Southeastern & Arlington Neighborhood Groundwater Assessment Summary: VRP site located at 6002 Southeastern Ave

Background

MCPHD received an IDEM notification that the property located at 6002 Southeastern Ave, Franklin Township, has entered the Voluntary Remediation Program. This is the site of a former gas station and the results of a 2011 site characterization found soil and groundwater contamination from various petroleum by-products. As part of the Neighborhood Environmental Health Risk Assessment, a total of 71 properties were found within a ¼ mile radius that may be serviced by private wells. As an initial groundwater assessment, 26 of those properties were surveyed, including those closest to the site and those to the south and west due to the site characterization stating that groundwater flow trends to the southwest. Letters requesting well samples were sent to these 26 properties with a door-todoor survey following. Samples were taken from October to November 2013.

Survey Results

A total of 26 properties were surveyed, with one property determined to be vacant. Of the remaining 25 residences, 16 properties responded to the survey resulting in a 64% response rate. The attached map shows the properties sampled.

Sampling Results

<u>Bacteria</u>

No *e.coli* bacteria were found in any of the samples. Coliform bacteria were present in 6 wells for a 37.5% unsatisfactory rate. 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.

<u>VOCs</u>

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 Maximum Contaminant Levels (MCLs).

<u>Metals</u>

Samples were analyzed for the following metals: Arsenic, Barium, Cadmium, Chromium, Mercury, and Lead. Arsenic was detected in 8 of the samples, or 50% of residences sampled. All other metals were below the MCLs.

<u>Arsenic</u>

Arsenic concentrations ranged from 3.4 ppb to 20.3 ppb with the mean concentration being 9.7 ppb. Only 3 wells (19%) contained arsenic levels higher than the MCL of 10 ppb.

Conclusions

Since no volatile organic compounds (petroleum products) were detected, there does not appear to be any contamination from the old gas station at 6002 Southeastern Ave. There was some bacteria and elevated arsenic detected, which were consistent with results from other sampling efforts in the area.

Private wells sampled near 6002 Southeastern Ave

