

Union Valley

Is it safe? _____

The Union Valley area is safe for industrial use.

Are there use limitations for this area?

Due to the contamination in a groundwater plume originating from the Y-12 Nuclear Security Facility, industrial use of groundwater and surface water is limited.

- License agreements with the property owners were negotiated. The agreement notified them about the contamination concern, and it requires them to notify DOE of any changes in the use of groundwater or surface water in certain areas.

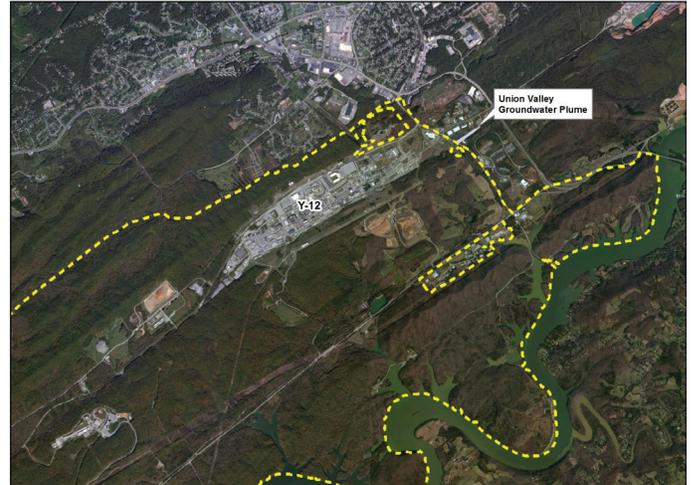
Background: _____

Activities performed at Y-12 since the 1940s have resulted in a carbon tetrachloride-dominated contamination plume originating at the eastern end of Y-12 site extending into the privately-owned industrial park in Union Valley. Use of the groundwater is a potential risk to the environment and human health from ingestion. Some forms of industrial use of groundwater could result in the acceleration of the movement of the contaminant plume.

How was the problem addressed? _____

The DOE, Environmental Protection Agency, and State of Tennessee conducted contamination investigations to determine the extent of the plume. The parties approved an interim Record of Decision that implemented steps to control the use of the groundwater by the current and future private owners.

Restrictions, through the license agreements, are in place to ensure that the groundwater is not ingested and any planned industrial use of groundwater is reviewed by DOE to prevent acceleration of the plume movement from Y-12. More aggressively, a Y-12 east end groundwater treatment facility was built to reduce the plume contamination levels. This action has shown a significant reduction in the extent of movement of groundwater plume contamination into the Union Valley area.



Annual monitoring is performed by DOE to detect changes in contaminant levels and locations. Additionally, property owners are contacted annually to ensure any new tenants in the area are aware of the concern and the use restrictions. The effectiveness of these controls and the monitoring results are reported annually in the *Remediation Effectiveness Report*.

More Information is available: _____

- *Record of Decision for an Interim Action for Union Valley, Upper East Fork Poplar Creek Characterization Area, Oak Ridge, Tennessee*. July 10, 1997.
- Administrative Record – a listing of all available documents and correspondence in reaching this decision is available at the DOE Information Center in Oak Ridge.