



U.S. DEPARTMENT OF  
**ENERGY**

**Richland Operations  
Office**

**DOE News Release**

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## **First of Hanford's Highly Radioactive Sludge Moved Away from River**

RICHLAND, Wash. – Workers have started moving highly radioactive material, called sludge, away from the Columbia River, marking a significant milestone in the U. S. Department of Energy (DOE)'s cleanup of the Hanford Site in Washington State.

Today, DOE contractor CH2M HILL Plateau Remediation Company (CH2M HILL) safely transferred the first large container of highly radioactive sludge from a basin next to a former plutonium production reactor to dry storage in the center of the site. Today's transfer is the first of six shipments this summer to remove the most radioactive material. At the same time, a separate system is being built to remove the rest of the sludge from the basin by the end of 2015.

“Removing the sludge reduces the risk from highly radioactive material being stored next to the Columbia River,” said Matt McCormick, Manager, DOE Richland Operations Office. “This sludge has been stored underwater in the basin for more than 30 years, and today marks a turning point in our cleanup. This is a great step toward reducing risk to the Columbia River. My thanks go out to the Hanford workers who made sure the work was done safely.”

Sludge is material less than a quarter inch in diameter that resulted from the corrosion of spent reactor fuel stored in the basin and other debris left from plutonium production operations. Currently, approximately 35 cubic yards of sludge is stored 17 feet underwater in a large basin adjacent to Hanford's K West reactor. The water keeps the sludge particles cool and acts as protective shielding to workers.

CH2M HILL is removing the highly radioactive portion of the sludge this summer in six shipments. This material was retrieved from containers, called knock-out pots, that were part of a system used to clean spent fuel as it was removed from the basin for dry storage in central Hanford.

“Today's shipment marks the first removal of highly radioactive sludge away from the river and is a major step forward in preparing the basin for eventual demolition,” said John Lehew, CH2M HILL President and Chief Executive Officer. “This challenging work is going smoothly and safely thanks to months of hands-on training and preparation at a full-scale mock-up facility.”

CH2M HILL engineers, operators and technicians developed innovative technologies, tools, and equipment for handling sludge in a non-radioactive environment. Crews trained together and provided

input on equipment design and methods used to process the sludge before moving into the highly radioactive environment of the K West Reactor basin.

In the basin, workers transferred the sludge material into a storage container that was subsequently vacuum-dried at the nearby Cold Vacuum Drying Facility. The container was then shipped to a facility in central Hanford, the Canister Storage Building, for interim storage, consistent with the management of spent nuclear fuel. Once all of the knock-out pot sludge is removed, CH2M HILL will begin removing the remaining sludge, which is stored large, underwater containers in the basin.

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