



Village of South Charleston Water System Narrative for Buildings Likely to Contain Lead Solder & Fixtures

The information contained herein and the system map was developed from as-built drawings, the institutional knowledge of current and past Village of South Charleston employees and input from retired plumbers dating back to the 1940's.

The map depicts two general categories of water mains. Category 1 is comprised of cast iron water mains and Category 2 water mains are those constructed of Ductile Iron Pipe and PVC C-900. To the best of our knowledge, service lines connected to Category 1 & Category 2 water mains consist of copper and galvanized pipes. Over the years as lead service lines were discovered during water meter replacement and water main repairs, the lead service lines were removed and replaced with copper or galvanized pipe. In 2003 about 75% of the water meters in the village were replaced. During late 2013 and 2014 100% of the water meters were replaced with radio read meters. No lead service lines were found by the installers in 2003 and 2014. We have a high level of confidence that no lead service lines on the public side exist.

Category 1 water mains are depicted as:  on the map. The joints of these lines and service line taps are packed with oakum and lead constructed as follows: "After setting the pipes together, workers pack oakum into the joints, then pour molten lead into the joint to create a permanent seal. The oakum swells and seals the joint, the "tar" in the oakum prevents rot, and the lead keeps the joint physically tight." Because of the potential of lead being present at or near service lines for properties tapping into cast iron mains, we have marked the public side of the system as likely to contain lead regardless of the service line material.

All buildings served by Category 1 mains were constructed before 2015. While we are unaware of any lead service lines on the private side, we cannot say with 100% confidence that none exist. Piping on the public side of the connection has been marked as likely to contain lead, regardless of the material used in the installation of individual service lines. We believe this approach complies with the Agency's requirement for "community water systems to be conservative in their estimates and assume that lead could have been used for service line materials unless the age of the area or specific information exists to rule out lead."

Category 2 water mains are shown as:  on the map. Water mains constructed from these materials use rubber/mechanical joints in construction; therefore, the public side does not contain leaded joints. All properties served by Category 2 mains have been marked as not likely to contain lead on the public side.

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(Continued)**

Like service lines connected to Category 1 water mains, services connected to Category 2 mains consist of copper and galvanized pipes. Most of the buildings served by Category 2 mains were constructed before 2015; therefore, the private side of the connection has been marked as likely to contain lead regardless of the material used to manufacture the service line unless specific records on file indicate otherwise.