

REACH



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Electricity, water, roads ready for vit plant

Becky Curtis, CHG

CH2M HILL Hanford Group has completed the infrastructure for Hanford's tank waste vitrification plant more than a year ahead of schedule and \$9 million under budget.

The infrastructure will provide electricity, water and roads for the treatment plant that will vitrify Hanford's radioactive tank waste.

"The completion of the infrastructure project represents one of the final steps before we begin site preparation and construction of Hanford's vitrification plant," said Harry Boston, manager of the Department of Energy Office of River Protection. "The fact that it was completed early and under budget demonstrates that our team is continuing to make progress on this critical project and we are on track to keep our commitment to begin hot operations of the vitrification plant in 2007."



Workers with Wilson Construction pour concrete walls of an electrical substation basement, part of the infrastructure to support a planned vitrification plant.

The infrastructure features a 62.5-million-volt-amp electrical substation and 230- kilovolt transmission lines installed by Wilson Construction Company, which has offices in Kennewick. The electrical system, which is capable of providing enough power for 6,000 average homes, has more capacity than was needed at Hanford to produce plutonium for weapons during the Cold War.

Power can be received either from the Columbia Generating Station area or from Priest Rapids Dam to ensure that the melters, which will operate continuously at 2,100 degrees Fahrenheit to convert waste to glass, are not unexpectedly interrupted. Fluor Hanford and the Bonneville Power Administration are responsible for operating the electrical power system.

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Approximately three miles of pipeline have been laid to deliver water for vitrification processes, drinking and firefighting. A separate piping system nearly two-and-a-half miles long will transport liquid effluent byproducts to existing treatment and disposal facilities on the Hanford Site. The water and effluent piping systems were designed by Fluor Federal Services and were installed by RCI Environmental, Inc. Fluor Hanford and its contractors operate the effluent treatment facilities for the site.

Fluor Federal Services' designs also directed RCI Environmental as workers widened, reinforced and added streetlights to the intersection at Route 4 South and Canton Avenue in the 200 East Area. The intersection is now ready to accommodate heavy construction traffic for building the vitrification plant. A new road also encircles the 65-acre area where the plant will be built by Bechtel National, Inc.

"In addition to working with Fluor Federal Services and several design and construction subcontractors, we coordinated closely with multiple on-site end-user organizations as well as the DOE Office of River Protection and the Bonneville Power Administration," said project manager John Payne, a Babcock Services subcontractor to CHG.

"Building this necessary infrastructure for the vitrification plant was a collaborative effort by several outstanding contractors and subcontractors," said CHG President Fran DeLozier. "It also is a testament to doing business by using fixed-price contracts and incentives to complete projects under budget and ahead of schedule."

The infrastructure construction project, which was estimated at \$31 million and was originally scheduled to be finished in July 2002, was completed at just under \$22 million. ♦



A crane positions one of the 113-foot power transmission towers.