Melton Valley Watershed

Is it safe?

The Melton Valley watershed area is safe for federal waste management use. Most of the Melton Valley watershed area is not accessible to the public. Contamination sources in the area were removed, contained, and/or remediated to protect workers in this area and decrease the levels of contamination released to the environment.

Are there use limitations for this area?

- Access to this area is fenced and restricted to badged government workers and/or escorted visitors.

All controls and monitoring necessary for this area are performed and reported as required in the Remedial Action Report.

Background:

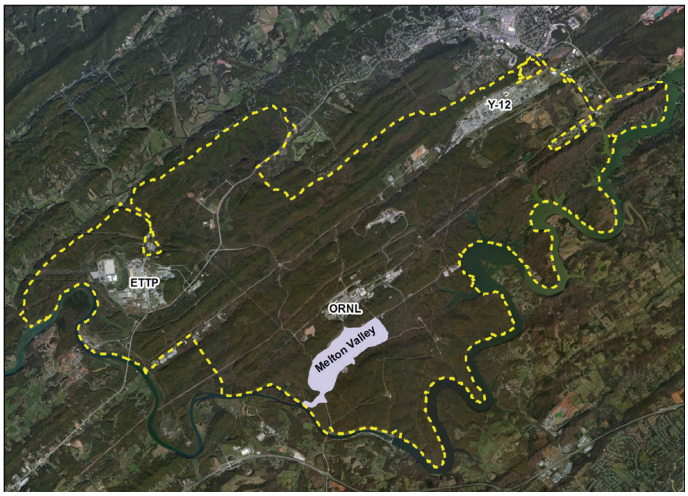
Hazardous waste from federal activities have been stored and/or disposed within the 1,000- acre Melton Valley watershed. Wastes disposed in Melton Valley reside at a variety of locations, including solid waste landfills, trenches, liquid waste tanks and pipelines, surface structures, deep hydrofracture wells, and impoundments. Contamination at several locations had leached into surrounding soil and groundwater, where it migrated to nearby streams and the White Oak Creek Lake impoundment.

Many remediation activities, reviewed by the public and approved by DOE, Environmental Protection Agency, and the State of Tennessee, are complete and significantly decrease the amount and movement of source contamination into the environment.

How was the problem addressed?

The first action taken in the Melton Valley area in the early 1990's was the placement of a barrier at the mouth of the White Oak Lake. This barrier greatly reduced the amount of contamination that could enter the Clinch River from the Melton Valley watershed.

The DOE, the Environmental Protection Agency, and the



State of Tennessee conducted contamination investigations and evaluated alternatives to determine the best plan for handling the impacts to the environment and human health from the years of waste disposal in the valley. The selected alternatives for addressing the contamination sources were captured in the Interim Records of Decision (ROD) approved by the parties.

The alternatives selected included hydrologic isolation (capping burial ground sites and limiting the flow of groundwater), source removal activities, additional grouting of previously plugged hydrofracture and monitoring wells, removal of transuranic (TRU) waste, grouting waste trenches and inactive process waste pipelines, and removing small inactive facilities and soil hotspots throughout the valley. EM completes this work in 2006.

DOE performs annual monitoring in the valley to detect changes in contaminant levels and locations. The effectiveness of the selected contamination controls and the monitoring results are reported annually in the Remediation Effectiveness Report.

More Information is available:

- *Record of Decision for Interim Actions for the Melton Valley Watershed at the Oak Ridge National Laboratory, Oak Ridge, Tennessee*. September 21, 2000
- *Remedial Action Report for the Melton Valley Watershed at the Oak Ridge National Laboratory, Oak Ridge, Tennessee. June 25, 2009*.
- Administrative Record – a listing of all available documents and correspondence in reaching this decision is available at the DOE Information Center in Oak Ridge.