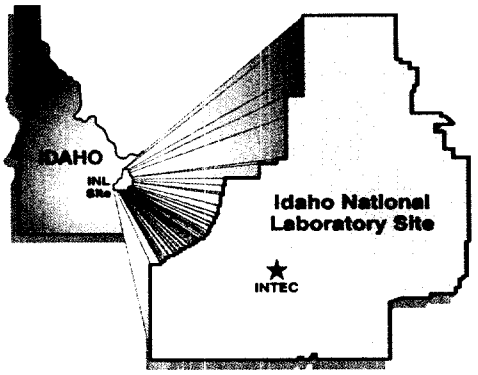
Agencies release proposed plan for remediation of contaminated tank farm soil and groundwater



The U.S. Department of Energy, U.S. Environmental Protection Agency and Idaho Department of Environmental Quality have released a proposed plan to remediate contaminated soil at the Idaho Nuclear Technology and Engineering Center's tank farm and INTEC contaminated groundwater. INTEC is located in the south-central portion of the DOE's Idaho National Laboratory site.

Citizens may request copies of the proposed plan or a briefing with the project managers by calling the Idaho Cleanup Project's toll-free number at (800) 708-2680. The plan is also available on the Internet at *http://www.idahocleanupproject.com* or *http://ar.inel.gov/home.html*. A 30-day public comment period begins Aug. 22 and ends Sept. 21.

Public meetings are scheduled for Aug. 29 in Idaho Falls (Shilo Inn) and Aug. 30 in Twin Falls (College of Southern Idaho Taylor Student Union Building). Agency and project representatives will be available during an open house at both locations from 6 to 8 p.m. for informal discussion. A court reporter will be present to record public comments.

The tank farm was a key part of INTEC, formerly known as the Idaho Chemical Processing Plant. Built in 1951, INTEC facilities were used to dissolve spent nuclear fuel and recover uranium-235. Radioactive liquid wastes were stored underground in the tank farm.

A majority of the liquid waste was thermally treated, which reduced its volume to 5,800 cubic yards of a solid, granular material called calcine. The remaining liquid in the tank farm, about 900,000 gallons of sodium-bearing waste, will be treated using a steam reforming process and disposed outside of Idaho.

Historical spills from process piping and valves, and activities (such as maintenance and sampling) inadvertently released waste to the surrounding soil. No leaks occurred from the tank/vault systems themselves. Contaminants released to the soil include primarily three radionuclides cesium-137, strontium-90 and technetium-99 and nitrate.

Contamination also came from a former wastewater injection well (plugged in 1989) that released radioactive contaminants (strontium-90 and iodine-129) to the Snake River Plain Aquifer and above the aquifer when the well casing failed.

The agencies finalized a remedial investigation/feasibility study earlier this year that concluded actions must be taken to protect workers and the Snake River Plain Aquifer.

Five alternatives were evaluated as part of the study: (1) limited action (i.e., protective controls, maintenance and monitoring); (2) capping and monitoring, (i.e., installing a cap over the tank farm to limit water infiltration and protect workers, and monitoring perched water and groundwater); (3) hot spot removal, capping and monitoring (i.e., removing contaminated soil from the largest leak at the tank farm, installing a cap and monitoring); (4) hot spot grouting, capping and monitoring (i.e., grouting the most contaminated soil in place, installing a cap, and monitoring); and (5) contingent aquifer pump and treat.

The agencies identified capping and monitoring as the preferred alternative. Two types of caps would be installed over the tank farm, both limiting water infiltration, but one would also protect workers from radiation exposure. Administrative controls are currently in place to protect workers, and some infiltration controls have been implemented. Capping the tank farm would prevent contamination that is currently in the perched water system (i.e., a zone of water over 100 feet below the tank farm) from moving down and contaminating the Snake River Plain Aquifer.

A final remedy will be selected for the tank farm soil and INTEC groundwater after reviewing and considering all information submitted during the 30-day public comment period on the proposed plan.

Additional information is available in the Administrative Record file for Operable Unit 3-14. The Administrative Record is located at the DOE Reading Room of the INL Technical Library in Idaho Falls. A copy can be found at the Albertsons Library at the Boise State University Campus. The Administrative Record can be accessed on the Internet at *http://ar.inel.gov/home.html*.

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