

Officials say drinking water not affected

Contamination remains in north, downtown Casper

By PETE NICKEAS - Star-Tribune staff writer | Posted: Monday, February 22, 2010 12:15 am |

[Reach Cherrie Perkins](#)

Cherrie Perkins is the project manager for the orphan sites in Casper. If you're in the area or want your home tested, she can be reached at (307) 777-7746.

Most of the contaminated groundwater and soil that environment officials found in north and downtown Casper in the mid 1990s is still contaminated, according to testing results released Thursday night by the Wyoming Department of Environmental Quality.

The testing was done this fall and revealed widespread groundwater and soil contamination from perchloroethylene, a chemical common to dry cleaning solvents and industrial degreasing chemicals.

Some of the contamination downtown is beneath the old Lobell Refinery site. The north Casper site of a former city garage, now a park, is also contaminated, though DEQ officials couldn't say whether the city's maintenance garage contributed to the contamination. DEQ officials said an old dry cleaning facility in north Casper may have contributed to the contamination, as well.

Drinking water in the areas is provided by the city and first filtered through the water plant near Fort Caspar. The main threat the contamination presents is from "vapor intrusion," according to David Folkes, principal of EnviroGroup, the company that tested water and soil throughout Casper.

High levels of the chemical can cause dizziness, headaches, sleepiness, nausea, and loss of coordination, according to documents provided by the DEQ, though officials said they didn't anticipate any clinical health effects from the level of contamination found throughout Casper.

The chemical dissolves in air, so seepage from ground water into the soil means the chemical eventually leaves the ground and dissipates into the air. The problems begin when the chemical dissipates into confined spaces -- basements and utility closets, for example.

"Perchloroethylene as a liquid is heavier than water and as it sinks into the ground from a leak, it can go from the [ground] water table down until it hits bedrock," Folkes said. "We're most interested in what's in the top of the water because that's where the vapor occurs."

Rick and Lucy Garrison, who live in the contaminated area, said they were going to take advantage of free testing and a possible fix offered by the DEQ.

"The thing that worries you is the resale value of your home," Rick Garrison said.

Both Garrisons said the DEQ has been helpful -- they've received letters outlining the testing efforts, watched the presentation given by DEQ officials and stuck around afterward to talk with the program director.

"It made it really clear for us," Lucy Garrison said.

The most common remediation systems work like souped-up shop vacuums. A contractor drills through a concrete basement floor, digs a small pit and sticks a pipe in the ground to create a "path-of-least-resistance" for the gasses that naturally seep upwards.

A fan sucks the contaminated air that would have seeped into the basement and pushes it through a pipe that exits the building, usually at the roof.

"We're trying to create a vacuum under the floor so the gas under the building wants to go into our fan instead of into the room," Folkes said.

This round of testing was done following the passage of the Orphan Site Remediation Act in 2000 that requires the DEQ to inventory contamination sites where the source of contamination is unknown.

Testing in the mid 1990s found contamination but officials said there wasn't any money for remediation. The DEQ still doesn't know the source of contamination.

Reach city reporter Pete Nickeas at pete.nickeas@trib.com or (307) 266-0639. Read more about Casper politics and government at <http://tribtown.trib.com/redtape>