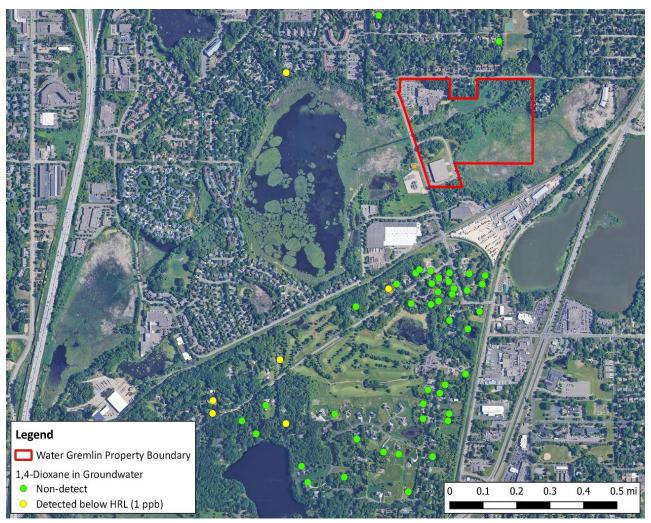
DEPARTMENT OF HEALTH

Water Gremlin

HEALTH ASSESSMENT SERIES | 1,4-DIOXANE PRIVATE WELL TESTING UPDATE

9/23/20

Six private wells out of a total of 50 sampled in 2020 had detectable levels of the chemical 1,4dioxane (see map below). Concentrations in all six wells were below the Minnesota Department of Health (MDH) Health Risk Limit (HRL) for drinking water of 1 part per billion (ppb) and are not of health concern. Additional confirmation sampling for the six private wells is recommended.



2020 Private well testing results for 1,4-dioxane

January-February 2020 testing results

MDH collected water samples from eleven private wells in late January and early February, 2020. Three of the eleven wells had detectable levels of 1,4-dioxane. The concentrations found were 0.06, 0.1, and 0.12 ppb, which are significantly less than the HRL of 1 ppb. The HRL represents an amount of a contaminant that poses little or no health risk to those drinking the water daily for a lifetime, including sensitive or highly exposed people.

August 2020 testing results

In April 2020, the Minnesota Pollution Control Agency (MPCA) directed Water Gremlin to sample additional private wells within a one-mile radius of the Water Gremlin facility. MPCA and MDH prioritized testing locations within the one-mile radius based on the results of the sampling done earlier in 2020. Water Gremlin's environmental consultant, Wenck, sent letters to 97 residents at the priority locations requesting access to collect and test a sample of their well water. Forty-four well owners provided Wenck access, including some that were sampled in Jan/Feb.

MDH staff also collected samples at the same time as Wenck from eight homes to verify testing results. These MDH-collected samples were analyzed at the MDH Public Health Laboratory. The samples collected by Wenck were tested by Pace Analytical and results were reported directly to MPCA.

1,4-Dioxane was detected in three more private well samples at concentrations of 0.23, 0.8, and 0.95 ppb. These concentrations are also below the HRL and are not a health concern. The Public Health Lab reported the same results (all not detected) as the lab used by Water Gremlin.

Is the 1,4-dioxane detected in private wells from Water Gremlin?

1,4-Dioxane was detected in the groundwater on the Water Gremlin property at concentrations greater than the HRL in December 2019. However, the distribution of the 1,4-dioxane detections in private wells makes the source unclear, particularly for the wells at the south end of sampling area. Additional data collection and analysis is required to better understand the occurrence and movement of 1,4-dioxane in the area.

Next steps

MPCA will determine the locations of the next round of residential well sampling.

Questions?

To contact MDH, call (651) 201-4897 and leave a message or email health.hazard@state.mn.us.

To contact MPCA, call 651-757-2998 or email water.gremlin.mpca@state.mn.us.

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