



# Impact Study

## Private Drinking Water Well Testing



### Purpose

The St. Clair County Health Department's Environmental Health Services conducted testing of five private drinking water wells within the immediate area of the St. Clair County Landfill located in Smiths Creek, Michigan to assess the potential impact to groundwater.

### Results

Based on the recommendations from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), in early 2024, five water wells were tested for metals and Volatile Organic Compounds (VOCs) within an area of the landfill (Refer to listing below). VOCs were not detected in this study. One sampling site had an elevated arsenic level based on the maximum contaminate level (mcl) of 0.010 mg/L in drinking water from the United States Environmental Protection Agency (EPA). Elevated arsenic is known to be naturally occurring in ground water in St. Clair County<sup>1</sup>. All the other sampling sites were below the maximum contaminate levels for metals.

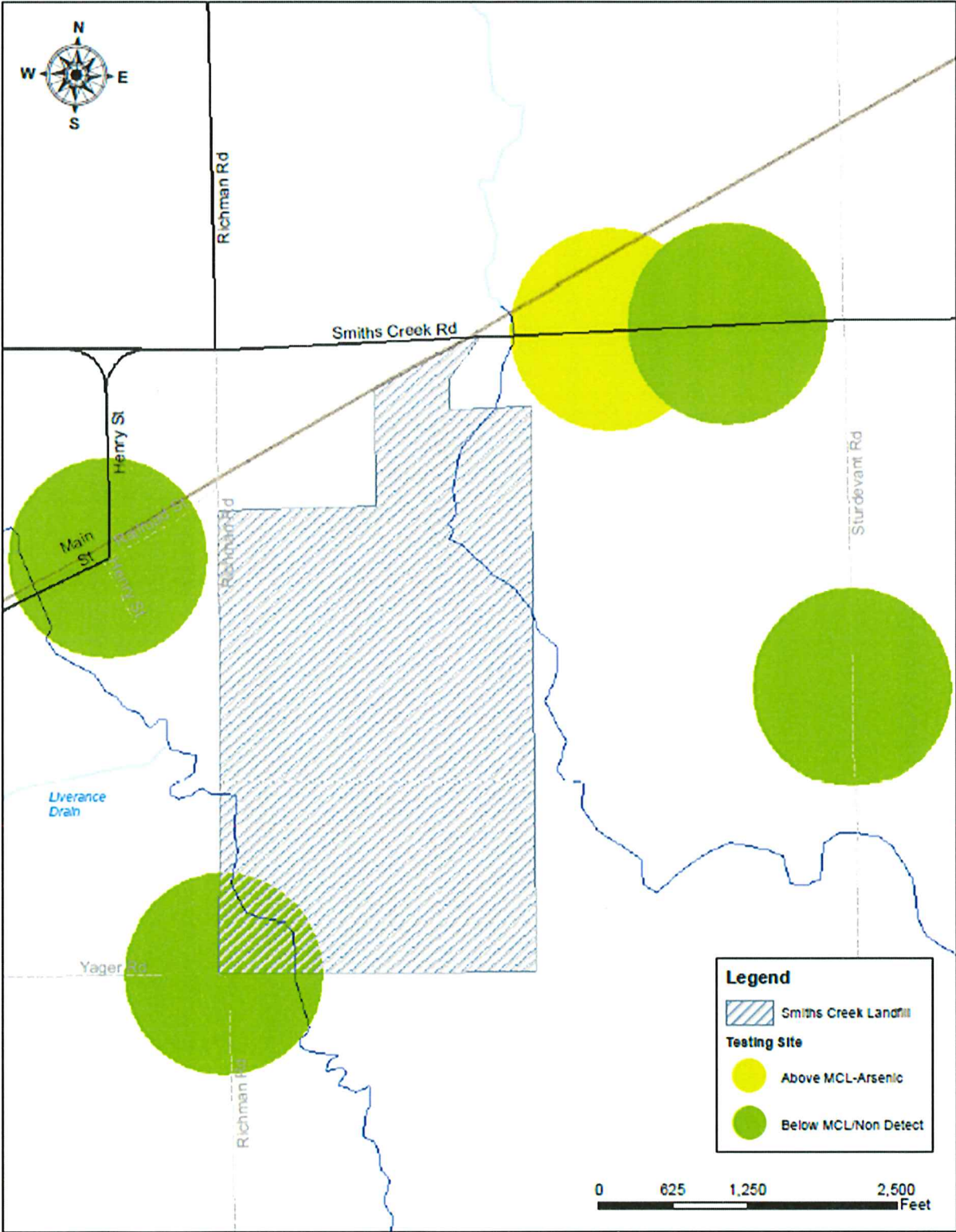
**Metals:** Arsenic; Barium; Cadmium; Chromium; Copper; Iron; Lead; Manganese; Mercury; Selenium; and Zinc.

**VOCs:** 1,1 Dichloroethane; 1,1 Dichloroethylene; 1,1 Dichloropropene; 1,1,1 Trichloroethane; 1,1,1,2 Tetrachloroethane; 1,1,2 Trichloroethane; 1,1,2,2 Tetrachloroethane; 1,2 Dichlorobenzene; 1,2 Dichloroethane; 1,2 Dichloropropene; 1,2,3 Trichlorobenzene; 1,2,3 Trichloropropene; 1,2,4 Trichlorobenzene; 1,2,4 Trimethylbenzene; 1,3 Dichlorobenzene; 1,3 Dichloropropene; 1,3,5 Trimethylbenzene; 1,4 Dichlorobenzene; 2,2 Dichloropropene; Benzene; Bromobenzene; Bromochloromethane; Bromodichloromethane; Bromoform; Bromomethane; Carbon tetrachloride; Chlorobenzene; Chlorodibromomethane; Chloroethane; Chloroform; Chloromethane; cis-1,2 Dichloroethylene; cis-1,3 Dichloropropene; Dibromomethane; Dichlorodifluoromethane; Dichloromethane; Ethylbenzene; Fluorotrichloromethane; Hexachlorobutadiene; Isopropylbenzene; m & p-Xylene; Methyl ethyl ketone; Methyl isobutyl ketone; Methyl-tert-butyl ether (MTBE); Naphthalene; n-Butylbenzene; n-Propylbenzene; o-Chlorotoluene; o-Xylene; p-Chlorotoluene; p-Isopropyltoluene; sec-Butylbenzene; Styrene; tert-Butylbenzene; Tetrachloroethylene; Tetrahydrofuran; Toluene; Total Trihalomethanes; Total Xylenes; trans-1,2 Dichloroethylene; trans-1,3 Dichloropropene; Trichloroethylene; and Vinyl chloride.

<sup>1</sup> <https://www.michigan.gov/egle/about/organization/drinking-water-and-environmental-health/contamination-investigation/water-quality-maps>

# Private Drinking Well Sampling Sites

The private drinking well sampling sites are displayed on the map by a general location in order to protect the privacy of the property owners who participated in the study.



MCL – Maximum contaminate level per the Environmental Protection Agency