

Guidance for Using Water System Personnel Experience to Evaluate Service Line Materials

INTRODUCTION

Wisconsin Public Water Systems (PWSs) are required to develop and submit a baseline service line inventory in accordance with ch. NR 809.545(1n), Wis. Adm. Code, by November 1, 2027, and submit annual updates to the inventory thereafter until certain conditions are met. EPA guidance¹ published in August 2026 offered the use of water system personnel experience (hereafter referred to as “personnel experience”) as one possible method for a PWS to classify the material of lead-status-unknown² (LSU) service lines as non-lead without physically inspecting every location.

A service line can be categorized as non-lead³ in a PWS’s baseline inventory if it is determined through an evidence-based record, method, or technique to not be a lead or galvanized-requiring-replacement (GRR) service line.⁴ This document is intended to outline the use of an evidence-based method that the department may approve for a PWS to classify the material of a group of service lines as non-lead without physically inspecting every location. This document explains the criteria that the Wisconsin Department of Natural Resources (department) will use to determine whether personnel experience is an acceptable method for an individual PWS to use, and if it is, the steps the PWS can follow to use this method.

¹ [EPA factsheet: LCRI Service Line Inventories – Tips August 2026](#)

² A lead-status-unknown service line is a service line whose pipe material has not been demonstrated to be a lead service line, galvanized-requiring-replacement service line, or non-lead service line [ch. NR 809.04(46)(f) Wis. Adm. Code].

³ A service line can be categorized as non-lead, if the service line is determined through an evidence-based record, method, or technique not to be a lead or GRR service line. The water supplier is not required to identify the specific material of a non-lead service line; however, the water supplier may use the material, such as plastic or copper, as an alternative to categorizing it as non-lead [ch. NR 809.545(1n)(d)3. Wis. Adm. Code].

⁴ ch. NR 809.545(1n)(d)3., Wis. Adm. Code

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WHO CAN CONSIDER USING PERSONNEL EXPERIENCE?

Option 1: Entire Distribution System of PWS that serves 3,300 or fewer persons

A PWS that meets all of the criteria listed below and serves 3,300 or fewer persons may use personnel experience to evaluate service line materials in the **entire** distribution system:

- PWS has no known lead service lines currently in their distribution system;
- PWS has no records of lead service line (LSL) replacement (i.e. no LSLs ever previously existed in their distribution system);
- PWS has at least one (1) street-side LSU service line.
- PWS staff have confidence that there are no LSLs in their distribution system based on a review of all available records and their institutional knowledge, but have insufficient records to support this; and
- PWS has conducted a review of all existing evidence-based records listed in ch. NR 809.545(1n)(b), Wis. Adm. Code.

Option 2: Portions of the Distribution System of PWS that serves more than 3,300 persons

A PWS that meets all of the criteria listed below and serves more than 3,300 persons may use personnel experience to evaluate service line materials in **portions** (e.g., neighborhood or development) of the distribution system:

- PWS has no known lead service lines currently in the applicable portion(s) of the distribution system;
- PWS has no records of lead service line (LSL) replacement in the applicable portion(s) of the distribution system (i.e. no LSLs ever previously existed in the applicable portion(s) of their distribution system);
- PWS has at least one (1) street-side LSU service line in the applicable portion(s) of the distribution system.
- PWS staff have confidence that there are no LSLs in the applicable portion(s) of the distribution system based on review of all available records and their institutional knowledge, but have insufficient records to support this; and
- PWS has conducted a review of all existing evidence-based records listed in ch. NR 809.545(1n)(b), Wis. Adm. Code.

LIMITATIONS OF PERSONNEL EXPERIENCE

- The department will only approve personnel experience as a method for classifying street-side LSU service lines. Service lines on the property side can be visually inspected in the home or building if there are no records or other available methods to identify the service line material.
- A PWS that classifies street-side service lines as non-lead based on personnel experience must identify the basis of material classification for all such locations in their service line inventory as “personnel experience” before the PWS begins non-lead validation activities⁵.
- The department may require a PWS to provide additional information if the PWS’s affidavit provides insufficient details to assess the reliability of personnel experience to classify service line materials (e.g., job title, years of service, job responsibilities, etc.).
- Service lines identified as non-lead using personnel experience must be included in the PWS’s non-lead validation pool⁶. If a water system subsequently discovers that any service lines classified as non-lead based on personnel experience were inaccurately classified, it must reclassify the street side of all service lines that were classified as non-lead based on personnel experience to lead status unknown in the portion of its distribution system covered by the affidavit that included the incorrectly classified service line. See **Appendix D** for more information.

WATER SYSTEM PERSONNEL EXPERIENCE STEP-BY-STEP PROCESS

Step 1: Identify and Classify All Known Service Lines

Before using the personnel experience method to identify the material of LSU service lines as non-lead in its baseline inventory, a PWS must first review all existing evidence-based records listed in ch. NR 809.545(1n)(b), Wis. Adm. Code (See **Appendix A**).

Step 2: Identify All Service Lines of Lead-Status-Unknown Material

Make a list of all street-side service line materials that could not be classified as non-lead or as a specific non-lead material, such as copper or plastic, by reviewing the records described in **Appendix A**.

⁵ ch. NR 809.55(5)(h), Wis. Adm. Code

⁶ Ch. NR 809.545(1r)(e), Wis. Adm. Code

Step 3: Identify which LSU Service Lines Can be Classified as Non-Lead Using Personnel Experience

Using the list of street-side LSU service line materials developed in Step 2, identify the service lines and/or areas of the distribution system that water system staff can identify as non-lead based upon the staff member's personal observations and knowledge of the distribution system.

Water system operators and personnel should identify only the service lines that they have a *high degree of confidence* to be non-lead. In the following steps, staff will need to attest that the service lines are non-lead based on the staff member's personal knowledge in an affidavit. The affidavit must be notarized.

Step 4: Identify the Number of Affidavits Required for the Distribution System or Portion of the Distribution System

Minimum Affidavit Requirements for Entire Distribution System

Water systems serving a population of 500 or less must submit two affidavits signed by two different water system staff (current or former) covering the entire distribution system.

Water systems serving a population of 501- 3,300 must submit three affidavits signed by three different water system staff (current or former) covering the entire distribution system.

Water systems serving a population of 3,300 or less can use the template in [Appendix B - Affidavit template for Water System Serving 3,300 or Fewer Persons](#).

Table 1. Minimum Requirements for affidavits that cover an entire distribution system

Pop Served	No. of Affidavits
501-3,300	3
500 or fewer	2

Minimum Affidavit Requirements for Portion(s) of the Distribution System

Water systems serving a population that exceeds 3,300 cannot submit an affidavit that covers the entire distribution system. Such systems must use the *Affidavit template covering a Portion of Water System* in [Appendix C](#). Systems serving more than 3,300 persons may use affidavits to cover one or more portions of the distribution system, following requirements in Table 2.

To cover a portion of the distribution system with 200 or fewer service lines, water systems must submit two affidavits signed by two different water system staff (current or former).

To cover a portion of the distribution system with 201-1,320 service lines, water systems must submit three affidavits signed by three different water system staff (current or former).

To cover multiple portions for the distribution system the PWS must submit separate affidavits meeting the requirements of Table 2 below for each portion of the distribution system. For example, if a PWS wants to use personnel experience to cover Oak Hills neighborhood, which includes more than 200 service lines and Maple View neighborhood which includes fewer than 200 service lines, they must submit three affidavits covering Oak Hills neighborhood plus two additional, separate, affidavits covering Maple View neighborhood.

Table 2. Minimum number of affidavits required to cover a portion of a distribution system

No. Service Lines	No. of Affidavits from different persons
201-1,320	3
200 or fewer	2

Step 5: Draft the Affidavit(s) and Submit to the Department for Review

Only one water system operator or staff person should complete and sign each affidavit. Each operator or staff person may complete and sign multiple affidavits covering different portions of the distribution system.

The water system should update **[BOLDED TEXT IN BRACKETS]** in the Affidavit, but **must** retain all other text. Personnel should replace the **[BOLDED TEXT IN BRACKETS]** with the following details:

- Under **[DESCRIPTION OF EXPERIENCE AND RESPONSIBILITIES RELATED TO IDENTIFICATION OF SERVICE LINE MATERIALS]**, include details such as:
 - Responsibilities for conducting or overseeing work activities including:
 - main break repair and/or replacement
 - service line repair and or replacement
 - cross connection inspections
 - other, as applicable
 - Frequency and degree of involvement in replacement, repair, and inspection activities

- Under **[DESCRIPTION OF APPLICABLE PROFESSIONAL LICENSES OR CERTIFICATIONS]**, include details such as:
 - Certified Water System Operator
 - Professional Engineer
 - Licensed Plumber
 - Other, as applicable
- Under **[DESCRIPTION OF ALL ACTIVITIES OR INSTANCES WHEN SERVICE LINE MATERIALS WERE OBSERVED]**, include details such as:
 - Mechanical service line excavation
 - Service line replacement or repair
 - Water main replacement or repair
 - Cross connection inspection
 - Water meter change out
 - Other, as applicable

After drafting the affidavit(s), **but before signing and notarizing**, email the draft(s) to DNRDGLeadCopperInventories@wisconsin.gov or your Lead and Copper Field Specialist. Department staff will review the affidavits and inform you of any clarifications or additional information needed. After the department completes its review of your draft affidavits, update the affidavit(s) as applicable. Resubmit your draft affidavit(s) to DNRDGLeadCopperInventories@wisconsin.gov as necessary to ensure the department will approve the affidavits you have notarized as an acceptable evidence-based method for classifying the material of a group of service lines as non-lead without physically inspecting every location.

Step 6: Complete and Notarize the Affidavit(s)

Once the department has approved your unsigned affidavits, they each need to be signed and notarized before a notary. Do **not** sign any affidavit until you are in the presence of a notary. To have an affidavit notarized, the water system staff member must bring the unsigned affidavit(s) and a valid government-issued photo ID to a notary public—commonly found at banks, UPS Stores, or libraries—and sign in the notary’s presence. Some notaries may charge a fee and/or require an appointment.

Step 7: Submit the Affidavit(s) to the Department

Submit the signed and notarized affidavit(s) to the department at DNRDGLeadCopperInventories@wisconsin.gov.

Step 8: Classify the Remaining LSU Service Lines and submit the Baseline Inventory, along with the Methods and Completeness Certification, and the Public Accessibility Certification

Classify the applicable street-side LSU service lines as non-lead, listing the basis of material classification as ‘personnel experience’ in the inventory.⁷ Submit the baseline inventory to the department using the Service Line Inventory Submittal Portal (SLISP). The PWS can access SLISP through the [DNR Switchboard](#). Contact your Lead and Copper Field Specialist with questions about how to use or access SLISP.

Update the Methods and Completeness form to indicate the water system used Personnel Experience to classify service lines in the inventory. You can do this by briefly describing the use of personnel experience on page 2 of the Methods and Completeness form under “OPTIONAL - other records.” Complete the Public Accessibility Certification. To request a copy of the Methods and Completeness and Public Accessibility Certification forms, contact your Lead and Copper Field Specialist. Submit the Methods and Completeness Certification and the Public Accessibility Certification to DNRDGLeadCopperInventories@wisconsin.gov.

Step 9: Retain Documentation of Personnel Experience and Copies of Affidavits

Retain documentation of all service line identification efforts associated with steps one through six, described herein. The department may ask PWSs to produce or submit these records to support their inventory submittal. All LSU service lines must be identified by December 31, 2037, unless the system is subject to a shortened deadline or is eligible for a deferred deadline.⁸

FOLLOW-UP ACTIVITIES

Consumer Notifications

PWSs should clearly communicate the level of confidence in their inventories to consumers. The department strongly recommends that within a year of using the personnel experience method to build its baseline inventory, a PWS should send a consumer notice that clearly communicates the level of confidence in its service line

⁷ ch. NR 809.545(1n)(i), Wis. Adm. Code

⁸chs. NR 809.545(2)(e)5. and 6., Wis. Adm. Code

classification to each consumer whose service line is identified as ‘non-lead’ through the personnel experience method. The department also recommends that PWSs offer to physically inspect these service lines upon request, as well as explain what information the personnel experience method provides. The following are examples of ways to inform consumers:

Option 1: Entire Distribution System

*The street-side, or water system owned, portion of your drinking water service line was identified as non-lead using water system personnel experience. **[# of staff]** water system staff members observed **[# of service lines]** out of **[total number of service lines]** service lines over the course of **[# years of service for all staff that signed the affidavit]** years and have not found lead. Water system staff examined service lines during **[description of all activities or instances when service line materials were observed]**. Therefore, we have classified all street-side service lines with unknown material in our distribution system as non-lead. We will continue to identify and track service line materials in the future during routine operations. If you would like **[Water system name]** to physically inspect your service line to verify the material, please contact us at **[phone number]**.*

Option 2: Portions of Distribution System

*The street-side, or water system owned, portion of your drinking water service line was identified as non-lead using water system personnel experience. **[# of staff]** water system staff members observed **[# of service lines]** out of **[total number of service lines]** service lines in the **[area or portion of the distribution system]** over the course of **[# years of service for all staff that signed the affidavit]** years and have not found lead. Water system staff examined service lines during **[description of all activities or instances when service line materials were observed]**. Therefore, we have classified street-side service lines with unknown material in **[DESCRIPTION OF AREA COVERED BY AFFIDAVIT]** of our distribution system as non-lead. We will continue to identify and track service line materials in the future during routine operations. If you would like **[Water system name]** to physically inspect your service line to verify the material, please contact us at **[phone number]**.*

Ongoing Service Line Material Identification and Tracking

1. PWSs should develop standard operating procedures to continuously identify and document service line materials that are encountered during routine operations, maintenance activities, and distribution system upgrades. PWSs are required to

identify service line materials encountered during normal operations, and must update the inventory annually based on the materials identified.⁹ The PWS should record the materials and update the basis of material classification for any service line whose verification method was previously identified as ‘personnel experience’ to ‘Field Inspection Only’ when appropriate.

2. If a PWS discovers an LSL that was previously classified as non-lead, the PWS must update their inventory and notify the department within 60 days of discovering the LSL.¹⁰
3. If a PWS subsequently discovers that any service lines classified as non-lead based on personnel experience were inaccurately classified, it must reclassify the street side of all service lines classified as non-lead based on personnel experience as lead status unknown in the portion of its distribution system covered by the affidavit that included the incorrectly classified service line. See [Appendix D](#) for more information.

⁹ ch. NR 809.545(1r)(b)2., Wis. Adm. Code

¹⁰ ch. NR 809.55(c), Wis. Adm. Code

Appendix A

Evidence-Based Records

For the baseline inventory, PWSs must conduct a review of information sources that provide information about service line and connector materials and locations, including all of the following:

- a. All construction and plumbing codes, permits, and records or other documentation that indicate the service line and connector materials used to connect structures to the distribution system.
- b. All PWS records on service lines and connectors, including distribution system maps and drawings, recent or historical records on each service connection and connector, meter installation records, historical capital improvement or master plans, and standard operating procedures.
- c. All records of inspections in the distribution system that indicate the material composition of the service connections and connectors that connect a structure to the distribution system.
- d. Any information on lead, galvanized iron, and galvanized steel materials that the water supplier has identified under ch. NR 809.119, Wis. Adm. Code.
- e. Additional information if required or approved by the department.

PWSs must include any information on service line and connector materials from all applicable information sources described above in the baseline inventory.

Appendix B

Affidavit template for PWS Serving 3,300 or fewer persons to identify entire distribution system.

AFFIDAVIT

State of _____

County of _____

1. I, **[FULL LEGAL NAME]**, being first duly sworn on oath, state and depose as follows:
I am of legal age and competent to make this affidavit.
2. I **[AM/WAS]** the **[TITLE]** of the **[WATER SYSTEM NAME]**. I **[HAVE SERVED/SERVED]** in this position from **[START DATE] - [END DATE/PRESENT]**. I **[AM/WAS]** responsible for the operation and maintenance of the **[WATER SYSTEM NAME]** distribution system. In this role I **[AM/WAS]** responsible for **[DESCRIPTION OF EXPERIENCE AND RESPONSIBILITIES RELATED TO IDENTIFICATION OF SERVICE LINE MATERIALS]**. **[DESCRIPTION OF APPLICABLE PROFESSIONAL LICENSES OR CERTIFICATIONS]**.
3. I **[HAVE EXAMINED/EXAMINED]** over **[NUMBER]** service lines when **[DESCRIPTION OF ALL ACTIVITIES OR INSTANCES WHEN SERVICE LINE MATERIALS WERE OBSERVED]**. I **[HAVE EXAMINED/EXAMINED]** service lines in all portions of the **[WATER SYSTEM NAME]** connecting to homes that **[RANGE/RANGED]** in age from **[NUMBER]** years old to recently constructed. I **[HAVE OBSERVED/OBSERVED]** both the street side and property side of these service lines. None of the service lines I observed were made of lead.
4. **[WATER SYSTEM NAME]** **[HAS REVIEWED/REVIEWED]** all available evidence-based records under s. NR 809.545(1n)(b), including construction and plumbing codes, permits, meter installation records, recent and historical records on service connection, historical capital improvement or master plans, inspection records, and there are no records of lead service lines ever having existed anywhere in the distribution system.
5. To my knowledge, I am not aware of any lead service line (LSL) being encountered in the distribution system

6. To my knowledge, no lead service lines have ever been replaced in **[WATER SYSTEM NAME]** distribution system.

7. **[ADDITIONAL SUPPORTING INFORMATION IF APPLICABLE]**

NOTARY ACKNOWLEDGMENT

Subscribed and sworn to (or affirmed) before me on this ____ day of _____, **20**,

by **[Name of Affiant]**.

Signature of Notary Public: _____

Printed Name of Notary Public: _____

Notary Public, State of _____

My commission expires: _____

[Seal]

Appendix C

Affidavit template covering a portion of a distribution system

AFFIDAVIT

State of _____

County of _____

I, **[FULL LEGAL NAME]**, being first duly sworn on oath, state and depose as follows:

1. I am of legal age and competent to make this affidavit.
2. I **[AM/WAS]** the **[TITLE]** of the **[WATER SYSTEM NAME]**. I **[HAVE SERVED/SERVED]** in this position from **[START DATE – END DATE/PRESENT]**. I **[AM/WAS]** responsible for the operation and maintenance of the **[WATER SYSTEM NAME]** distribution system. In this role I **[AM/WAS]** responsible for **[DESCRIPTION OF EXPERIENCE AND RESPONSIBILITIES RELATED TO IDENTIFICATION OF SERVICE LINE MATERIALS]**. **[DESCRIPTION OF APPLICABLE PROFESSIONAL LICENSES OR CERTIFICATIONS]** |
3. I **[HAVE EXAMINED/EXAMINED]** over **[NUMBER]** service lines when **[DESCRIPTION OF ALL ACTIVITIES OR INSTANCES WHEN SERVICE LINE MATERIALS WERE OBSERVED]**. I **[HAVE OBSERVED/OBSERVED]** service lines **[IN THE AREA OUTLINED IN ATTACHED MAP] OR [DESCRIPTION OF DISTRIBUTION SYSTEM AREAS WHERE SERVICE LINE MATERIALS WERE OBSERVED]** connecting to homes that **[RANGE/RANGED]** in age from **[NUMBER]** years old to **[NUMBER]** years old. I **observed both the street side and property side of these service lines**. None of the service lines I observed were made of lead.
4. **[WATER SYSTEM NAME]** has reviewed all available evidence-based records under s. NR 809.545(1n)(b), including construction and plumbing codes, permits, meter installation records, recent and historical records on service connection, historical capital improvement or master plans, inspection records, and there are no records of lead service lines ever having existed anywhere in the area described in Part 3.
5. To my knowledge, I am not aware of any lead service line (LSL) being encountered anywhere in the area described in Part 3.

7. To my knowledge, no lead service lines have ever been replaced anywhere in the area described in Part 3.

8. **[ADDITIONAL SUPPORTING INFORMATION IF APPLICABLE]**

NOTARY ACKNOWLEDGMENT

Subscribed and sworn to (or affirmed) before me on this ____ day of _____, **20**,

by **[Name of Affiant]**.

Signature of Notary Public: _____

Printed Name of Notary Public: _____

Notary Public, State of _____

My commission expires: _____

[Seal]

Appendix D

What to do if an LSL is encountered during routine water system operations or non-lead validation

If a water system subsequently discovers that any service lines classified as non-lead based on personnel experience were inaccurately classified, it must reclassify the street side of all service classified as non-lead based on personnel experience to lead status unknown in the portion of its distribution system covered by the affidavit that included the incorrectly classified service line. For example:

- ⇒ if a water system uses affidavits 1, 2, and 3 to classify all LSU service lines in the Oak Hills Neighborhood as non-lead, and then discovers a lead service line in the Oak Hills Neighborhood, it must then reclassify all service lines in the Oak Hills Neighborhood that were classified as non-lead based on personnel experience in affidavits 1, 2, and 3 as LSU; or
- ⇒ if water system that serves 500 or fewer persons or fewer uses two affidavits to classify all LSU service lines in its distribution system as non-lead subsequently discovers a lead service line, it must reclassify all service lines in its distribution system that were classified as non-lead based on personnel experience as LSU.
- ⇒ Additionally, the PWS must update their service line inventory to reflect the new information before their next annual inventory update is due¹¹, and submit the updated inventory to the department by the due date. The inventory must include all of the updated items listed below.
 - Update service line material(s) to include newly identified LSL(s).
 - Update the service line material(s) to include service lines confirmed to be non-lead through field investigations
 - Update the basis of material classification to reflect field inspections completed during routine water system operations
 - Continue to classify all LSUs that were not field verified as LSU.

The PWS must continue working to identify all LSU service lines from its inventory using other methods, before the mandatory service line replacement deadline.¹²

¹¹ ch. NR 809.545(1r), Wis. Adm. Code.

¹² The deadline is December 31st, 2037, for most water systems except those subject to a shortened or deferred deadline (ch. NR 809.545(2)(d), Wis. Adm. Code).