



Environmental Restoration Contractor accelerates cleanup in FY 2001

In fiscal year 2001, the Environmental Restoration Contractor team and non-ERC cleanup activities safely removed 610,000 tons of waste from the Columbia River corridor, 13 percent more than planned. In fact, the ERC team led by Bechtel Hanford has exceeded quantities planned for the past six years. By the end of FY 2001, the ERC team had removed 3.2 million tons of radioactively and chemically contaminated materials from the river corridor, 30 percent of the estimated total volume.

100F Area

At F Reactor, 370,000 tons of contaminated material were removed in FY 2001 as the ERC team cleaned up concrete, steel and soil from liquid waste sites. These sites included effluent piping, drainage and sewer systems, along with unplanned-release areas.

In July, an excavator removes a contaminated outfall structure that once released cooling water into the river from B and C reactor effluent-retention basins. The ERC team has removed 3.2 million tons of such contaminated materials from the river corridor.

A visible, highly contaminated site

At N Reactor, representing the most radiological contaminated areas in the river corridor, the ERC team removed nearly 102,000 tons of highly contaminated material. The challenge began in July 2000 and focused on removing highly contaminated material from the N-3 crib and trench. Cribs and trenches dissipated liquids discharged from reactor-cooling systems into the soil. Liquid waste spread through layers of silt, gravel and rock. Conditions prompted on-site improvements to techniques for protecting the environment and reducing workers' exposure to potential radiological hazards. The use of these innovative technologies and techniques will ensure safety for cleanup at Hanford's remaining liquid waste sites.

Columbia River contaminants

In FY 2001, over 85,000 tons of contaminated soil were excavated at the 100 B/C Area to access concrete and steel effluent piping systems and three outfall boxes that led directly to the Columbia River. The effluent piping and outfall structures carried water from cooling ponds into the river during B and C Reactor operations.

Also in FY 2001, a cleanup project at the JA Jones landfill remediated nearly 29,000 tons of contaminated material.

Backfilling with clean soil

While the ERC team was cleaning up waste sites, operations were accelerated at the 100D, DR and H areas. Twenty-two former waste sites and effluent pipelines were backfilled with clean soil at D and DR Reactors. The work was completed five months ahead of schedule, which allowed for more cleanup work at other reactor areas. At H Reactor, 10 sites and effluent pipelines were backfilled two months ahead of schedule. ♦

Continued on page 9.

Environmental Restoration Contractor accelerates cleanup in FY 2001, cont.

ERC team stabilizes surplus facilities, reduces worker risk

A key part of the Environmental Restoration Contractor team's work involves safeguarding and maintaining inactive Hanford facilities while reducing risk to workers and public health. The Surveillance/Maintenance and Transition Project, part of the Environmental Restoration contractor team led by Bechtel Hanford, maintains, inspects and stabilizes inactive facilities, mitigating potential hazards.

During FY 2001, project personnel completed roof inspections and repaired exhaust systems at the inactive PUREX plant and reduced the plant's overall maintenance costs. They completed interim stabilization at sites surrounding PUREX and three 200 Area waste sites containing two retention basins and one burial ground.

They also completed the Canyon Disposition Initiative feasibility study. The study gives decision-makers information they need to determine cleanup options for the five massive inactive chemical processing plants at Hanford, known as canyon facilities. The Canyon Disposition Initiative was supported by extensive fieldwork at U Plant, the host facility.

Canyon disposition options range from completely removing the immense facilities to using the structures themselves as waste disposal facilities. During FY 2002, stakeholders will use the Canyon Disposition Initiative fieldwork data to determine preferred alternatives for Hanford's five canyons.

B Reactor, on the other hand, is a historic landmark. It was the world's first full-scale nuclear production reactor, and the ERC team has worked to clean up and maintain the reac-

tor building and support safe, escorted public tours. More than 1,200 people visited B Reactor, including Russian treaty officials, the media and members of Congress. ♦

Integration Project brings together information for Hanford cleanup

The Groundwater/Vadose Zone Integration Project was established in 1997 to coordinate and integrate a wide range of activities affecting Hanford's groundwater and vadose zone — the soil between the ground surface and the groundwater. In fiscal year 2001, the Integration Project continued to gain momentum in integrating site-wide applications of fieldwork, science and technology and public involvement. The Integration Project's goal is to provide the sound technical basis for making and supporting cleanup decisions at Hanford.

Bechtel Hanford, Inc., the site's Environmental Restoration Contractor, manages the Integration Project. In addition to BHI, team members include CH2M HILL Hanford Group, the Pacific Northwest National Laboratory and Fluor Hanford, and they receive support from other national laboratories and universities.

In FY 2001, the Groundwater/Vadose Zone Integration Project:

- Accelerated fieldwork to collect radioactive and chemical samples from some of the most hazardous waste sites

- Completed investigation near an aging radioactive burial site for tritium contamination within the groundwater

- Completed first evaluation of the System Assessment Capability, a suite of computer models and cleanup analysis techniques used to predict the movement and fate of remaining contaminants after site closure

- Integrated information into a virtual library, an evolving, user-friendly Intranet site for Hanford workers to review and use site-wide environmental data

- Obtained valuable feedback from citizens, regulatory agencies and tribes at monthly public meetings.

To find out more about the Groundwater/Vadose Zone Integration Project, visit: www.bhi-erc.com/projects/vadose. ♦