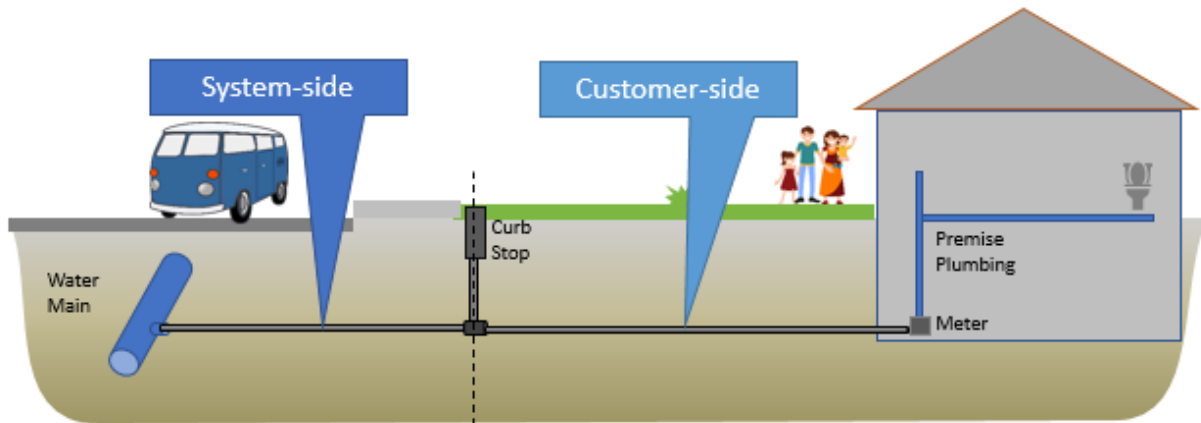


## **Training Excerpt**

### **SUFFICIENT EVIDENCE FOR NON-LEAD – JOB AID**

To categorize pipe material as non-lead (e.g. copper), the water system is expected to show sufficient evidence through one of the “stand-alone” verification options, or a combination of 2 or more other methods as described below.

**Note:** For systems that own a portion of the service line, such as shown below, the pipe material for both the customer and system portions must be identified.



**“Stand-Alone” Records Method Options:** The following options do not need to be combined with another method to verify a pipe is non-lead:

- Records indicating service line installation/replacement date after January 6, 1991 (the effective date of the PA Lead Ban)
- OR-
- Record of a local ordinance prohibiting lead service line installation and water system records indicating service line installation/replacement after the ordinance effective date.

**Combination of Two (or more) Other Methods:** If water system records do not meet either of the stand-alone criteria above, the system may use any TWO other investigation techniques from the list below:

- Records review
- Modeling/Statistical analysis
- Water sampling (5<sup>th</sup> liter sampling, if system does not have corrosion control treatment)
- Field verification, options include\*:
  - Visual inspection at existing access point (This includes any access points in which the material type can clearly be determined, such as a meter pit, or the service line entry to the basement at the customer side)
  - CCTV inspection outside pipe – at curb box
  - Mechanical Excavation at a location along each half of the service line (i.e. customer and system side)

\* **Representative Field Verification:** Note that if a system is verifying records using a field method, a statistically sound subset of service lines can be field verified, rather than every line. Systems should follow the procedure established in the [Michigan EGLE “Minimum Service Line Material Verification Requirements”](#) document. This method should only be used for a homogeneous area, such as a residential neighborhood in which the houses were built in the same time period.

- Other method reviewed by DEP

**“Stand-Alone” Field Method Options:** If a system does not have other verification method options, there are two stand-alone field method options. Use ONE of the following verification methods:

- Internal CCTV inspection over the full length of the service line
- OR –
- Mechanical excavation in at least 3 locations over the length of the service line as follows (visual below):
  - Curb stop to building:
    - A minimum of 18 inches from the curb stop
    - Or, if the distance to the building is less than 18 inches, halfway to the building
  - Curb stop to water main:
    - A minimum of 18 inches from the curb stop
    - Or, if the distance to the water main is less than 18 inches, halfway to the main
  - Third point (choose one):
    - Inside the home where the service line enters (inspected by water system personnel, not customer)
    - A second excavation point in the longer section of service line that is at least halfway between the first point and the building or water main

