



**Disclaimer for Lead and Copper Services for the Village of Ripley Water Works** 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 have used plumbing material or solder manufactured before 1998. Such materials may have lead 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 were generally assumed to be on buildings less than 1935. The **Historic Area** as highlighted indicates where possible lead pipes may have existed on the public and private side. Some of these remaining lead pipes may exist on the public side according to water records reviewed to date. The property and/or building owner should verify if any lead pipe exists on the private side. More information on lead in the public water systems can be obtained from the Ohio Environmental Protection Agency, Division of Drinking and Ground Water under the Lead and Copper in Public Systems web page.

The Village of Ripley is a Village in Brown County, Ohio along the Ohio River and Red Oak Creek. Colonel James Foadge, a veteran of the American Revolution first arrived in 1804 to claim his granted claim of 1,000 acres from the Northwest Territory. After Colonel Foadge and his family sold out the town, it was renamed in 1816 to honor General Eleazar Ripley, an American officer from the War of 1812. Later, Ripley became a destination for slaves forming the Underground Railroad to freedom. Mr. John Rankin and others were instrumental assisting slaves across the frozen Ohio River. The Rankin House on the hilltop overlooking the Village inspired the character of Eliza in Harriet Beecher Stowe's landmark book *Uncle Tom's Cabin* in 1852.

The Village grew to about 1,600 by 1925 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 Ripley water services have identified water services as shown on the map. It is generally understood that water services installed between 1935 and 1995 are copper pipe that used lead solder for joining pipes.

Today, the Ripley Water Works provides water supply for primarily the Village incorporated area. The Village owns and operates this water system with a newer water treatment plant from 2007 providing water service to a population in excess of 1,750. The current water service branches or taps within the Ripley 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 1925 are assumed to be copper pipe with some brass piping used prior to 1940. Water services installed from 1935 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 yam 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 since about 1960 in the public water system did not use lead joints on water mains.

March 2017

**2017**

**RIPLEY, OHIO  
PUBLIC SIDE / PRIVATE SIDE**

- HISTORIC SERVICES CONTAINING LEAD COMPONENTS
- POSSIBLE LEAD CONTAINING LEAD COMPONENTS
- HISTORIC DISTRICT



March 5<sup>th</sup>, 2017

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

Re: Village of Ripley, Ohio  
PWS ID No. OH0801112  
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 Ripley 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 3<sup>rd</sup>, 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 7<sup>th</sup>, 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 Ripley is a Village in Brown County, Ohio along the Ohio River and Red Oak Creek. Colonel James Poage, a veteran of the American Revolution first arrived in 1804 to claim his granted claim of 1,000 acres from the Northwest Territory. After Colonel Poage and his family laid out the town, it was renamed in 1816 to honor General Eleazar Ripley, an American officer from the War of 1812. Later, Ripley became a destination for slaves forming the Underground Railroad to freedom. Mr. John Rankin and others were instrumental assisting slaves across the frozen Ohio River. The Rankin House on the hilltop overlooking the Village inspired the character of Eliza in Harriet Beecher Stowe's landmark book Uncle Tom's Cabin in 1852.

The Village grew to about 1,600 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 Ripley water services have identified water services as shown on this map. It is generally understood that water services installed between 1935 and 1998 are copper pipe that used lead solder for joining pipes.

Today, the Ripley Water Works provides water supply for primarily the Village incorporated area. The Village owns and operates this water system with a newer water treatment plant from 2007 providing water service to a population in excess of 1,750. The current water service branches or taps within the Ripley 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 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 about 1960 in the public water system did not use lead joints on water mains.

Disclaimer for Lead and Copper Services for the Village of Ripley, Ohio 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,

Dusty Dryden, Water Operator

Dan Schaefer P.E., Water Engineer, Brandstetter Carroll Inc.