

Corps of Engineers to discuss its feasibility study with state scientists

Wyoming missile site cleanup ongoing

By JOAN BARRON - Star-Tribune capital bureau | Posted: Monday, March 22, 2010

CHEYENNE -- State scientists will meet with a team from the U.S. Army Corps of Engineers on Wednesday to discuss a feasibility study governing cleanup of contamination from an abandoned Cold War missile site near Cheyenne.

The corps' feasibility study submitted in December examines different ways to clean up the site, said Jane Francis, a geological supervisor with the Wyoming Department of Environmental Quality.

"Before we put the cleanup system in we need to collect a little more additional information on the hydrology and geology out there," Francis said.

The corps has proposed a pump-and-treat system in the middle of the 10- to 14-mile-long plume of trichloroethylene (TCE) in groundwater to cut off the contamination.

But the corps still must do something at the old Atlas missile site, and at the leading edge of the plume, Francis said.

"We're not sure it's going to work," she said. "We need to collect additional information before we put that system in."

"For example, we don't know how deep the contamination is," nor do they know how wide it is in the middle of the plume, she added.

"For a plume this size, it's very difficult to study it," she said.

The corps is treating the water at the city's Sherard water treatment plant so nobody is exposed to the TCE.

Also, the domestic wells inside the plume area are fitted with filtration units so that the water is safe to drink.

"So the corps has moved pretty fast on that. Now we're looking at the big final solution. Let's come up with a remedy for the plume." Francis said.

The corps' questionable plan is to place five wells in the middle of the plume, pump out the water and treat it by running it through an air stripper, then pump the water back underground.

The air stripper is a tower filled with what looks like whiffle balls. The water cascades through them and the contamination evaporates.

"It's hard to break down underground but once you get it to the surface, you can break it down pretty quickly," Francis said.

Corps officials also have talked about pumping out the water and sending it to the Sherard water treatment plant for decontamination.

The treatment plant now is using an aeration basin to evaporate any TCE in the water.

Francis said it will take the corps until 2011 to install air strippers at the Sherard water treatment plant.

Bud Spillman is a member of the community advisory group for the cleanup and is also manager of the Cheyenne Board of Public Utilities' water treatment division.

He said the plume begins at the missile site and travels downhill to the east.

The corps proposes to install a series of wells to the north-south orientation in the middle to extract the water and treat it.

But the corps hasn't identified where to drill the wells or how many to put in.

"I think that is the concern," Spillman said.

The corps, he added, needs to identify the zone where the TCE is located so they can intercept it.

"So it will make a difference whether it's three or six wells and the spacing," he said.

The highest concentration levels of TCE is at the old Atlas missile site and dates to the late 1950s and early '60s, Spillman said.

The city first found the contamination in the late 1990s.

"These sites typically take 20 years before you get a cleanup system in place," Francis said. "We're nine years into it so for we're moving pretty fast, especially for such a big site."

The corps will hold a public hearing on the feasibility study once it is approved.

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