



# EM UPDATE

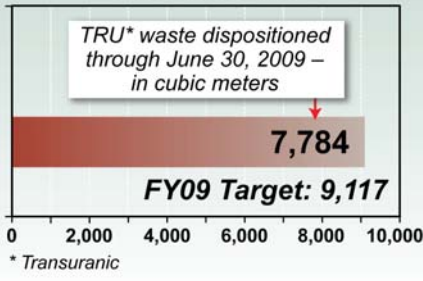
Office of Environmental Management



safety ❖ performance ❖ cleanup ❖ closure

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### EM Scorecard



## Historic Accord on Hanford Cleanup

As part of his visit to the Hanford Site, Energy Secretary Steven Chu joined top officials from Washington State, Oregon and the U.S. Department of Justice to announce a proposed legal settlement that will impose a new, enforceable and achievable schedule for tank waste cleanup at Hanford.



From left, Washington State Governor Chris Gregoire, Oregon Governor Ted Kulongoski, Secretary Chu, acting U.S. Assistant Attorney General John Cruden, Washington State Attorney General Rob McKenna, and Under Secretary Kristina Johnson.

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### – IN BRIEF –

#### ■ Oak Ridge: From Hazard to Habitat

Three ponds on the former K-25 site at Oak Ridge have been restored with clean soil and freshly planted aquatic vegetation.

The ponds have also been refilled to their previous water level and the next step will be to introduce sunfish and other new fish species that are not bottom feeders and can thrive in the new ecosystem that is being created.

It's all part of a \$3.5 million environmental remediation project on the site, said Dennis Hill, a spokesman for Bechtel Jacobs, DOE's

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A crowd of over 100 people, including Tribal Nation representatives, community members, local elected officials, stakeholders, Hanford Advisory Board members, workers and others, gathered to watch Chu make the announcement on August 11. He was joined by Washington Governor Chris Gregoire, Oregon Governor Ted Kulongoski, Washington Attorney General Rob McKenna, U.S. Senators Patty Murray and Maria Cantwell, acting U.S. Assistant Attorney General John Cruden, acting EPA Regional Administrator Dan Opalski, Energy Under Secretary Kristina Johnson and EM Assistant Secretary Inés Triay.

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Washington Governor Chris Gregoire, EM Assistant Secretary Inés Triay and Energy Under Secretary Kristina Johnson share a moment of celebration following the announcement of the new agreements on the Hanford cleanup.

## Hanford Cleanup

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They spoke with the ongoing construction of the Waste Treatment Plant (WTP) in the background.

Together the officials announced a proposed consent decree between the Department of Energy (DOE) and Washington State that will set a new and achievable schedule for construction and startup of the WTP and the retrieval of waste from the large underground single-shell storage tanks at Hanford. The proposed consent decree settles litigation filed by Washington State last November and joined by the State of Oregon to compel DOE to complete key aspects of Hanford cleanup.

In tandem with the consent decree, DOE, the U.S. Environmental Protection Agency (EPA), and Washington State are proposing changes to the 1989 Tri-Party Agreement (TPA) to establish a new, realistic but aggressive schedule for completing waste retrieval from all single-shell storage tanks by 2040, and treating all of the tank waste by 2047.

The consent decree and modifications to the Tri-Party Agreement will be

subject to public comment periods before they are finalized.

In addition, DOE and the State of Oregon agreed on a consent decree that recognizes Oregon's interest in the cleanup effort and provides Oregon the right to receive copies of certain reports and notices that DOE must file under the consent decree with Washington State; the right to participate as an observer in joint three-year reviews; and prior notice of any motion by DOE filed with the court to modify the consent decree with Washington or invoke judicial dispute resolution proceedings.

The TPA would extend the current schedule for completing retrieval of waste from single-shell tanks from 2018 to 2040, and completing treatment of all tank waste from 2028 to 2047. With a goal of accelerating the completion dates, the proposed agreement adds a process for reviewing the final completion dates every six years. Each six-year review will determine whether the completion dates can be accelerated.

As a result of the negotiations and settlement, DOE will also issue an upcoming draft environmental impact statement that will include a preferred



*Shirley Olinger, Manager of DOE's Office of River Protection at Hanford and Secretary Chu climbed over 100 steps to reach the current top elevation of Hanford's Waste Treatment Plant Pretreatment Facility. When complete the facility will be twice as tall.*

alternative of not importing certain off-site radioactive, mixed radioactive and hazardous waste to Hanford at least until the WTP is operational. Once the draft environmental impact statement has been issued, the state and DOE will move to enter the consent decree with the federal court and will also finalize the TPA modifications.

Under the agreement, DOE will also prepare a lifecycle analysis of all Hanford cleanup costs to meet legally mandated timelines for cleanup. The Tri-Party Agreement agencies also finalized and signed changes in the agreement that establish new milestones for cleaning up contaminated groundwater under the Hanford Site to ensure protection of the Columbia River. ■

## – PROCUREMENT –

### ■ Depleted Uranium

#### Hexafluoride (DUF6) Operations

**Contract:** Proposals for the DUF6 contract are due **August 17, 2009**. This solicitation would award two cost-plus-award-fee contracts for the operation of the DUF6 conversion facilities at the Portsmouth Gaseous Diffusion Plant in Ohio and the Paducah Gaseous Diffusion Plant in Kentucky. The estimated value of this five-year contract is \$350 to \$450 million. It has an anticipated start date in late 2010.

### ■ Proposals for Portsmouth

#### Gaseous Diffusion Plant D&D

**Contract:** The Request for Proposal establishes a staggered submission of proposal data to streamline the procurement process. Past performance; Key Personnel and Organization; and Corporate Experience sections of the proposal are due **August 24, 2009**.

The single cost-plus-award-fee contract has a projected funding range of \$2.5 billion to \$3.2 billion over a ten-year period.



## A Recovery Act Refresher in D.C.

The people charged with turning the American Recovery and Reinvestment Act's nuclear cleanup goals into reality gathered in Washington last week and found they had a lot to share, a lot to be proud of and a lot of work still ahead.

Some 130 contractors and federal employees attended the two-day "ARRA Information Exchange Meeting" organized by the U.S. Department of Energy's Office of Environmental Management.



Cynthia Anderson, Director of EM's Recovery Act Team

With six months of hard-earned Recovery Act experience behind them, they were eager to hear how their peers were handling the common challenges of recruiting, hiring and training new workers, meeting oversight demands and getting started on actual cleanup work.

They also wanted to hear the latest word from senior EM and DOE officials on what priorities they should be keeping in mind as they put more of the \$6 billion in EM Recovery Act funds to work.

Cynthia Anderson, Director of EM's Recovery Act Team, said she was pleased with the back and forth at the meeting. "Everybody thought this was an excellent opportunity for the contracting community as well as

the DOE community to discuss the Recovery Act," she said

The key takeaway messages for contractors, said John Mocknick, Recovery Act Team Leader, were the need "to perform...and do it safely."

Anderson also reminded the group that if they fail to meet expectations, funds designated for their projects will be shifted to others waiting in line.

The group heard recaps of milestones already achieved such as more than 4,000 jobs created or saved, more than \$4 billion in Recovery Act funds already obligated to contracts and more than \$140 million actually spent.

Representatives of major EM sites such as Hanford, Savannah River, Oak Ridge and Idaho also delivered updates on specific steps they are taking to further Recovery Act goals and the impact they are having on their local economies.

Matt Rogers, a Senior Advisor to Energy Secretary Stephen Chu, told the group that those efforts are making a difference in putting people back to work and helping small businesses get back on their feet.

"If the Recovery Act is touching people in their communities, then the Recovery Act is working," Rogers said, adding "you folks are having a major impact on the unemployment rates in your communities."

He also said that so far the impact of Recovery Act projects was being noticed more by local media than national media.

Dr. Inés Triay, Assistant Secretary for EM, reminded the group of some fundamental principles. In moving forward with Recovery Act work, she reminded them their first priority must be making sure "our safety culture remains strong and remains our highest value."



EM field staff and contractors listen to Assistant Secretary Inés Triay talk about the Recovery Act.

"There is no milestone, no schedule consideration, no cost consideration that justifies any kind of injury to our workers," she said.

Triay added that the incident last month at Hanford where a worker was seriously injured in a fall "is very sobering, when you think about what could have happened to that worker."

She said the same kind of seriousness must be applied to delivering EM's projects "on time and within cost" and that "rigor and discipline has to permeate the entire EM Program."

Bob Raines, Director of Project Management Systems and Assessments

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Bob Raines, Director of Project Management Systems and Assessments for DOE's Office of Engineering and Construction Management

– SECRETARY CHU GETS ACQUAINTED WITH HANFORD –



▲ Following their tour of the Waste Treatment Plant, Secretary Chu, along with Senators Patty Murray and Maria Cantwell, Washington Governor Chris Gregoire, Oregon Governor Ted Kulongoski and other officials announced agreements on Hanford cleanup deadlines.



▲ Secretary Chu and Senator Maria Cantwell (D-Wash.) toured the Waste Treatment Plant's Pretreatment Facility and talked with DOE employees about the intricacies of designing and building a first of a kind facility to separate liquid radioactive waste for treatment.

◀ Secretary Chu, with Bechtel National's Director for the Waste Treatment Plant Ted Feigenbaum, asks questions about construction of the Pretreatment Facility for Hanford's vitrification plant.

## Recovery Act

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for DOE's Office of Engineering and Construction Management, said that if DOE can build a record of delivering Recovery Act projects on budget it will have a very good shot at getting off the Government Accountability Office's list of high-risk agencies.

GAO applies the high-risk designation government-wide to programs and functions it considers vulnerable to waste, fraud, abuse and mismanagement.

But Raines warned that project managers must be realistic about the risks they face and set aside adequate financial reserves to cover them. If a particular project proves unwieldy, he recommended breaking it down into smaller pieces whose costs can more easily be estimated.

If projects "come in over budget, that's the headline," Raines said. "And we don't want that to be the headline."

In a typical year, he said, DOE finishes 15 large projects. But with the additional Recovery Act funding that level will jump to 70 to 80 projects a

year. If those come in on budget, he said, "I think you will turn the tide."

Bill Levitan, Director of EM's Office of Compliance, pointed out that Recovery Act funds are going to help EM meet cleanup milestones it has previously agreed to with federal and state environmental regulators.

That, he said, represents an opportunity for EM. "This whole thing is about our credibility," he said, adding, "with all these commitments, if we keep them or exceed them—that increases the credibility of our Program, which bodes well for the future." ■



## DOE Training Pays Off in UF6 Incident

Just around midnight on Saturday, August 1, on a lonely stretch of Interstate 64 in West Virginia, a pickup truck ran off the road and set off a chain of events that would show how valuable the U.S. Department of Energy’s training programs can be to emergency responders when they are confronted with a road accident involving nuclear materials.

The pickup bounced off a guardrail on the westbound side of the highway, careened across the median and slammed into the guardrail on the eastbound side of the road, spraying debris across the traffic lanes.

Moments later, David Fisher, who was driving a tractor trailer loaded with uranium hexafluoride (UF6) encased in a steel cylinder, came on the scene.

He barely had time to react before the debris on the roadway knocked out the steering on his truck and the Freightliner rig and its 33,000 pound load climbed the steeply sloping right shoulder, flipped onto the driver’s side and skidded to a stop 300 yards down the road with its fuel tanks on fire.

Fisher, 48, who was wearing seat belts, survived the crash but had to kick out the truck’s windshield to escape the spreading fire which quickly reduced the entire tractor portion of his rig to a smoldering hunk of metal.

He was hauling the cylinder as a commercial shipment for R&R Trucking of Duenweg, Missouri, a carrier that specializes in moving nuclear and defense materials. The load originated at the United States Enrichment Corporation in Paducah, Kentucky and was bound for Portsmouth, Virginia for shipment overseas.

The first three fire departments to arrive on the scene were volunteer units from neighboring towns and an adjacent county that had no radiation detection equipment with them.

When they saw the radioactive and corrosive placards on the trailer, they pulled back from the scene and ordered an evacuation of the nearby town of Sandstone, West Virginia.

*“We were a whole lot calmer than we would have been because we had been through the training, and we made better decisions.”*

*– Lieutenant Bryan Trump  
Beckley, WV, Fire Department*

It was shortly after 1 a.m. when firefighters from Beckley, West Virginia, arrived on the scene and put their radiation detection equipment and recent training provided through DOE’s Transportation Emergency Preparedness Program (TEPP) to use.

In May, some 36 members of the Beckley Fire Department had completed two days of DOE training on how to handle transportation accidents involving radioactive materials. The course was given by Technical Resources Group, a DOE contractor, in Beckley.

Since its inception in 1990, the TEPP program has worked with state, local and tribal officials to train emergency responders.

The program is managed for the Department of Energy by the Office of Environmental Management. The training the Beckley firefighters received was through the Modular Emergency Response Radiological Transportation Training (MERRTT) Program. Last year, it reached 2,306 emergency responders in 132 sessions held throughout the country.

Lieutenant Bryan Trump of the Beckley Fire Department said the training took a lot of the anxiety out of dealing with the situation on Interstate 64.

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*The intact UF6 cylinder is lifted into place on a replacement trailer one day after its planned trip overseas was interrupted by a crash on Interstate 64.*



## UF6 Incident Ends Well

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“We were a whole lot calmer than we would have been because we had been through the training, and we made better decisions,” he said.

He and his crew methodically took a complete series of radioactivity readings at the scene and when they found no elevated levels, they were able to stop the evacuation that was underway. At that point about 100 people had already been roused from their homes and told to seek shelter at the Sandstone High School.

“We were glad that we were able to assist someone and prevent it from

being blown out of proportion,” Trump said, “it was worth sitting in the class.”

Ella McNeil, EM’s program manager for TEPP, said its training focuses on helping emergency responders understand the risks posed by radiological materials and gain proficiency in operating whatever radiation detection equipment they may have.

In the case of uranium hexafluoride, she said, the greatest concern from the breach of a container would be having the material come in contact with water or water vapor which could create a hazardous chemical cloud.

McNeil said the Beckley department’s response “shows that the TEPP

program is making a difference to the responder community when there is an accident involving radiological materials.”

Cleaning up the aftermath of the crash continued until late in the day on Sunday, August 2. Allen Neal, vice president of nuclear services with R&R Trucking, who was on the scene, requested that traffic be halted in both directions on Interstate 64 while the uranium hexafluoride cylinder, which had worked loose of the truck’s flatbed trailer during the crash, was lifted off the ground. He said he wanted to be sure there were no breaches of the steel container in an area that wasn’t visible.

But it was still intact when it was lifted onto a relief truck for a trip back to Paducah. “It’s very heavy duty,” said Neal.

He said Fisher received several staples in his scalp at a local hospital for cuts he received in the crash but was otherwise okay. The driver of the pickup truck was given a breath test by police officers at the scene and was found to have a blood alcohol level of .124, above the legal limit of .08 in West Virginia. He was charged with driving under the influence by the Summers County, West Virginia, Sheriff’s Office. ■

### – PEOPLE –

■ **Dae Chung** has been named EM’s Principal Deputy Assistant Secretary. He previously served as Deputy Assistant Secretary for Safety. Since joining the Department of Energy in 1989, he has held increasingly responsible technical and management positions in the Office of Environment, Safety and Health, the Office of Nuclear Energy, the Office of Defense Programs, and EM. He holds a Bachelor’s degree in Nuclear Engineering from the University of Maryland and a Master’s in Mechanical Engineering from the University of Pittsburgh.

■ **Cynthia Anderson** has been named Director of the EM Recovery Act Program and is responsible for managing all aspects of the Program including defining the scope, cost, and schedule for each project. She also serves as EM’s Deputy Chief Operations Officer. She holds a Bachelor’s degree in Chemistry and Computer Science and a Master’s in Business Administration.

■ **Desi Crouthers** has been named Director, Office of Human Capital. He is responsible for EM’s Human Capital Strategy and complex-wide workforce planning activities. He holds Bachelor’s degree in Engineering from Mississippi State University and a Master’s in Strategic Planning and Human Resource Management from the University of Texas at Dallas.

■ **Joann Luczak** has been named Director, Office of Budget. She will be responsible for planning, formulation and execution activities of the EM budget. She has over 19 years experience with the Department of Energy and most recently served in the Office of the Chief Financial Officer. She holds a Bachelor’s degree in Political Science and Economics and a Master’s in Political Science.

### EM Update

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## – ROUNDUP: COMMENTS ON THE HANFORD ACCORDS –

### Washington Governor

#### Chris Gregoire:

“This is a great day for Washington State, our neighboring state of Oregon, and the entire nation. It’s a great day for the Columbia River, a lifeline of the Pacific Northwest, and for all the communities downstream from Hanford. We now have strong partners in the White House who are committed to cleaning up the existing toxic contamination and improving the health and safety of our citizens.”

### Oregon Governor Ted Kulongoski:

“The agreements announced today mark a critical turning point in our bi-state and federal partnership to clean up the Hanford site. I believe this renewed commitment to an aggressive cleanup schedule and oversight will finally deliver the public health and environmental protection for the citizens on both sides of the Columbia River.”

### U.S. Energy Secretary

#### Steven Chu:

“Our agencies share a common interest in the protection of the environment, the public and the Columbia River. This agreement will ensure continued cleanup progress at the Hanford Site. I appreciate the commitment, perseverance and professionalism of all the people in the many organizations involved in these negotiations, who worked tirelessly over the past two years to reach this accord.”

### U.S. Environmental Protection Agency Administrator Lisa Jackson:

“With today’s announcement, we are charting the course for a successful cleanup at Hanford. We simply must step up to the challenges at Hanford to protect the Columbia River and the communities that depend on it. Today, we renew our commitment to get the job done and get it done right.”

### U.S. Attorney General

#### Eric Holder:

“I am pleased the parties have come together after years of effort to reach these important agreements that set Washington State, Oregon and the federal government on a pathway to cleaning up these sites. These historic settlements reflect the administration’s strong commitment to environmental protection here in the Pacific Northwest and around the country.”

### U.S. Senator

#### Patty Murray (D-Wash.):

“This agreement is a blueprint for making real progress toward clean up goals. But to meet those goals we need to follow through with consistent budgets and a commitment to smart clean up policies. The people of this community have done everything that’s been asked of them. We not only have a legal obligation to meet cleanup milestones, we have a moral obligation to ensure this community’s sacrifices are being honored.”

### U.S. Senator

#### Maria Cantwell (D-Wash.):

“This agreement will provide more certainty in meeting cleanup milestones in order to help protect Columbia River communities while more quickly transitioning the site to new uses like a clean energy park. We now have the state and the Department of Energy on the same page working to open up this land to new uses, including clean energy generation. This is good news for the Tri-Cities economy.”

### U.S. Representative

#### Doc Hastings (R-Wash.):

“Throughout this long process, it’s been clear that both Washington State and DOE have a shared commitment to cleanup. With today’s announcement we can see that cleanup can best be achieved when parties sit down, talk and persevere through impasses and reach agreement. I’m hopeful that these changes will result in smooth, continuing cleanup progress.”

### Washington Attorney General

#### Rob McKenna:

“I’m proud to join my fellow state and federal leaders in announcing this settlement which includes firm timelines for Hanford cleanup that are directly enforceable by the court. By confirming its accountability for cleaning up this deadly waste, the federal government honors the Tri-Cities’ contribution to defending our country from World War II through the end of the Cold War.”



– IN BRIEF: NEWS FROM AROUND THE COMPLEX –

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environmental management contractor at Oak Ridge.

The three ponds are located on a portion of the site near the East Tennessee Technology Park and adjacent to a 50-acre tract where the Community Reuse Organization of East Tennessee is starting construction on two new multi-purpose commercial buildings.

The ponds were created in the 1950s to capture storm water runoff on the site and over the years their sediments had become contaminated with polychlorinated biphenyls (PCBs). Because the fish in the ponds were bottom feeders, they were disturbing the sediments in the ponds and ingesting PCBs.

After consulting stakeholders, regulators and members of the public, Oak Ridge developed a remediation plan for the ponds. It called for removing the previous fish populations and lowering water levels so that the ponds could be recontoured with clean soil and new aquatic vegetation could be planted. The final step would be introducing the new species of fish.



Workers planting new aquatic vegetation.

Hill said other options were considered included draining the ponds completely and filling them in or excavating all PCB tainted soil. But he said the community preferred the restoration option.

■ **Portsmouth: Looking For Work**

More than 480 job seekers attended a job fair on August 5 held at the Ohio State University Endeavor Center in Piketon, Ohio, to apply for future cleanup jobs at the Portsmouth Gaseous Diffusion Plant. The fair was sponsored by LATA/Parallax Portsmouth, the U.S. Department of Energy’s environmental remediation contractor at the site.



Lining up for cleanup jobs in Ohio.

■ **Headquarters: The Plume Book is Out**

The Office of Environmental Management has issued the third edition of its continuing reports on the state of groundwater contamination at U.S. Department of Energy sites.

The August 2009 version adds four sites—Lawrence Livermore, Sites 200 and 300, the Nevada Test Site and the Pantex Plant in Texas, and twenty plumes to those covered in last year’s report.

It also identifies remedial activities that will benefit from American Recovery and Reinvestment Act (ARRA) funding.

The report, titled “Groundwater

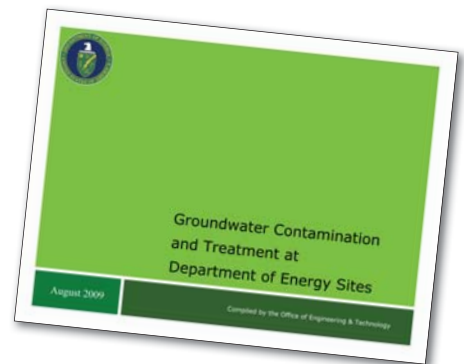
Contamination and Treatment at Department of Energy Sites,” summarizes the nature and extent of groundwater contamination and details the approaches being taken to address the problem.

The updated document includes maps and assessments of 94 plumes at thirteen DOE sites.

DOE has one of the largest groundwater contamination problems and subsequent cleanup responsibilities in the world, in terms of the volume of affected groundwater, number of plumes, range of hydro-geologic settings, and diversity of contaminants.

The new booklet can be accessed on the EM Portal.

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## Just One More Big Pour To Go

On the night of August 4, workers carried out a successful concrete pour for the last big piece of the slab floor for the basement of the Salt Waste Processing Facility [SWPF] at the Savannah River Site.

Completing Placement 14 involved pouring more than 1,000 yards of concrete delivered by a steady stream of 113 mixing trucks that rolled into the site all night.

That left only the final piece of the floor—Placement 15—to be finished before the entire eight-foot thick slab floor would be in place.

David Bender, the U.S. Department of Energy’s Construction Manager for the project, said the pour was initially scheduled for August 11, but had to be called off because of threatening weather. He said he expects the final pour will take place early next week.

Getting the floor in place will mark the first major milestone in construction of the \$1.3 billion facility that is scheduled to begin operations in 2013.

The floor has taken shape through a series of large-scale pours that started in June.

Construction workers and engineers did all of their summer pours at night to take advantage of cooler temperatures and lower humidity and help the large volumes of concrete set up and cure properly.

When the SWPF begins operation it will have the capacity to process up to 7.3 million gallons of liquid radioactive waste annually. Bender said the plant is designed to separate the portion of the waste with higher levels of radioactivity and concentrate it for vitrification at the Defense Waste Processing Facility

at the site. The remainder of the waste—with lower levels of radioactivity—will be processed and disposed of as industrial waste.



Night work on a concrete pour, left, and an aerial view of the SWPF showing the slab floor taking shape, below.



### – IN BRIEF: NEWS FROM AROUND THE COMPLEX –

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#### ■ Hanford: Accident Report Is Complete

The Type B Accident Investigation Team completed its investigation of a July 1 accident that resulted in serious injuries to a Washington Closure Hanford LLC (WCH) worker. The team delivered a report

to the Richland Operations Office Manager on August 4.

Type B investigations are conducted when a worker suffers a serious injury but no fatalities are involved. The Richland Operations Office (RL) has taken appropriate contract action and will work closely with WCH over the next few months to ensure that

program changes are implemented. The Department of Energy’s Accident Investigation determined that failures in work planning and supervision contributed to the event. RL will evaluate mitigating factors and the effectiveness of corrective actions before taking any final contract action.

