



FACT SHEET
DENNY PROPERTIES
TRACTS 1 & 2, GROFF SUBDIVISION
SIX MILE RICHARDSON HIGHWAY
FAIRBANKS, ALASKA

FEBRUARY 2002

What's New

Benzene contaminated groundwater continues to shrink in size and concentration level. Since 2000, the contaminated groundwater has been confined to the Denny properties.

Results from the summer 2001 groundwater monitoring again confirm that the 1998 remedial efforts at the Denny properties were successful. All Six-Mile Village Subdivision residential drinking water wells that were adversely affected by the original benzene contaminant plume continue to meet safe drinking water standards.

Also, the benzene concentration in all monitoring wells that are located close to the former source area now meet safe drinking water standards. The contaminated groundwater that remains above the safe drinking water standard is now less than 170 feet in length and remains confined to the Denny properties. It is expected to continue to decrease in size and concentration due to natural attenuation processes.

Background

A historical gasoline release created a benzene groundwater plume that extended approximately 1500 feet off site of the Denny properties. Four residential drinking water wells in 1995 contained benzene concentrations above the safe drinking water standard of 5 µg/l (micrograms per liter). The benzene plume commingled with a much larger and regional trichloroethylene (TCE) groundwater plume that also impacted residences in the Six-Mile Village Subdivision.

Between 1996 and 1998, ADEC investigated the area of the gasoline spill, characterized the extent of contamination, and developed remediation alternatives. Following consultation with the public, it was decided that excavation of the contaminated soil and natural attenuation of the groundwater were the preferred cleanup options.

In the fall of 1998, approximately 750-cubic yards of gasoline contaminated soil were excavated and transported to a thermal treatment facility. In the summer of 1999, sampling of the four residential wells that were originally impacted in 1995 and six groundwater monitoring wells that were specially installed to monitor the groundwater cleanup showed a substantial reduction in benzene levels. At that time, all residential wells and five of the six monitoring wells met the safe drinking water standard. Monitoring well MW-103, located approximately 170 feet from the former source area, showed a decrease in benzene from 185 µg/l in 1998 to 40.5 µg/l in 1999, a 79% reduction.

In the summer of 2000, all four residential wells and five of the six monitoring wells continued to show substantial reductions in the benzene levels. MW-103 continued to show substantial reduction in benzene from 40.5 µg/l in 1999 to 7.4 µg/l in 2000, a 72% reduction. Although MW-103 remains slightly above the safe drinking water standard, it is expected to reach the safe drinking water standard within a year based on the trend established from previous monitoring events. The monitoring data indicates that the contaminated groundwater above the safe drinking water standard does not extend off the Denny properties.

In the summer of 2001, all four residential wells and all six monitoring wells had benzene concentration levels below 5.0 µg/l. The concentration level in MW-103 decreased from 7.4 µg/l in 2000 to 4.2 µg/l in 2001.

Regional TCE Groundwater Plume

ADEC continues to investigate the sources and potential cleanup of the regional TCE groundwater plume. Separate fact sheets will be issued concerning that effort.

Questions or Need Additional Information

If you have any questions or need additional information, please contact the ADEC project manager, Douglas Bauer, at (907) 451-2192 or by email at doug_bauer@envircon.state.ak.us.