

March 5th, 2017

Ohio Environmental Protection Agency (OEPA) Division of Drinking and Ground Waters 401 E. Fifth Street Dayton, Ohio 45402

Re: Village of Georgetown, Ohio

PWS ID No. OH0800503

Lead and Copper Mapping of Water Services on a GIS Based Distribution Map

In June 2016 State House Bill 512 was passed with the resulting regulation, Ohio Revised Code 6109.121 requesting that community public water systems comply with lead and copper mapping of water services within their distribution system. The Village of Georgetown water operator and engineer submits this lead and copper report, lead and copper sampling plan locations and GIS distribution water map identifying lead and copper services with an OEPA requested disclaimer for your review and acceptance.

Mr. Dan Schaefer met with the OEPA Southwest District Office on Friday March 3rd, 2017 to perform a checklist review of the necessary documents to insure that requirements for the lead and copper per this regulation are met. We were advised to proceed and given strong support of our efforts to date. We understand that violation letters could be mailed out on Tuesday, March 7th, 2017 to any PWS not submitting a mapping plan and report so this report and plan is being submitted at this time to eliminate any potential violation letter sent to the Village.

The comments below describe the Village's best effort on the location, identification as to material type and status of lead and copper service branches in the Village's water system. This below information and disclaimer has been placed on the Lead and Copper Map of Water Services for the Village.

The Village of Georgetown is the county seat of Brown County, Ohio. The Village was originally platted in 1819 and took its name from Georgetown, Kentucky. The Village is located along US 68 and White Oak Creek, which discharges southward directly into the Ohio River. The Village obtains its water supply from Brown County Rural Water Association through two existing wholesale water connections. President Ulysses S. Grant grew up and attended grade school in Georgetown. The Village is home to the large Brown County Fair and parade. The fairgrounds has the headstone of General Thomas L. Hamer a war hero.

The Village grew to about 1,750 by 1935 primarily in the historic area as shown on this map. Some of the remaining buildings still exist and are identified on this map. The buildings and services indicated in the historic area may have existing lead pipe and leaded pipe materials or components. Records are not available to specifically determine which building or water service used lead pipe. A review of available Georgetown water services have identified water services older and newer than 1982. It is generally understood that water services installed between 1935 and 1982 and 1982 and 1998 are copper pipe that use lead solder for joining pipes. The newer pipes in these years may have a higher risk of lead joints leaching into these copper pipes because of less normal water mineral buildup inside these pipes.



Today, the Georgetown Water Works provides water supply for primarily the Village incorporated area. The Village owns and operates this water system providing water service to a population in excess of 4,400. The current water service branches or taps within the Georgetown water system are shown on this map. Water services installed after approximately 1940 used copper pipe and joint compounds that contain leaded components.

In summary, water services installed after 1935 are assumed to be copper pipe with some brass piping used prior to 1940. Water services installed from 1935 to 1982 to 1998 may have used the 8% lead solder that could leach into the water through joints on services in the street portion (public) and or within the home or business (private side). The property owner should verify lead content issues on the private side.

Public and private water mains constructed from 1880 through 1960 in general were constructed of cast iron hub and spigot pipe generally in 18 foot sections joined together using lead joint materials. These cast iron pipes (used with water mains, fire hydrant piping, fire hydrants, and valves) are connected using yarn and lead or leadite (Sulphur based additive for easier lead pour) for each pipe joint. These leaded joint water mains are being replaced but many of these pipes exist throughout the water system, typically for Ohio water systems. Water mains generally installed in the late 1950's were installed using mechanical joint pipe with bolted connections. However, around 1960, compression joint pipe was introduced eliminating bolted and poured lead joint connections on pipe. These newer water main piping materials including PVC since about1960 in the public water system did not use lead joints on water mains.

<u>Disclaimer for Lead and Copper Services for the Village of Georgetown, Ohio</u> Because it is practically impossible to determine the lead content of an installed fixture, fitting or pipe, it should be assumed that the manufacture or installation date is the primary indicator of the lead content. Therefore, the characteristics of buildings and piping solder or fixtures would be buildings in Ohio built prior to 1998 or that used plumbing material or solder manufactured before 1998. Such materials may have lead content with greater than 8% lead and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1998. In addition, buildings built and plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight and have the lowest risk for contributing lead to the drinking water. It should be noted however that, although prohibited, some use of leaded solder or leaded components may have occurred after the prohibitions became effective. Actual lead pipe services are generally assumed to be possible prior to 1935. The Historic Area as highlighted shows where possible lead pipes may still exist but cannot be confirmed through existing records and should be verified on both sides for each water service tap or branch through approved OEPA testing methods.

If the OEPA should have any questions or require any follow up information or corrections, please do not hesitate to contact this below team.

Sincerely,

Derek Copas, Water Operator Dan Schaefer P.E., Water Engineer, Brandstetter Carroll Inc.

