

100-KR-4 Groundwater Operable Unit



Overview

DOE operates a pump-and-treat system in 100-K Area to prevent groundwater containing chromium from reaching the Columbia River. Two areas are targeted:

- Original pump-and-treat northeast of 100-K Area began in 1997.
- Expanded system in western 100-K Area began in 2007.

Other contaminants in groundwater include carbon-14, nitrate, strontium-90, trichloroethene, and tritium.

Limitations

Although many waste sites have been excavated, additional sources of chromium may be present in the unsaturated soil. This chromium could move down to the water table and contaminate groundwater.

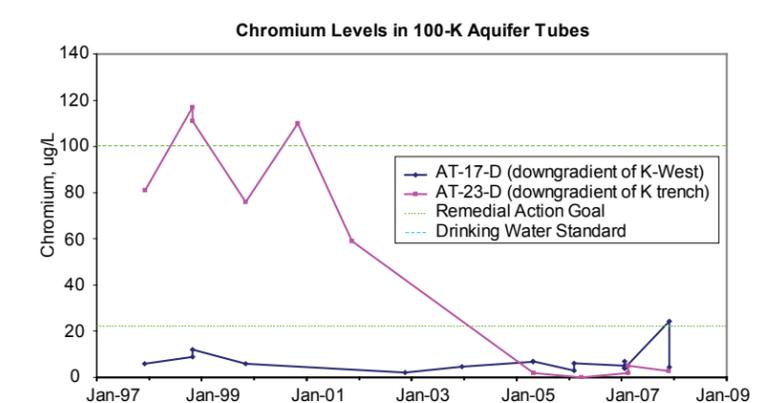
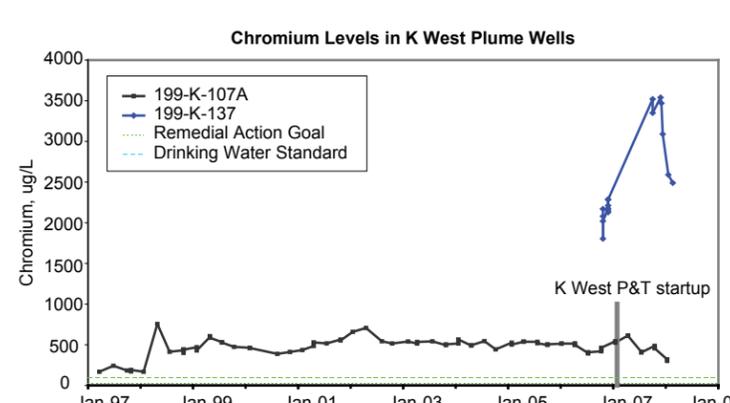
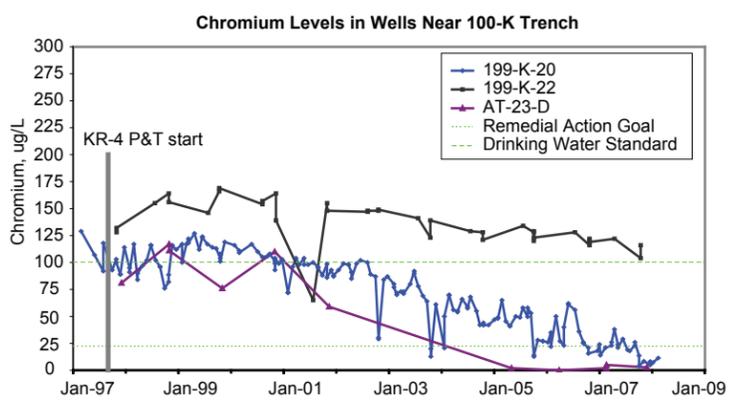
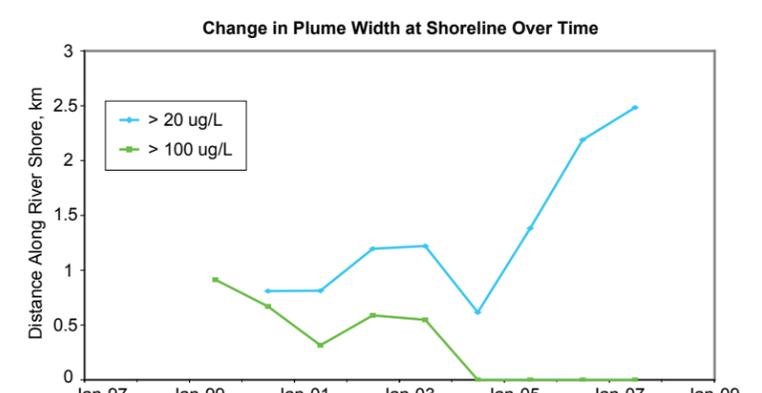
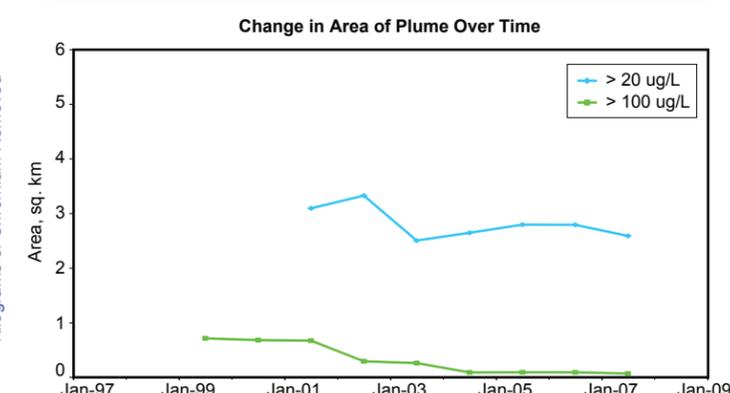
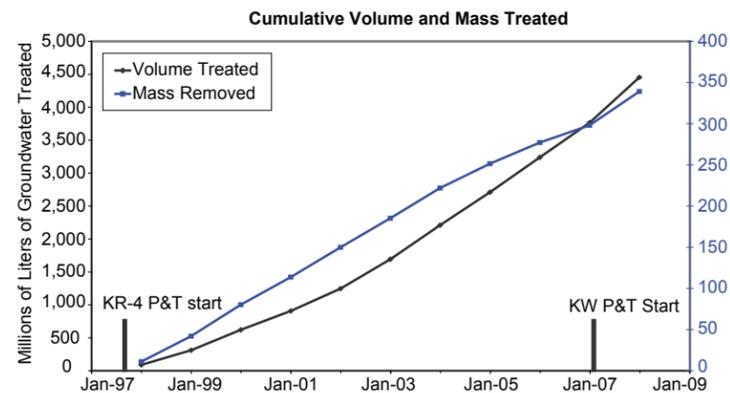
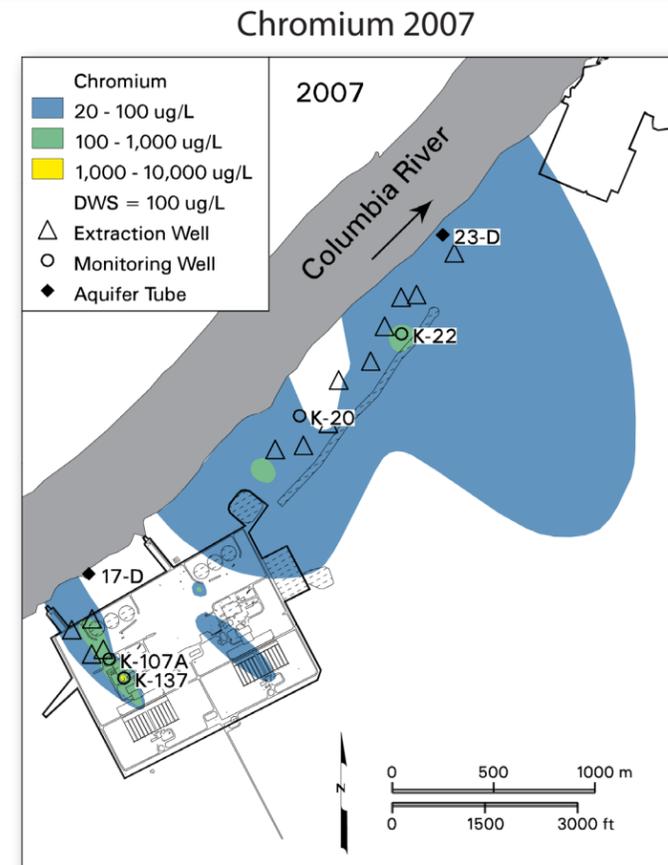
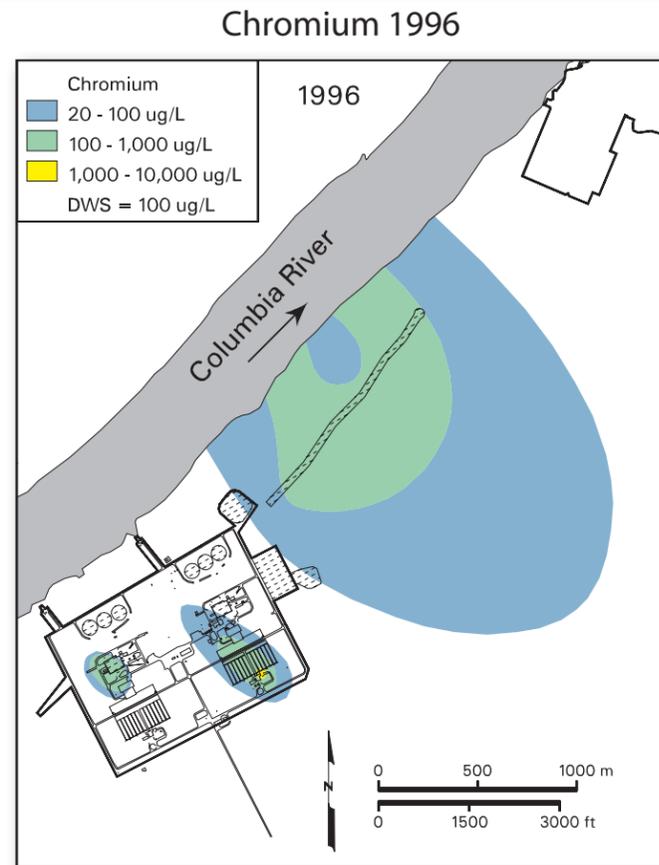
The location of the eastern boundary of the chromium plume is uncertain because of a lack of wells in that area.

Conclusions

DOE has removed over 339 kilograms (747 pounds) of chromium from 100-K groundwater with the pump-and-treat system.

Chromium concentrations have decreased in wells near the river, but remain above the cleanup goal.

The 100-K pump-and-treat systems are being expanded to make the remediation more effective.



7/21/08

