Introduction
The U.S. Department of Energy (DOE) has prepared an Explanation of Significant Difference (ESD) to provide the rationale for reevaluating the selected remedy for Operable Unit (OU) III, Surface Water and Ground Water, of the Monticello Mill Tailings Site (MMTS). The MMTS, added to the U.S. Environmental Protection Agency National Priorities List in 1989, is located in southeast Utah, in and near the City of Monticello in San Juan County. OU III is one of three operable units at the MMTS and addresses surface and ground water contamination which resulted from past operations at the former mill site. OU III encompasses contaminated ground water and surface water at and hydraulically downgradient of the Monticello mill site, a former uranium and vanadium-ore processing site.

When is an Explanation of Significant Difference required?
The Comprehensive Environmental Response, Compensation, and Liability Act, and the National Contingency Plan requires that an Explanation of Significant Difference is prepared when the differences in the remedial action significantly change but do not fundamentally alter the remedy selected in the Record of Decision with respect to scope, performance, or cost.
Summary of Site History

The Monticello mill was built in 1942 to provide vanadium during World War II. The mill was modified in the early 1950s to process uranium. Milling continued intermittently until the early 1960s when the mill was dismantled. When the mill was closed, low-level radioactive mill tailings, contaminated soil, and other debris remained on site.

DOE entered into an agreement with the U.S. Environmental Protection Agency (EPA) and the State of Utah Department of Environmental Quality (UDEQ) to remediate the site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The cleanup must also comply with applicable or relevant and appropriate Federal, State, and local environmental laws and regulations. The site was added to the U.S. Environmental Protection Agency National Priorities List in 1989.

Reason for Issuing an ESD

An ESD is necessary for the OU III ROD to inform and document to affected parties that, because the selected remedy has not met specific performance criteria, a contingency remedy is being implemented, in accordance with the Record of Decision for the Monticello Mill Tailings (USDOE) Site Operable Unit III, Surface Water and Ground Water, Monticello, Utah. Dated May 2004.

The selected remedy, monitored natural attenuation with institutional controls, is progressing more slowly than expected and the water quality restoration to remediation goals will likely take longer than predicted. As a result a contingency remedy is being implemented that includes: 1) a pump and treat enhancement that treats a contaminated plume upgradient of a funnel and gate Permeable Reactive Barrier (PRB) treatment wall; 2) removal of the PRB gate and replacement of the gate with a containment system which allows for continued treatment of the contaminated plume; 3) further studies to be conducted through 2012 to determine whether contingency remedy of pump and treat enhancement, together with monitored natural attenuation is a viable remedy at the surface and ground water operable unit; and 4) inclusion and evaluation of new protection standard for uranium in surface water as a remedial action objective.

Is the ground water safe?

There continues to be minimal risk to human health. The affected aquifer is not used for domestic purposes because it is thin and unproductive, susceptible to agricultural impacts, and because other sources of high-quality are readily available. Institutional controls will continue to prevent domestic use of the ground water and will remain in effect until water quality is restored.

Contact

The ESD and other documents related to the Monticello Disposal and Processing Sites are available on the DOE Office of Legacy Management website at http://www.LM.doe.gov/land/sites/ut/monticello/monticello.htm or at the Monticello site office located at 1665 South Main Street, Monticello, UT.

For more information about DOE Office of Legacy Management activities at the Monticello Disposal and Processing Sites, or to comment about the ESD, contact Jalena Dayvault, Monticello Project Manager DOE Office of Legacy Management 2597 B½ Road Grand Junction, CO 81503 Phone: (970) 248-6016 E-mail: Monticello@LM.doe.gov

Comments will be received until January 5, 2009.