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C^{the} Current



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Historical Hanford Landmark – Gone

Since the mid-1960s there was a very obvious structure rising into the 100-N skyline – the 200-foot 116-N stack located just 100 yards east of the N Reactor.



Historic view of 116-N stack in the 100-N Area, prior to demolition

Also located in the vicinity was the 184-N Powerhouse, which had a 70-foot stack rising from its structure. Now when you look toward N Reactor, that part of the sky is empty.

N Reactor gained historical notoriety as the last of nine nuclear plutonium production reactors to operate during World War II and the Cold War. Additionally, it was the only dual-purpose co-generation nuclear reactor of its kind in the United States. It not only produced plutonium for weapons, but it also produced steam to generate electricity.

On Saturday, June 21, after several months of planning, the D4 team in conjunction with Controlled Demolition, Inc. changed the look of Hanford's 100-N Area forever by lowering these two stacks with explosives. "By using explosives we were able to reduce the risk posed to workers had they brought the stacks down using conventional demolition techniques," said Kurt Kehler, D4 project manager. "Aside from bringing the stacks down, we dropped heavy equipment located on the upper levels of the powerhouse and fractured 4-foot-thick cement pedestals. This means workers will be able to more safely access the generator to remove it with conventional equipment," Kurt said.



The 116-N stack was taken down with explosives, ensuring worker safety during demolition.

To maintain the highest level of safety during the explosion, only personnel directly involved and appropriately trained were allowed on site. A media event was held at the Federal Building in Richland the following Monday to share the results, with video of the successful explosion as the highlight. To view the footage, click on the link found in the following document:

http://www.washingtonclosure.com/news/100N_Demo/E0806042_7.pdf

Now that the stacks are down, D4 is working on the remaining demolition of the facilities and stacks. As the stacks, generator and structures are dismantled the debris

Service Awards

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

Five Years:

Nancy Bowman, ESHI
Stanley Dolph, WCH
Richard Hardy, WCH
Jerry Hunt, WCH
Stanley Jenkins, WCH

Ten Years:

Bradley Ferguson, WCH
Kay Shiflet, WCH

15 Years:

Paul Brenberger, ESHI
Peter Diaz, WCH
Sean Reffalt, WCH
Gary Snow, WCH
Dean Humphrys, ESHI

25 Years:

Patricia Lichy, WCH
Joyce LoParco, WCH
Dean Wilcox, WCH

30 Years:

Leslie Brown, WCH
John Ludowise, WCH
Barry Vedder, WCH
Mike Stankovich, WCH

Historical Hanford landmark continued

will be transported to the Environmental Restoration Disposal Facility (ERDF). To date, D4 has demolished 138 facilities out of a total of 486.

618-7 Burial Ground Team Deals with Lead Debris

The Field Remediation (FR) team continues to brave the unknown as it excavates waste from the 618-7 Burial Ground. The team has loaded out 27,000 cubic meters of waste and recovered over 400 drums containing a variety of materials. The most problematic waste form retrieved has been lead debris and lead-contaminated soils.



The 618-7 Burial Ground brings unknown challenges in the form of lead debris.

“There was a lot of non-containerized or loose lead debris and lead oxide, which could exceed the acceptance levels at ERDF and need to be treated before disposal,” said Matt Haass, 300 Area FR resident engineer.

Waste in the trenches includes three

lead-containing waste streams (forms of waste): lead-contaminated debris, lead-contaminated soil and a mix of debris and soil. The team has received regulatory approval for treating the first two streams and must treat and dispose of all three in order to meet the Tri-Party Agreement milestone to remediate, backfill and revegetate the site by Dec. 31.

“Part of the remediation process is excavating and disposing of the materials we find, and the lead waste is slowing down that process,” said John Ludowise, 300 Area FR project engineer.

Much of the lead debris is believed to have come from the lead-dip process used to manufacture reactor fuel elements. A lead bath was used to pre-heat the uranium cores before applying cladding. Every few hours the molten lead was skimmed to remove impurities that would accumulate on the surface.

“The lead-dip process operated from the mid-1950s to the late 1960s, so there would have been a very large amount of lead-contaminated material requiring disposal,” John said.

So far, FR has retrieved 180 drums of vermiculite, a mineral and natural absorbent; 150 drums of aluminum rods and turnings and 25 drums of oil. Drums containing solid material are sampled, and those with little or no contamination are mixed with soil and sent to ERDF. Drums containing liquids are sampled and if possible bulked together for off-site disposal.

Matt estimated that FR will begin excavation of the Thoria Pit, the last trench at the 618-7 site, in mid-July. “Excavation of the Thoria Pit may be the most challenging because it is expected to contain drums of potentially pyrophoric zircaloy metal turnings. So far, we have planned for the worst and been prepared for what we found, and we hope for similar success with the Thoria Pit trench,” Matt said.

New Hires

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

Brandon Nixon: WCH, Project Controls Engineer – Project Integration

Jo Lynn Draper: WCH, Technical Editor – Project Services

Jose Garcia: WCH-HAMTC, Truck Driver – Waste Operations

Mark Davis: WCH-HAMTC, Truck Driver – Waste Operations

John Ramos: WCH-HAMTC, Truck Driver – Waste Operations

Frederick (Fred) Jimenez: WCH-HAMTC, Truck Driver – Waste Operations

Sean McKenna: WCH-HAMTC, Truck Driver – Waste Operations

Wilbur Brown: WCH-HAMTC, Truck Driver – Waste Operations

Christopher (Chris) Bates: WCH-HAMTC, Truck Driver – Waste Operations

Chris Andrus: WCH-HAMTC, Truck Driver – Waste Operations

Chad Elliott: WCH-HAMTC, Pipefitter – D4

618-1 Burial Ground Team Working to Meet TPA Milestones

The Field Remediation (FR) Project is finishing plans to begin excavation and remediation of waste from the 618-1 Burial Ground. As opposed to other burial grounds, “This site contains materials from the earliest laboratory and fuel fabrication facilities, from during the war itself,” said Jon Fancher, FR project manager at 618-1.

The 618-1 site is located in the northeast corner of the 300 Area and includes three trenches and a fourth area of short trenches or pits. The main trenches are about 7 by 60 m in size and operated from 1945-1951.

The site also contains hazardous materials discharged from structures that were later built over the trenches. The buildings were removed, leaving only concrete slabs. After removing the slabs, FR expects to unearth drums and lab waste that may include uranium oxide, which may be from an oxide burning facility that existed over the burial ground in 1961-1976 and was replaced by a uranium oxide facility in 1983.

To account for the unknown risks and materials, preparation and excavation plans for the project are similar to processes for the 618-7 Burial Ground, a nearby site where pyrophoric drums are expected to be found.

“The work at 618-7 has really helped us prepare for 618-1,” Jon said. “We’re able to take lessons learned and procedures from that site and practically move them across the street with only minor changes. Based on our work at 618-7, we are ready and up to the challenge of the next site.”

Remediation is set to begin in August to fulfill a Sept. 30 Tri-Party Agreement milestone.



One of many slabs at the 618-1 Burial Ground to be removed to access hazardous waste underneath

Paving the Way for Local Students

Washington Closure Hanford (WCH), in conjunction with Bechtel National, Inc., cosponsored the Columbia Basin College (CBC) Foundation scholarship fundraising reception and concert March 1 that raised a total of \$17,000.

“Our corporate donation helped increase the number and dollar amount of scholarships the foundation could award to students,” said Bill Shingler, Project Services director and CBC Foundation board member. Bill joined the board three years ago “realizing the synergies between WCH’s needs for a well trained workforce and CBC’s capabilities to deliver technically competent resources.”

WCH was also a table sponsor for the recital and dedication ceremony celebrating the school’s reception of a Steinway Concert Grand Piano. “Supporting education is the best way to leverage our donations because we get direct payback when educated students enter the workforce,” Bill said. “We get a lot of talent from CBC. The institution is a great resource for the community.”

Meet the WCH Communication Council

Since February 2008, a group of River Corridor Closure Project employees has met regularly as the WCH Communication Council. The team serves as a focus group and advisory body to the Communication and Public Affairs Department regarding work force information needs and ways to improve timely, honest two-way employee and management communications. The council includes a cross-section of representatives from every organization, team and location.

To help employees recognize whom to contact with communication needs or concerns, the Current will introduce council members in future issues, beginning with this issue.

Shane Bigham

Shane Bigham, Field Remediation Subcontract Technical Representative (STR) supervisor, joined the Communication Council to represent Field Remediation and the associated WCH subcontracted work force. "The council provides the opportunity for people to give suggestions to get the right information out in the right way," Shane said. "I hope to bring input from the subcontractors who do not have a direct link with normal WCH communication such as e-mail and other electronic distributions." An example of this process was the use of feedback about the format and presentation of the last all-employees meeting. "I delivered comments from the STRs to the council for review with senior management to improve the next all-hands presentation," Shane said. He views the council as a way for employees, including subcontractors, to give input to senior staff on what they are communicating and how that information is being received.



Paving the way continued



CBC students Ryan Horst (left) and Tom Brunner (right) work on updating employee computers.

the BHI domain to the River Corridor Closure domain, a task that required the students to work individually with each computer. "They have helped almost everyone on site, ensuring their data and settings are backed up during the move to the new systems," Rob said.

"They have done an outstanding job maintaining the schedule and they have demonstrated great customer service skills and work ethic," added Charles Page, IT manager.

The WCH Information Technology (IT) department also partnered with CBC in February by inviting two students, Tom Brunner and Ryan Horst, to update WCH employee computer systems. "This was another way that we could work with CBC to achieve our goals and support their students," said Rob Vore, Customer Support Desk lead.

Brunner and Horst migrated operating systems from Windows 2000 to Windows XP and user accounts from

Quality Star Recipient

The WCH Quality Assurance (QA) Management team selected Tim Lee, ERDF project analytical lead, to receive a Quality Star award. Tim was recognized and awarded his Quality Star by Mike Hassell, QA manager.

The Quality Star is awarded to individuals who make an extra effort to research, understand, define and apply QA principals to items and activities that are under their scope of responsibility. Recipients are also recognized for their dedication toward promoting continuous improvement of safety and quality in the work place.

Tim was selected based on his attention to detail and proactive approach to ensure that subcontractor requirements associated with excavation, removal and disposition of the 3612-D underground storage tank were appropriately flowed down, understood and implemented in compliance with the WCH QA program.

While participating in the Job Hazard Analysis for the 3612-D underground storage tank, he asked some very specific questions that led to recognizing the subcontractor had not considered several critical attributes associated with the job that needed to be addressed. He then provided his services to ensure the issues were addressed appropriately and the work was done safely.



Mike Hassell presents an enthusiastic Tim Lee with a Quality Star award.

