

Wonderland Drive Neighborhood Groundwater Assessment Summary

Background

Past groundwater sampling indicated possible elevated levels of arsenic in this neighborhood, which is defined as levels above the Maximum Contaminant Level (MCL) of 10 parts per billion (ppb). Due to limited sampling data for this area, an assessment was conducted to determine the levels of arsenic in the groundwater and overall water quality. The Wonderland Drive Neighborhood is located in Franklin Township, northeast of I-74 and Acton Rd. Letters requesting well samples were sent to 39 properties with a door-to-door survey following. Samples were taken from August to September 2013.

Survey Results

A total of 39 properties were surveyed, with one property determined to be vacant. Of the remaining 38 residences, 19 properties responded to the survey resulting in a 50% response rate. The attached map shows the properties sampled.

Sampling Results

Bacteria

No *e.coli* bacteria were found in any of the samples. Coliform bacteria were present in 6 wells, or 32% of samples. This rate is consistent with those found in past well surveys. Chlorination instructions were sent out with the lab reports and follow-up inspections were scheduled.

VOCs

No volatile organic compounds were found above detection limits in any of the samples taken.

Anions

Well samples were tested for the following anions: Chloride, Fluoride, Nitrates, Nitrites, Phosphates, and Sulfates. All anions were below the MCLs.

Metals

Samples were analyzed for the following metals: Arsenic, Barium, Cadmium, Chromium, Mercury, and Lead. Arsenic was detected in 17 of the samples, or 89% of residences sampled. All other metals were below the MCLs.

Arsenic

Arsenic concentrations ranged from 2 ppb to 15 ppb with the mean concentration being 6.8 ppb. Only 3 wells (16%) contained elevated arsenic higher than the MCL of 10 ppb. Well depth information was available for only 7 of the samples either from homeowners or the DNR well logs. Wells ranged from 65' to 95' in depth.

Conclusions

The primary contaminant found in the wells in the Wonderland Drive Neighborhood was coliform bacteria. Arsenic was not found to be a major concern, as previously suspected, with average levels below the MCL.

Wonderland Drive Neighborhood Survey



Highlighted parcels are those properties sampled.

