

Melton Valley Final ROD

Scope: The Melton Valley (MV) Final Record of Decision (ROD) project will select a final remedy for the MV Watershed, which is located outside the Oak Ridge National Laboratory (ORNL) main plant area. White Oak Creek (WOC) flows from the ORNL main plant area in Bethel Valley (BV) Watershed to MV Watershed before being discharged to the Clinch River. The project objective is to reach a final watershed decision for areas and issues that were not addressed in the MV Interim ROD¹, including streambed and lakebed sediments (White Oak Lake, embayment, creeks); floodplain soil exhibiting radiation less than 2,500 $\mu\text{R/hr}$; groundwater; and ecological risk issues.

The remedy will be selected and implemented under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. The project will:

- Prepare a focused Remedial Investigation (RI)/Feasibility Study (FS), Proposed Plan, and ROD for regulatory approval, including evaluation of public comments;
- Prepare a plan for future monitoring and institutional controls of the area..

The MV Final ROD project is planned by the Integrated Facility Disposition Program (IFDP) at an estimated cost of \$34M, which is based on an assumed remedy of monitored natural attenuation.

Environmental Risk and Principal Threat Source Material Rating: Low

- Several large waste disposal areas that received waste from over 50 years of DOE operation, production, and research activities are located in MV. The primary contaminants of concern are tritium, Strontium-90, and Cesium-137. Contamination at some disposal areas and from research activities in BV has leached into surrounding soil and groundwater, where it migrates to WOC.
- A six-year, \$360M project to implement MV Interim ROD actions was completed in 2006 with a goal of reducing contaminant flux and protecting an off-site residential surface water user from radiological contaminants at the confluence of WOC Embayment and the Clinch River. All major primary threat source areas were addressed through a series of remedial actions, including hydrologic isolation of buried waste and active collection and treatment of millions of gallons of contaminated groundwater emanating from the burial grounds.
- Remedial actions implemented in BV as specified in the BV Interim ROD² will address sources of contamination to WOC from past ORNL research activities.

Other Prioritization Factors:

- Separate projects for ORNL facilities Deactivation and Decommissioning (D&D) and upstream remedial actions in BV are scheduled for IFDP implementation prior to the MV Final ROD.
- MV is a restricted area under DOE control. Data from required MV and BV monitoring and the planned future RI Report will be used to evaluate the effectiveness of interim ROD actions and prepare the MV Final ROD, which is anticipated to require continued institutional controls and monitoring.

Overall Prioritization: Low

The overall prioritization for the MV Final ROD project is **Low**.

The information presented in this fact sheet is preliminary and will be refined during Critical Decision-2/3 development.

¹ Record of Decision for Interim Actions for the Melton Valley Watershed at the Oak Ridge National Laboratory, Oak Ridge, Tennessee, DOE/OR/01-1826&D3, DOE 2000

² Record of Decision for Interim Actions in Bethel Valley Watershed, Oak Ridge, Tennessee, DOE/OR/01-1862&D4, DOE 2002

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For more information, please contact the DOE public affairs office at (865) 576-0885.

