

**For Immediate Release**

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## **New Well at Idaho Site to Target Hazardous Solvent Plume in Aquifer**

**IDAHO FALLS, Idaho** – The U.S. Geological Survey (USGS) recently drilled a new well at the north end of the Idaho National Laboratory (INL) Site that will help the Department of Energy (DOE) Office of Environmental Management (EM) enhance a groundwater treatment system that has been removing a hazardous solvent from the underlying aquifer for two decades.

USGS drilled the new well into the Snake River Plain Aquifer to a depth of 255 feet below the ground surface. Located near the former Test Area North (TAN) facility, the well will be used for bioremediation injections set to resume in August to reduce concentrations of trichloroethylene (TCE) and other hazardous organic compounds in the aquifer beneath TAN.

Rich Abitz, director of the environmental restoration program at Fluor Idaho, EM's INL Site contractor, said the new well will help EM target a residual TCE source zone in the aquifer that is inaccessible using current bioremediation injection wells.

"We're looking forward to using the new well to target an area of the aquifer that shows a weak response to current bioremediation efforts," he said.

TAN was established in the early 1950s to build and test nuclear-powered jet aircraft engines for an aircraft nuclear propulsion program that ended in 1961. The facility was later used to study the effects of the loss of coolant from commercial reactors.

The bioremediation treatment system at TAN uses a simple, effective method. It injects a sodium-lactate and fatty-acid solution directly into the aquifer to create conditions favorable for naturally occurring microorganisms to consume the industrial solvents that were used at the facility for decades. A common industrial practice at the time was to inject facility wastewater, including the solvents, directly into the underlying aquifer.

The Snake River Plain Aquifer is the second-largest continuous aquifer in the U.S. Unlike an underground lake or river, the aquifer is saturated layers of rock and soil, in some cases hundreds of feet thick, where the water moves from several inches to several feet a day.

DOE, the Environmental Protection Agency (EPA), and State of Idaho agreed to implement pump-and-treat and bioremediation systems in a record of decision signed 20 years ago.

Abitz said Fluor Idaho will closely monitor the effectiveness of the injections in all wells to reduce TCE in the suspected source zone.

"The goal is to treat the residual TCE source zone and then complete a rebound test to confirm the remedy has effectively remediated the TCE source in the aquifer," Abitz said. "Once we meet conditions of the record of decision regarding solvent and radionuclide concentrations, we can shut down the groundwater treatment systems permanently."

*Fluor Idaho, LLC is a wholly owned subsidiary of Fluor Corporation with subcontractor partners CH2M, North Wind Inc., Portage, and Waste Control Specialists. Fluor Idaho manages the Idaho Cleanup Project Core contract at the Department of Energy's Idaho National Laboratory Site located 45 miles west of Idaho Falls. The 5-year, \$1.4 billion project, funded through the*

*U.S. Department of Energy's Office of Environmental Management, focuses on safely remediating the Idaho National Laboratory site including dispositioning transuranic waste, managing spent nuclear fuel, and treating high-level radioactive waste.*

For more information visit the Idaho Cleanup Project on the Web at <https://fluor-idaho.com>

**Suggested Captions:**

*Equipment awaits an EM Idaho National Laboratory Site crew for use in drilling a new well for groundwater treatment at the Test Area North.*

*Core samples show the porous nature of the rock in the Snake River Plain Aquifer below the Test Area North at the Idaho National Laboratory Site.*