M-Metals Well Survey and Sampling Project

Background

In 2001, ground water sampling was conducted in a south side neighborhood near the previous M-Metals facility, which was located at 1829 Dawson St. Trace levels of styrene and toluene had been detected in a couple of the wells. As a follow up to this project, the same neighborhood was surveyed to determine if any wells were still contaminated. The project area boundaries are Raymond St to the north, Hobart St to the east, Southern Ave to the south, and Churchman Ave to the west (see attached map). The wells sampled in 2001 were surveyed along with a random sample of homes on each street. Free well testing was offered to interested homeowners and those wells were sampled for volatile organics, metals, anions, and bacteria. The following is a summary of these findings as of December 9, 2009.

Survey Results

A total of 33 properties were surveyed; find attached the spreadsheet of property addresses. 4 homes were either vacant or no longer existed. There was a 52% response rate, with 15 properties responding to the survey and 14 no responses. Of the 15 responses, 2 properties are connected to municipal water and the remaining 13 have private wells. Samples were taken and analyzed for 8 of the 13 private wells, as 5 residents were not interested in having their wells tested.

Sampling Results

<u>VOCs</u>

No volatile organic compounds, including styrene and toluene, were found above detection limits in any of the samples taken. The detectable limit for styrene is 0.26 parts per billion (ppb) and the limit for toluene is 0.23 ppb.

<u>Metals</u>

Samples were analyzed for the following metals: Arsenic, Barium, Cadmium, Chromium, Mercury, and Lead. All metals were below the Maximum Contaminant Levels (MCLs).

<u>Anions</u>

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

<u>Bacteria</u>

E.coli bacteria were not found in any well, but coliform bacteria were present in 2 wells. Chlorination instructions were sent out with the lab reports and follow-up inspections were scheduled.

Conclusions

Based on sample results, private groundwater wells in this neighborhood do not appear to be contaminated by any VOCs or metals. However, only 8 samples were taken, which may not be representative of the entire neighborhood. Limitations included the high number (66%) of properties that either did not respond or were not interested in participating. Also, according to the M-Metals file, groundwater flows to the northwest of the facility, which would not impact this neighborhood as it is situated to the southeast. Based on maps and DNR logs, there are no private drinking water wells to the northwest of the M-Metals facility.

Total Properties in survey area- approx. 85 Properties contacted/left card- 33 Properties sampled- 7

