

## VERIFICATION FORM FOR COMMUNITY PUBLIC WATER SYSTEMS CLAIMING NO LEAD SERVICE LINES

The owner or operator of all community public water systems must identify and map areas of their distribution system that are known or are likely to contain lead service lines. Systems must submit a copy of the applicable map to the Ohio Department of Health and the Ohio Department of Job and Family Services. Systems must also submit a report to the director containing at least both of the following: (1) The applicable map with narrative, and (2) A list of sampling locations used to collect samples as required by Ohio Revised Code (ORC) Section 6109.121 and any rules adopted thereunder, including contact information for the owner and occupant of each sampling site.

Should a water system determine no lead service lines exist in their distribution system, they must provide information stating they reviewed, at the minimum, historical permit records and local ordinances, distribution maintenance records and information pertaining to installation dates or materials for all services lines. This information must be verified below.

I HEREBY CERTIFY THAT THE FOLLOWING METHOD(S) WERE USED TO DETERMINE NO LEAD SERVICE LINES EXIST IN THIS WATER SYSTEM'S DISTRIBUTION SYSTEM, AS REQUIRED BY ORC 6109.121(F):

<ul> <li>☐ Historical permit records and/or local ordinances</li> <li>☐ Distribution maintenance records (i.e. meter replacement, waterline break repairs)</li> <li>☐ Information pertaining to installation dates for all service lines (i.e. after 1986 when lead services lines were banned)</li> <li>☐ Service line material of all service lines is known (i.e. all service lines are known to be PVC)</li> </ul>

Lead Mapping Verification Form Revised 2/14/17

Date Verification Rec'd:

For Ohio EPA use only:

## Narrative: PWS OH8301512 Richard Renneker System Lead Mapping

The structures served by this PWS are grouped into four (4) distinct categories based on the date of construction listed in the Warren County Auditor's Records and the following interpretation of the general end dates of eras after which lead pipe use was discontinued, lead solder was banned, lead content was limited, or lead content was essentially eliminated.

Because it is practically impossible to determine the lead content of an installed fixture, fitting or pipe, it is assumed that the date of installation (first listed date of home construction) and age of water main servicing those buildings will be used as the two (2) primary indicators of potential lead content. Buildings constructed in OHIO prior to 1988 could contain lead pipe and/or lead based solder, buildings constructed prior to 1998, or use plumbing materials or solder manufactured before 1998 may contain materials with greater than 8% lead content and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1998. In addition, buildings constructed after 2014 which incorporated plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight will have the lowest risk for contributing lead to the drinking water. It should be noted that, although prohibited by law, some use of leaded solder or lead bearing components may have occurred after the prohibition became effective.

Based on this criteria, we have identified (by map color code) the following divisions of potential for private side lead component content:

Homes Constructed Before 1960 served by WL installed before 1960
Homes Constructed Before 1988 on water mains installed after 1960
Homes Constructed After 1988 but Before 2014
Homes Constructed After 2014

Warren County has historically identified the public portion of the service lines to be comprised of the water mains, tapping device, waterline from the main to the meter pit, the meter pit, the water meter, and support devices including angle valves, shut-off valves and corp stops; and the private side of the service consist of the water service lateral from the outbound side of the meter pit to the home (structure). Also, all of the plumbing inside the home (structure) including water line, solder, fittings, fixtures, and appurtenances are considered private side as well. All private side waterline and appurtenances from the outbound side of the water meter pit are the property of the owner and must be maintained appropriately under that private ownership.

In the context of these Lead Maps prepared for the OEPA, the color coding is mostly indicative of the first date of construction found for each home. It does not directly

indicate presence or absence of Lead piping in the home or in the yard (private side service line). Properties indicated in yellow shading with a bright yellow border on the map were built in the late 1800's, many in the 1920's and 1950's. Since these homes and the Kings Mills water system existed before the Warren County Water Department was formed in 1962, no records exist of actual materials used during construction of the old system except main line construction drawings dating the pipe as "old existing main" in the 1962 Nelson Watson Jr. & Associates , Inc. plan set. The "new" cast iron mains installed in 1962 for the "new" water plant and system were connected to the "old" mains in town. These oldest designated homes on mains constructed prior to 1960 have the highest potential of containing lead pipe in the home, lead service lines both private and public side, but no services or pipes are known to be lead or contain lead in this PWS at this time.

Further investigation into existing records on water taps/service lines has proven fruitless with regard to original service line installation records or legislative acts banning the use of Lead in this PWS. According to the mainstream literature, as well as suggested in the OEPA "Guidelines for Lead Mapping in Distribution Systems" (published 01/06/2017), use of Lead service lines was discontinued around the end of the 1950's. Therefore, the remainder of the properties in this PWS constructed after 1962 but before 1988 (identified in yellow shading with black border) likely have public side cast iron or ductile iron mains with service laterals to the meter pit consisting of K Type copper tubing with brass corp stops, angle valves, water meters and other appurtenances.

Further designation of homes constructed between 1988 and 2014, as designated in pink shading, most likely do not contain any lead pipe or lead based solder, but may have plumbing fittings and fixtures in the home which contain a portion of lead, up to 8%. The homes constructed after 2014 most likely utilized plumbing components considered to be essentially lead free, and are indicated with green shading.

Warren County tests for Lead content in water samples obtained inside private residences in this PWS, every third year. This is a reduced sampling schedule as allowed by current OEPA regulation due to the very low levels of Lead detected in each sampling round. Warren County sampled this PWS for Lead & Copper monitoring in 2016 with excellent overall very low Lead content. All volunteer sampling sites met a most stringent review of criteria to become the newest approved locations for proper OEPA Lead & Copper testing.

In summary, this PWS's Lead Map is color coded to identify potential for private side Lead content based on the age of construction of the home. All homes in this PWS constructed prior to 1988 have the highest risk of having some portion of the private water service lines contain lead pipe, lead solder or lead bearing fixtures. All of the public side brass valves, meters, and appurtenances installed from 1962 (inception of the Warren County Water Department) through 2013 have the potential to contain some Lead. Historical record shows the measured Lead levels, on average, are very low in homes in this PWS. END

























