Tests show traces of contaminants in groundwater

BY STACEY SHEPARD, Californian staff writer
e-mail: sshepard@bakersfield.com | Monday, May 7 2007 11:05 PM

Last Updated: Monday, May 7 2007 11:09 PM

Small traces of pesticides and other contaminants likely due to past agricultural and industrial practices were found in water taken from underground wells in Kern County, according to initial results of an ongoing statewide groundwater survey released Monday.

The study looks for minuscule levels of contamination in raw water taken from wells throughout the state. The concentration level of contaminants being studied is about 100 times smaller than what's allowed for by health standards.

Of the 47 wells tested in Kern County, traces of contaminants were found in about two-thirds of those wells.

The results are not representative of the water delivered to consumers, researchers said, since groundwater is typically treated or mixed with other water to ensure it meets health standards before consumers receive it.

The work is intended to help plan for future growth and manage underground water resources, which make up about 40 percent of the state and county water supply.

"It provides early warnings and can help identify the best location of public supply wells in the future as the population continues to increase," said Jennifer Shelton, a hydrologist with the U.S. Geological Survey.

The findings of the wells tested in Kern County were presented to local water officials on Monday by Shelton and fellow researchers with the U.S. Geological Survey and the State Water Resources Control Board.

Pesticides were the most common chemical found in the local wells, showing up in 59 percent of those tested. Fumigants, in particular, were found in 43 percent of the wells tested. The fumigants looked at are no longer used, but were once commonly used in vineyards and almond orchards.

Fumigant levels in local wells were higher than in other study areas throughout the state, including other parts of the San Joaquin Valley, said Ken Belitz, a research hydrologist with the U.S. Geological Survey.

Researchers couldn't explain why Kern had a higher prevalence of this pesticide but said they plan to address the cause in a detailed report on the study's findings to be published next year.

Past industrial practices, included chemical releases and leaky underground tanks, were likely the cause for benzene and gas hydrocarbons being found in 13 percent of wells and solvents showing up in 11 percent, the researchers said.

Arsenic, a naturally occurring element, and nitrates -- which seep into the ground from septic tanks, fertilizer, dairies or biosolids -- also were detected in some wells.

The additional data on local groundwater quality is helpful, said Rick Iger, engineering and operations manager for the Kern County Water Agency.

But Iger noted the study tested less than 1 percent of the more than 6,000 groundwater wells in Kern County.

"It's difficult for us to draw too much from it because it's a small sampling of wells," he said.

MOST READ

1. McFarland woman killed by apparent stray bullet as she lay in bed with 2
2. Parent of sick child becomes part of E. coli investigation
3. Two charged with animal abuse
4. Suspect in fatal hit and run named
5. Funeral services for May 11

MOST EMAILED

1. McFarland woman killed by apparent stray bullet as she lay in bed with 2
2. Web site on cancer fight her legacy
3. Suspect in fatal hit and run named
4. Deployment day
5. Trombonist playing last notes with symphony