



River Corridor Closure Project

Recovery Act Weekly Report

For the week ending January 17, 2010

Contract DE-AC06-05RL14655

Overview

Background Summary of Projects that Washington Closure Hanford (WCH) will accomplish using ARRA funds (pending definitization of scope and contract modifications).

A. The Environmental Restoration Disposal Facility (ERDF)

ERDF is the hub of the WCH scope of work and supports a major portion of other Hanford contractor (OHC) waste disposal. Wastes collected from sites around the Hanford complex are brought to ERDF for treatment and disposal. WCH operates the ERDF and is currently using ARRA funds to upgrade and expand its capabilities to meet the needs of Hanford's accelerating mission.

B. The 618-10 Burial Grounds

The trenches at 618-10 have long been regarded as some of Hanford's worst waste sites. Using ARRA funds, WCH will characterize the site. Intrusive and non-intrusive techniques will be used, and the subsequent analysis of data will enable the project to pursue remediation of the site safely and effectively.

C. The 618-11 Burial Grounds

Along with 618-10, the 618-11 Burial Grounds are among the biggest challenges faced by WCH using ARRA funds. The 618-11 characterization work will require special care because of its proximity to the Energy Northwest Generating Facility, north of the 300 Area.

D. Waste Site Remediation

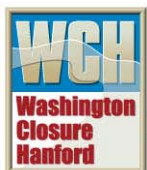
WCH is employing ARRA funds to clean up many failed waste sites not originally part of its contract. Sites in the 100-F and IU 2&6 segments 1&2 are proposed for waste site remediation in the two year period starting in October 2009.

E. Confirmatory Sampling of other new sites

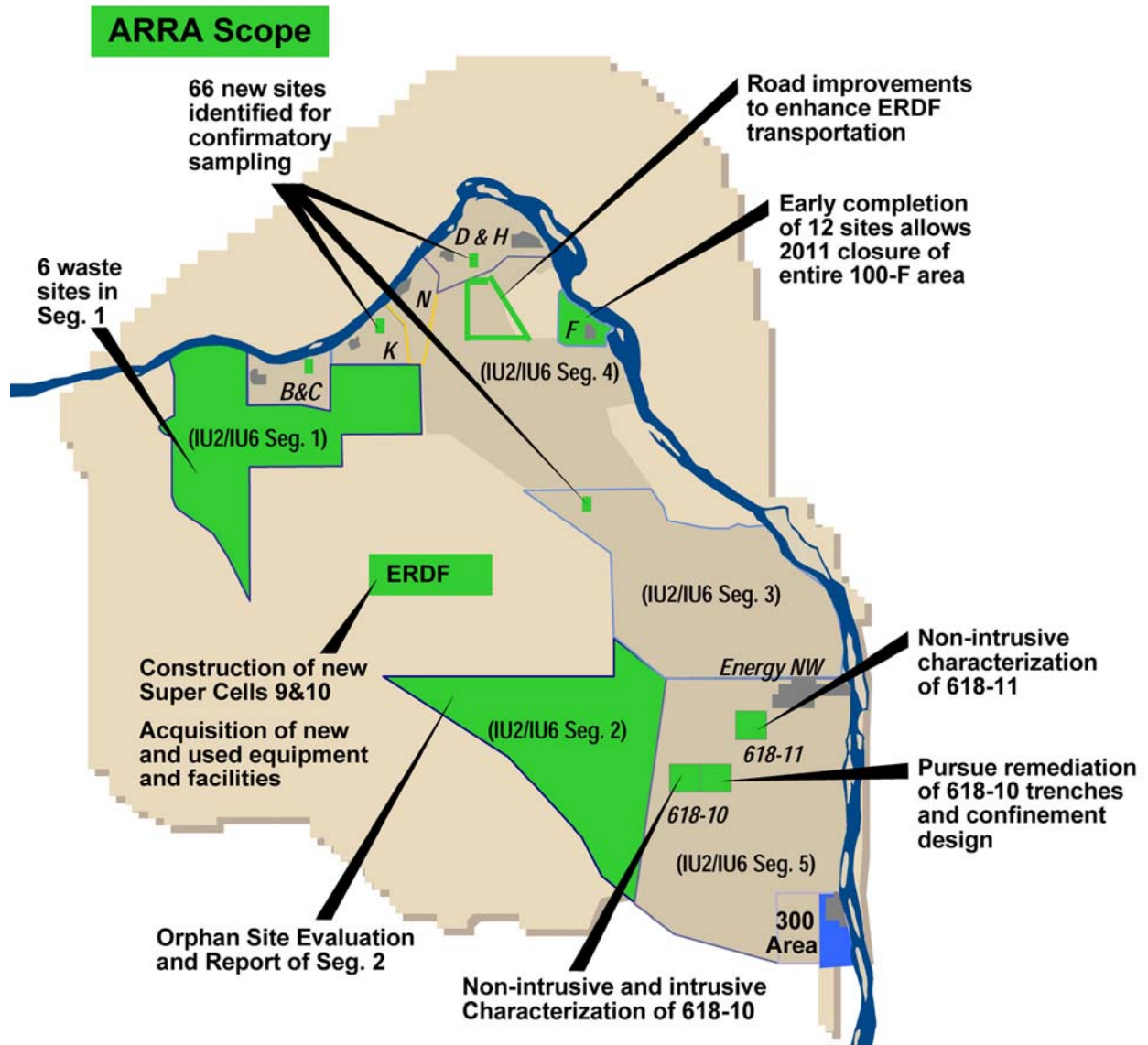
WCH is proposing to complete the early sampling process of 66 potential waste sites using ARRA funds. Confirmatory sampling is performed for sites that require additional information for determining if the site requires remediation. Details including chemicals of potential concern, specific sample locations, frequencies, sampling protocols, and analytical methods are presented in site-specific work instructions. Samples are then collected and analyzed for radionuclide and/or non-radionuclide chemicals of potential concern to determine if the site requires remedial action.

This weekly report will provide evidence of these activities as they occur in support of ARRA.

The following figure illustrates the overall scope of WCH's ARRA projects.



Overview (Continued)



Safety

Safety Accomplishments

As of December 22, 2009, WCH and its subcontractors have worked more than 112,000 hours of ARRA scope with no safety incidents.

Hazard Reductions

The U.S. Department of Energy (DOE) recently released the new site-wide Stop Work procedure. This procedure was a joint effort between all site contractors and Hanford Atomic Metal Trades Council (HAMTC), and will be implemented across WCH on February 1. The new procedure will replace WCH's current "Stop Work" policy.

The new procedure is designed to have consistent language and issue resolution across each of the contractor organizations at Hanford. As such, there will be a single term for a work stoppage, which will be "Stop Work." While WCH will no longer use the terms "Time Outs" or "Work Pauses," the real issue is not what we call it, but how we respond to it. DOE and WCH management have acknowledged that its workers are "first in class" in identifying issues, stopping the job, working with supervision to resolve the issue, and safely getting back to work. Nothing about this process will change with the new procedure.

The one significant addition to the procedure is that management will need to reach mutual agreement on the resolution of the concern with the individual that stopped the work, prior to restarting. While this might be new to the procedure and other Hanford contractors, it is not new to WCH, which has always strived to involve the concerned individual in discussions to resolve the issue satisfactorily. This has been, and will continue to be, an integral part of how WCH responds to work stoppages.

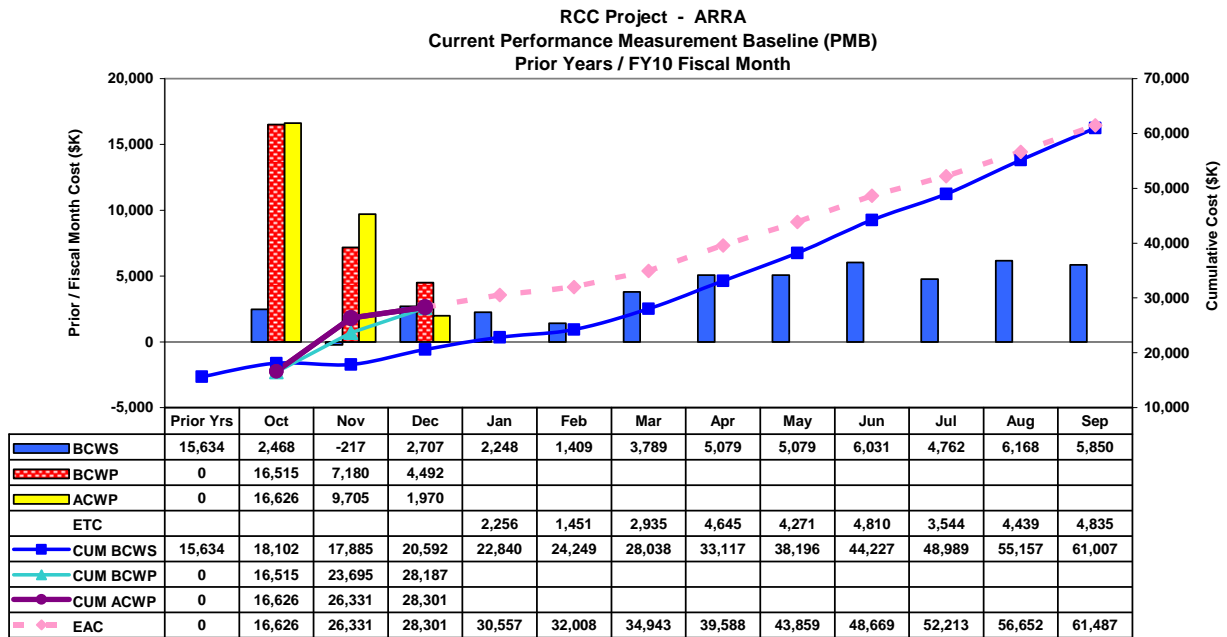
During the weeks of January 18-21 and January 25-28, briefings on the "Stop Work" procedure will be conducted during plan-of-the-day meetings by WCH supervisors and HAMTC safety representatives.



Cost/Contract Status

Contract Mod #	Date	Scope	Obligated (\$M) (Inception to Date)	Not to Exceed (\$M) (Inception to Date)
099	4/9/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$203.0	\$28.0
105	4/30/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$203.0	\$44.5
126	7/23/09	H.37 Clause - Reporting Requirements	N/A	N/A
139	9/3/09	ERDF Cell Expansion & Upgrades; 618-10 NIC	\$253.6	\$44.5
142	9/30/09	ERDF Cell Expansion & Upgrades; 618-10 NIC; Road Upgrades; Remediation of Orphan Sites	\$253.6	\$123.8

Contract Modification #142 is the definition of the Phase 1 scope of work and was incorporated into the Integrated Project Baseline (IPB) (Performance Measurement Baseline) beginning with October 2009 reporting.



ARRA Actuals (includes PMB and Proposal 2)

Apportionment Number	Apportionment Title	PMB or Balance *	Dec 2009	Inception To Date	NTE Amount
RL-0041.R1.2	ERDF Cell Expansion	PMB	696	21,922	
		Balance	475	2,083	12,000
RL-0041.R2	River Corridor Soil & Groundwater (618-10)	PMB	1,274	6,380	
		Balance	50	183	5,000
Sub Total		PMB	1,970	28,301	
		Balance	526	2,265	17,000
Fee			204	1,840	
Total			2,700	32,407	

* PMB is the Phase 1 Performance Measurement Baseline. Balance is Proposal 2



ERDF

Super Cells 9 and 10 Construction

Under subcontract to WCH, DelHur Industries has excavated 1,747,517 cubic yards of material for super cell 9 (including 263,913 cubic yards of stockpile removal). Excavation has reached the specified elevation of super cell 9 and the removal of the south ramp into the super cell is underway.

DOE Headquarters continues its review of the award package for the excavation of super cell 10 and the construction of super cells 9 and 10.



DelHur Industries has reached the specified depth of 70-feet of super cell 9 at the Environmental Restoration Disposal Facility.

ERDF (Continued)



DelHur Industries personnel began excavating the south ramp, upper left, at the Environmental Restoration Disposal Facility.

Facility and Equipment Upgrades

Final testing and calibration were conducted at the new scale. The new scale and reader board on the back road to the facility are part of the waste tracking system. Waste shipments will be entered real-time into the Waste Management Information System (WMIS).

The scale is expected to be operational by the end of January.

Prequalification questionnaires were sent to companies interested in expanding the truck maintenance facility, constructing the new equipment and container maintenance facilities, and the new operations center. WCH will evaluate the potential subcontractors that meet requirements and are interested in receiving a request for proposals (RFP).

The transportation truck maintenance facility will include two additional truck bays, an exterior awning that will cover a concrete pad, and a conference room. The container maintenance facility will include a large container repair line, a maintenance shop, a weld area, a lunch area, and an exterior awning over a concrete pad. The equipment maintenance facility will include two service lines, an operational storage facility, a large concrete pad, and an exterior awning

ERDF (Continued)

over a smaller concrete pad. The new operations center will contain a large meeting room, an administrative area, several offices, and a lunch area.



Plans are to expand the truck maintenance facility at the Environmental Restoration Facility. The proposed design calls for two more truck bays to be added to the facility.

Bids to build a new a new septic system and onsite refueling station are being evaluated. The award package is expected to be extended in February. The existing septic system is near its capacity and unable to handle the additional demands of the proposed facility upgrades. The new system will be capable of servicing both the proposed facilities and the existing facilities.

Staff from WCH's information technology (IT) team met with ERDF designers and engineers to discuss the new container monitoring system. WCH is planning to adapt a system originally designed by Pacific Northwest National Laboratory (PNNL) for Army cargo containers to meet ERDF's needs. The system would allow for ERDF operations personnel to identify how many full and empty containers are available at the generator sites as well as ERDF. The IT team reviewed future generation sites to make sure power and data transmission is available.

ERDF (Continued)

Upcoming Activities

- Continue excavation of super cell 9
- Evaluate bids for new septic and onsite refueling systems
- Continue to develop RFP for design and construction of truck maintenance facility, container maintenance facility, and equipment maintenance facility



Profile

Rule Steel does not mind a little trash talking. In fact, you could say garbage is one of its specialties.

Rule Steel and its 125 employees are based in Caldwell, Idaho. They design and fabricate tanks, structural and miscellaneous steel for buildings, waste and recycling containers, and stainless steel wine fermentation bins.

The company recently completed its second order of 150 roll-on/roll-off waste containers to Washington Closure Hanford. Three containers, paid for with Recovery Act dollars, were delivered each day from late September through early December to the Environmental Restoration Disposal Facility (ERDF).



Rule Steel workers construct one of the 150 waste containers delivered to the Environmental Restoration Disposal Facility. Rule Steel is based in Caldwell, Idaho.

Profile (Continued)

Rule Steel, which provided the first order of 150 containers to WCH last year, worked closely with ERDF Operations Manager Jeff Armatrout and his staff to develop the containers.

“The unique part of this order was that we worked in conjunction with Jeff and his staff to provide a container designed and stamped by a professional engineer,” said Tim Keith, a sales manager at Rule Steel.

The containers are used to transport chemically and radioactively contaminated material such as soil, concrete, steel debris, and demolished piping. The contaminated material is loaded into the containers near the excavation or demolition sites and transported to ERDF, where the contents are dumped. The new containers were necessary to accommodate increasing waste generated by Washington Closure and other Hanford contractors.

The containers are 20 feet long, about 8½ feet wide and nearly 5 feet high. They weigh 7,600 pounds and can load up to 60,000 pounds, which includes the container and waste.

Keith said his company, which is celebrating its 50-year anniversary, values its working relationship with WCH.

“The people at WCH have been a real pleasure to work with,” Keith said. “In today’s difficult economy, our number one goal is to keep our people working, and an order like this helps us do that.”



Profile (Continued)



The new containers delivered to the Environmental Restoration Disposal facility weigh 7,600 pounds.

Video

[Click here to view a video of Rule Steel, which provided 150 new waste containers to the Environmental Restoration Disposal Facility \(coming Monday\).](#)

618-10 Burial Ground

618-10 Non-Intrusive Characterization/Trench Remediation Project

WCH subcontractor North Wind Inc. has completed the installation of 376 cone penetrometers around the 94 vertical pipe units (VPUs) at the 618-10 Burial Ground. Four cone penetrometers are placed 6 to 8 inches around each VPU.

Cone penetrometers are narrow steel cylinders that house instruments used to determine the type and distribution of radioactive materials within the VPUs, which are five bottomless 55-gallon drums welded together to form a pipe. From 1954 to 1963, highly radioactive waste generated from Hanford's 300 Area was dumped into the VPUs.

North Wind also continued with radiological characterization activities. Workers are using a multi-detector probe (MDP) designed for measuring radiation sources. The MDP, which is lowered into the cone penetrometers, includes two gamma-ray detectors used as spectrometers, two neutron detectors, and a gross gamma detector. Measurements are taken each foot with a 3-minute count time. A radiological control technician then checks for contamination as the MDP is removed from the cone penetrometer. A computer is used to analyze data, showing graphics of the detector's activity.

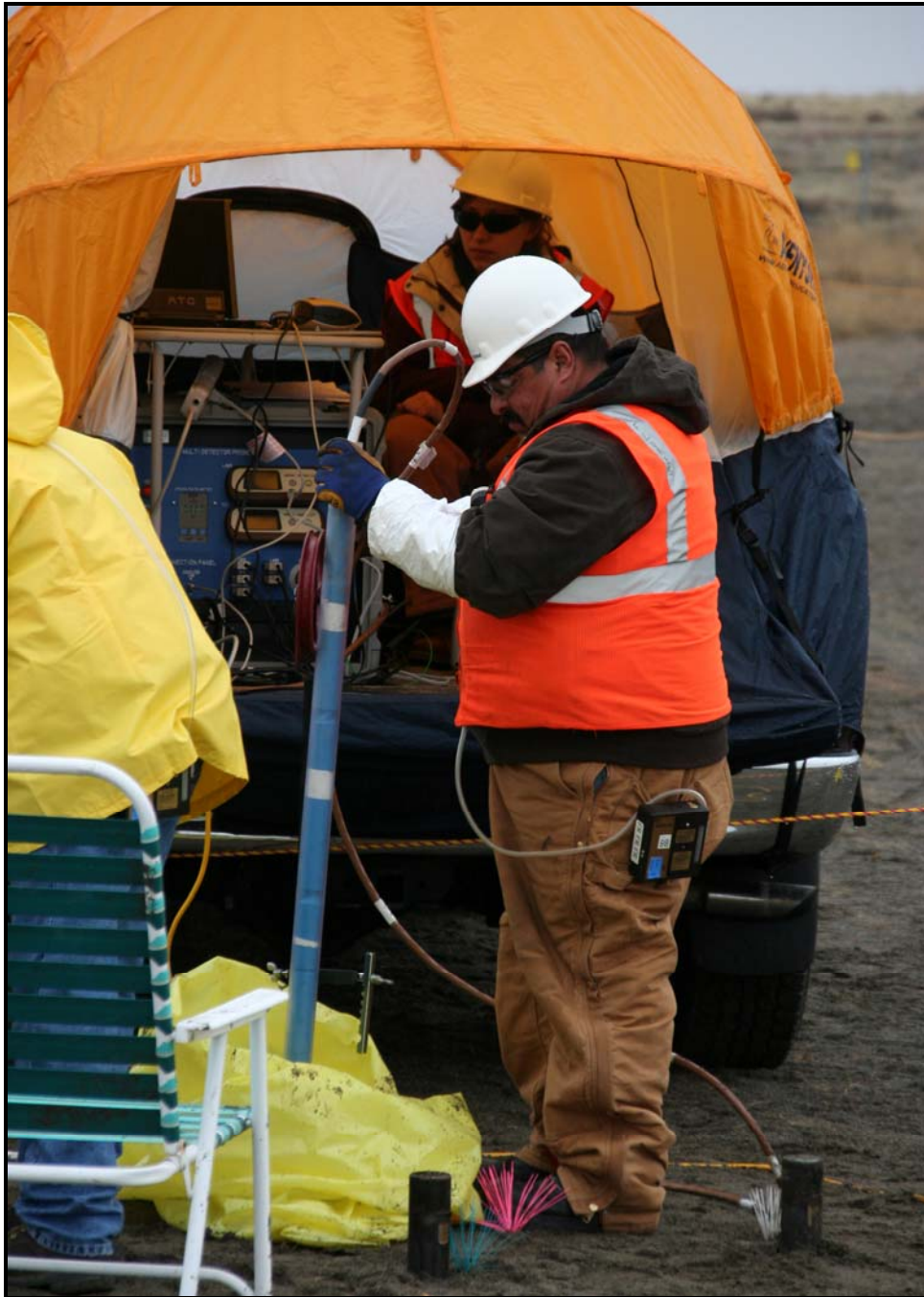
Upon completion of the MDP measurements, the cone penetrometers are capped close to the ground surface so future activities will not be affected.

Upcoming Activities

- Continue confinement design criteria development activities
- Continue soil sampling project startup review development activities
- Continue VPU radiological characterization activities



618-10 Burial Ground (continued)



A North Wind employee inserts a multi-detector probe into a cone penetrometer during radiological characterization activities at the 618-10 Burial Ground.

F Area

WCH is still in the process of evaluating prequalification questionnaires from companies interested in remediating the remaining F Area waste sites. An RFP will be sent to potential subcontractors that meet requirements. Work continues to prepare design drawings for the waste sites.

Remediation will involve the excavation of radioactive and hazardous soil and debris, and the packaging of the material to be shipped to ERDF. A wide range of contaminated soil, miscellaneous debris, buried equipment, and structural materials may be encountered during remedial activities.

The remediation sites are: 100-F-26:4 pipeline, 100-F-26:7 pipeline, 100-F-44:8 piping, 100-F-44:9 pipeline, 100-F-45 riverbank pipeline, 100-F-47 substation, 100-F-48 coal pit debris, 100-F-49 maintenance garage, 100-F-51 fish lab, 100-F-55 ash layer, 100-F-56 scattered surface debris, 100-F-57 pump house pipe cradle debris, and 100-F-58 scattered ACM debris.

IU 2 & 6 Segment 1

Some data from the waste profile samples collected last month at the six waste sites have been received. Cultural resource reviews for two of the waste sites continue. Ecological and cultural reviews for the remaining four sites are complete. A change notice was developed that will authorize the existing remedial action subcontractor based at 100-H Area to conduct field work at IU 2 & 6 Segment 1. Preparations are being made for a project startup review meeting.

The sites at IU 2& 6 Segment 1 contain mostly surface debris that must be removed and transported to an approved disposal facility.



Confirmatory Sampling

The team is still in the process of drafting sampling instructions for waste sites at the 100-D and 100-K Areas. This includes conducting historical research and consulting regulatory documents, developing a list of contaminants of potential concern to be sampled, and determining potential sample locations for review by DOE and Hanford Site regulators.

Planning for 100-D Area pipeline waste sites also continues. These sites consist of many pipe segments that are frequently not related to one another. Therefore, pipeline sites are usually broken into smaller, more manageable subsites based on usage, location, and relationship to other waste sites. The team drafted sampling instructions for each subsite, as appropriate, and is meeting with DOE and Ecology to brief them ahead of document reviews.

Work also continues on developing procurement documentation. In late January or early February, WCH will issue an RFP for a company to provide excavation and sampling support for all 66 sites. Sites that pass the confirmatory sampling process will be closed out and no further action will be required under the existing interim record of decision. Those that fail will be recommended for cleanup to meet regulatory standards.

Sampling of the sites is expected to begin this spring.



General

Mentoring/Training

No significant activities this week.

Media, Visits, Press Releases

WCH conducted a media tour of the 618-10 Burial Ground. Local reporters were provided an update on work at the site, where ARRA dollars are accelerating characterization of the burial ground in preparation for cleanup.

A reporter from CNN's Seattle bureau toured the Environmental Restoration Disposal Facility to gather information for a piece on how ARRA funding at Hanford has affected the local economy. The reporter interviewed workers and took video of the facility.



Ron Morris, Subcontract Technical Representative for Washington Closure Hanford, prepares to do an interview with reporters who visited the 618-10 Burial Ground.

Contracting Actions

- Change notice issued to subcontractor FE&C for remediation of inter-areas Segment 1 waste sites.