic, we also have construction traffic from super cells 9 and 10,” said Jeff.

He added that they are scheduled to maintain if not continue to break existing records throughout the summer. “We’ll continue to see an average of at least 250 containers a day from the River Corridor Closure Project, and likely the same from CHPRC as they continue to accelerate their cleanup activities,” he said.

“It takes a strong commitment by the entire team – the Department of Energy, Environmental Protection Agency, Washington Closure, Eberline Services Hanford, Stoller, TradeWind, DelHur and the other Hanford contractors – to make this a safe operation. They’re committed and it shows,” said Jeff.



ERDF continues to set disposal records. For the week ending March 21, the team disposed of 41,368 tons, or 2,007 containers – the most ever in one week.



Billy Martin works for WCH subcontractor North Wind, Inc. as a multi-detector probe technician at the 618-10 Burial Ground.

## ARRA Focus

Billy Martin is close to making the biggest deal of his life – he’s in the market for his first house.

Martin, less than three years removed from college, is in this position thanks to the American Recovery and Reinvestment Act. The Richland native was hired in September by Washington Closure Hanford subcontractor North Wind, Inc. to help clean up the highly contaminated 618-10 Burial Ground.

The burial ground is the most hazardous Washington Closure has confronted to date. From the mid-1950s to the early 1960s, Hanford Site personnel used the burial ground to dispose of low- and high-activity radioactive waste from 300 Area laboratories and fuel development facilities.

North Wind is conducting nonintrusive characterization activities at the burial ground, where work is funded by Recovery Act dollars. Martin’s job is to operate the multi-detector probes, or MDPs, which are instruments used to measure a wide range of radiation sources.

North Wind began nonintrusive characterization by installing narrow steel tubes, called cone penetrometers, around each of the 94 burial vertical pipes and into selected trenches. The MDPs are then lowered into the cone penetrometers and measurements are recorded as the MDPs are pulled out.

“The 618-10 site is a unique project, and I’m glad to be a part of it,” Martin said. “Working the MDPs is very important. The data collected will help us safely clean up the burial ground.”

Martin earned a degree in economics with a minor in environmental studies from St. Olaf College, a liberal arts school of 3,000 students located in Northfield, Minnesota. Martin also played hockey at St. Olaf, located about 35 miles from Minneapolis and St. Paul, and continues to play in a Tri-City men’s recreation league.

After college, Martin worked for a painting business in town. A longtime family friend recommended that he submit his resume to North Wind.

“I’ve always used the economics side of my education, so it’s nice to finally get to use the environmental side,” he said. “And the timing was perfect. The painting business shuts down during the winter months, and now I have a steady paycheck coming in. And the people here have been great to work with.”

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“The 618-10 site is a unique project, and I’m glad to be a part of it.”

*Billy Martin,*

*North Wind, Inc. employee*

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### FACTOID

Vertical pipe units, or VPUs, are five bottomless 55-gallon drums welded together end to end.

## One Million Tons Loaded Out at D Area



*More than one million tons of contaminated material has been loaded out for waste sites and burial grounds at D Area in the last three years without a single lost-time accident.*

One of the last things Mark Buckmaster gets to celebrate at D Area before he moves on to N Area is a major milestone achieved by the D Area Field Remediation team.

On March 5, the team loaded out their one-millionth ton of contaminated material. They started in January 2007, and in that time, they haven't had a single lost-time accident.

"This team has worked together very well to keep each other safe and ensure everything runs smoothly," said Mark, who is the project manager at D Area until Dave Martin takes over in mid-April. In addition to Washington Closure, the team includes Eberline Services, Safety and Ecology Corp. (SEC), Phoenix Enterprises NW and Stoller.

The work involved excavating 34 waste sites that included pipelines, drums, miscellaneous debris, reactor components, reactor hardware, bottled liquids and spent fuel – lots of anomalies.

In addition, it was during this time that CRATER made its debut. CRATER is the technology developed for identifying and differentiating between high-dose reactor hardware and suspect spent nuclear fuel. CRATER allows the evaluation to be done before the material is removed from the dig site.

"SEC did a good job helping us prove that CRATER works," said Mark. "They did all the handling of material for testing and working out the bugs, and they deserve a lot of the credit for helping us bring it from the drawing board to field excavation."

With a million tons under their belt, incoming project manager Dave Martin said that's only phase 1. "We still have 22 waste sites and an estimated 200,000 tons of material to remove before we're done," he said.



*Josh Sellers, Safety and Ecology Corp., takes a sample of liquid from the D Reactor fuel storage basin. He is assisted by Dave Shea, Washington Closure, and Rick Sterling, formerly with Eberline Services Hanford.*

**Congratulations to the 300 Area D4 team for achieving another goal of working 90 days without a recordable injury.**



## Pride and Progress – Phoenix Rising



*Jonetta Everano, owner/president, Phoenix Enterprises NW, is grateful to her family for the support they've given as she builds the business. She loves what she does!*

Sitting in one of the company rigs, watching the excavation progress at the IU 2&6 site, Jonetta Everano, owner/president, Phoenix Enterprises NW, reflected on progress made over the last several years. She has been around the dig sites at Hanford for many years, starting as an intern at the Vitrification Plant where she was then hired. Transferring to Bechtel with the ERC project at 100 B/C as a Field Engineer led to her promotion to subcontractor technical representative.

Her degree in Construction Management and Business Administration from Central Washington University helped gear her towards starting her own business in the competitive construction industry. While employed by Federal Engineers and Constructors (FE&C) as a Construction Services Manager, Jonetta began the process of forming her own company. Dick French of FE&C, mentored her and helped get her set up in business. "I couldn't have done it without his help and the support of FE&C," said Jonetta.

When Phoenix Enterprises started running their Truck and Pup outfit on its first contract, there were approximately 15 employees, including Stacy Wilson, site superintendent. "Coming from an industry of seasonal work, our drivers enjoy having year round work. They're very good and have an excellent safety ethic," said Stacy.

Jonetta has propelled Phoenix Enterprises forward, securing the excavation work at IU 2&6, utilizing her own trucks to haul the dirt. Phoenix is now comprised of approximately 40 employees. She sees the progress of the company as being a result of a

thriving safety culture. "We've been very fortunate with our safety record and I attribute that to the strong teamwork and communication we have throughout the River Corridor Project." The team at ERDF has been instrumental in Phoenix's progress as well. Jonetta gives credit to Bruce Covert, Waste Operations director for developing a communicative attitude amongst his team, Dave Durance, Jeff Armatrout, Frank Farmer and others. They have helped in the mentoring process as well as working through start-up issues.

Being a new company, awarded a new contract utilizing a relatively new process (use of Truck and Pups, which had only been used once before at the 100 B/C Burial Grounds), gives Jonetta great pride. Being able to hire employees from the private industry and bring them into the Hanford environment has been a rewarding experience as well. But the three things that are key to her progress and the pride she holds for the work Phoenix is contributing,



*Phoenix Enterprises NW uses its own truck and pup outfit to load out material at the IU 2 & 6 project.*

"We've been very fortunate with our safety record and I attribute that to the strong teamwork and communications we have throughout the River Corridor Project."

*Jonetta Everano,  
Owner/President,  
Phoenix Enterprises NW*

Pride and Progress continued

were repeated several times, “It’s the safety, the communications and the team environment that have made us a success,” said Jonetta.

## Planting Season's Over Already at Hanford

While most of us are still waiting for warmer weather to do our planting, April Johnson is done with hers.

April and the River Corridor Closure Project revegetation crew have a 2-3 month window – beginning in late fall and extending into winter – to complete revegetation of areas that have been disturbed during cleanup.

“In addition to replanting disturbed areas, we’re also required to mitigate – or replace – habitat that has been lost due to activities such as the expansion of the Environmental Restoration Disposal Facility,” said April.

Last season, WCH and subcontractor Wildlands revegetated more than 117 acres at the 300 Area, B/C Area, the ERDF cells 3&4 interim cover, and mitigation near Gable Butte.

April prescribes which plant species to plant based on soil type and what’s growing nearby. The requirement is to plant vegetation that is native to the Hanford Site and has the best chance for survival.

The plantings included more than 55,000 sagebrush, hopsage and bitterbrush seedlings, as well as 1,700 pounds of grass seed, including Sandberg bluegrass, Indian ricegrass, bluebunch wheatgrass, needle and thread, and bottlebrush squirreltail. The planting density ranges from 400-500 plants per acre.



*In addition to revegetating near the C Reactor, Wildlands employees also planted brush tublings and grass seeds at B/C Area near the river, at 300 Area, on the ERDF cells 3&4 interim cover and did mitigation plantings near Gable Butte – 117 acres in all.*

Planting is done in the November-January timeframe to take advantage of the natural precipitation and cooler temperatures required for the cool season grass species to germinate and become established.

All revegetation and mitigation plantings are monitored for five years to evaluate success and seedling survival. Revegetation sites must be dominated by native species, and transplanted shrubs must have a survival rate of at least 50 percent by that time. However, April said they usually know within two or three years if they can meet the goals and can replant when necessary.

April just placed next season’s order for shrub seedlings. She said WCH is scheduled to plant 30,000 more shrubs and 1,000 more pounds of grass seed this fall than last year.



*Workers from subcontractor Wildlands Inc. plant sagebrush along the banks of the Columbia River at B/C Area.*