

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

THE LEAD AND COPPER RULE REVISIONS



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DRINKING WATER & GROUNDWATER PROGRAM

Current Status

- Pre-publication rule posted on December 22, 2020.
- Published in the Federal Register on January 15, 2021.
- Original Effective Date: March 16, 2021
- Original Compliance Date: January 16, 2024
- Revised Effective Date: June 17, 2021
- **Revised Effective Date #2: December 21, 2021**
- Revised Compliance Date: September 16, 2024
- **Revised Compliance Date #2: October 16, 2024**
- Several pending lawsuits



Today's Presentation

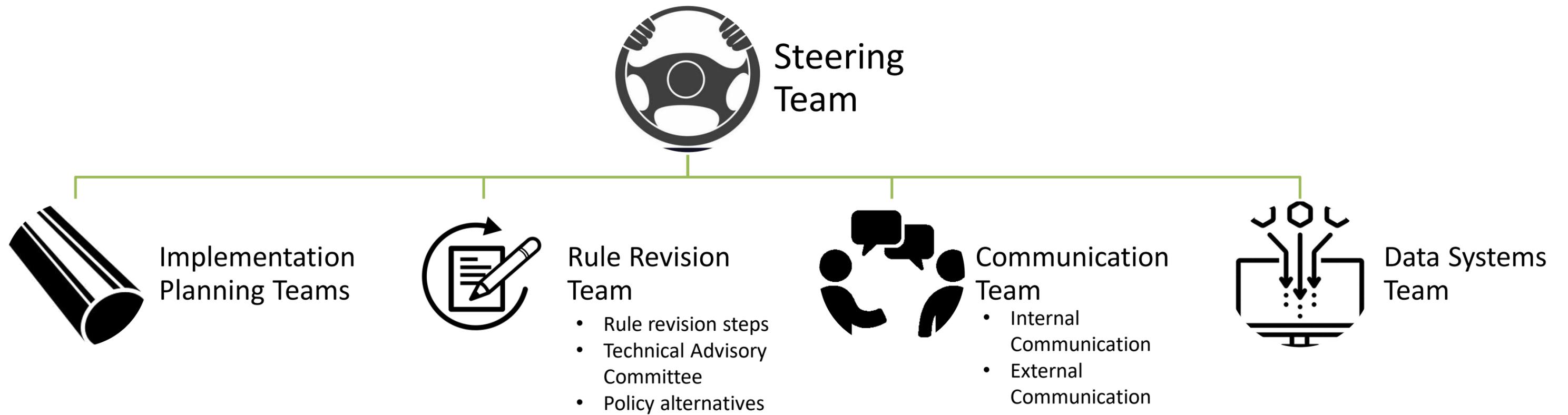
- How will (DNR) get ready to administer the rule?
- How will we communicate with Public Water Systems about what they need to do to be ready to comply with the rule?
- How will stakeholders be involved?
- What have we done so far?

Statement of Need

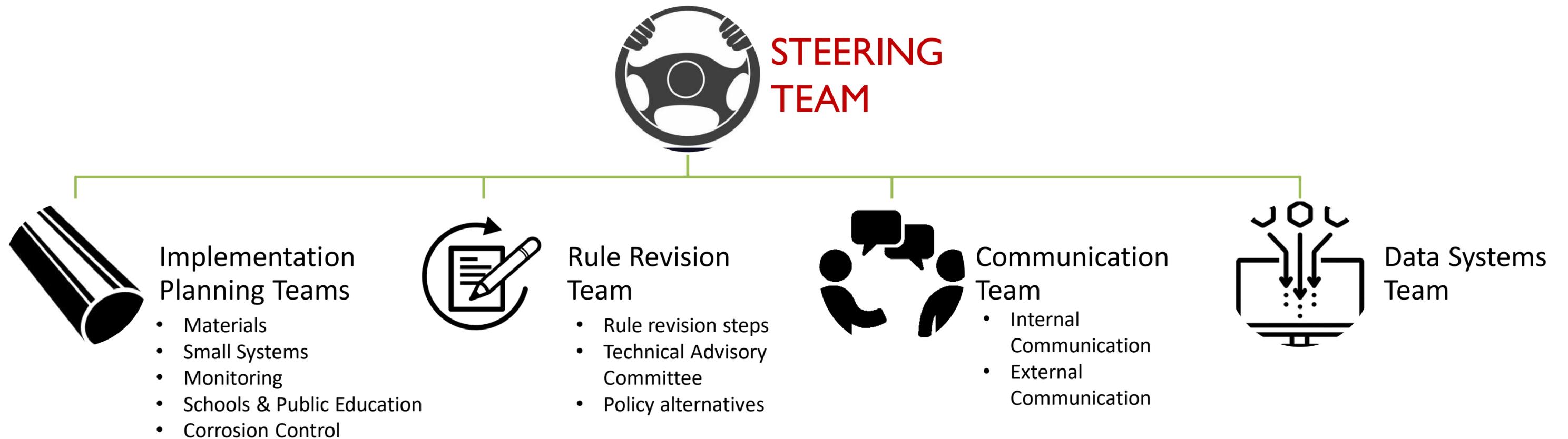
The Safe Drinking Water Act (SDWA) requires EPA to establish and enforce standards for public drinking water systems (PWS). EPA delegates primary enforcement responsibility (also called primacy) for PWSs to states and Indian Tribes. In Wisconsin, the Department of Natural Resources (department) is the SDWA primacy agency. In order to retain primacy for the Public Water System Supervision (PWSS) program the department must have state regulations in place that are no less stringent than the regulations promulgated by EPA and have adopted and be implementing procedures for the enforcement of these regulations.

The EPA published final regulatory revisions to the National Primary Drinking Water Regulation (NPDWR) for lead and copper under the authority of the Safe Drinking Water Act (SDWA). These Lead and Copper Rule Revisions (LCRR) are intended to provide greater protection of public health by reducing exposure to lead and copper in drinking water. State primacy agencies are thus required to develop and adopt state regulations that are no less stringent than the LCRR, and to develop and implement procedures to administer and enforce the new rule provisions prior to the anticipated LCRR compliance date of September 2024.

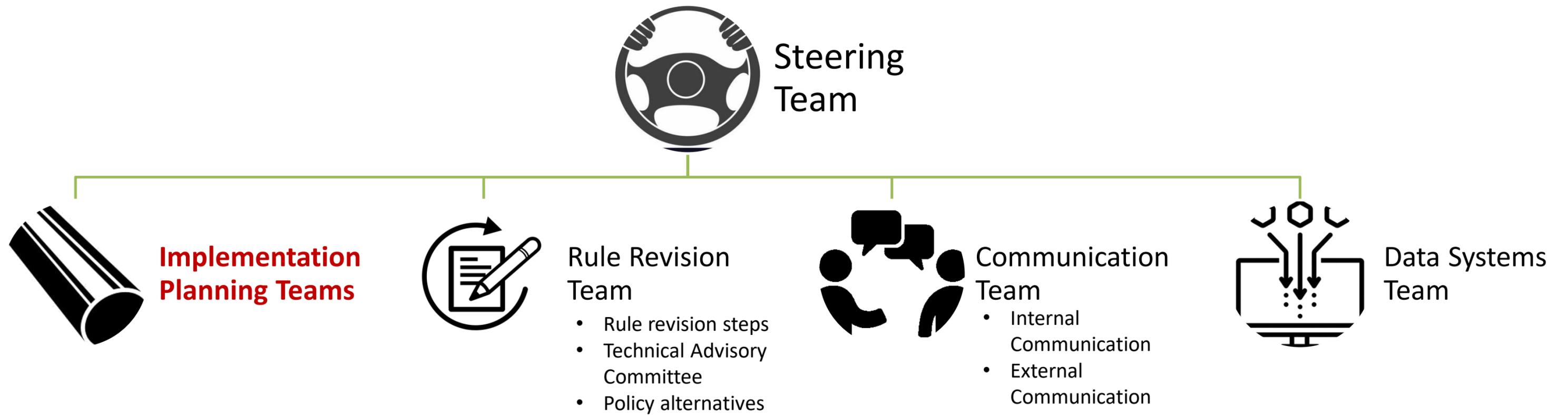
Framework for LCRR Administration & Rule Revision



Framework for LCRR Administration & Rule Revision



Framework for LCRR Administration & Rule Revision



LCRR Implementation Planning Areas



MATERIALS
INVENTORY



LSL
REPLACEMENT



COMPLIANCE
MONITORING



SMALL SYSTEM
FLEXIBILITY



FIND AND FIX



CORROSION
CONTROL



SCHOOLS &
DAYCARE



PUBLIC NOTICE
& EDUCATION



SOURCE WATER
MONITORING &
TREATMENT

LCRR Implementation Planning Teams



MATERIALS
INVENTORY



LSL
REPLACEMENT

MATERIALS WORKGROUP



FIND AND FIX



SMALL SYSTEM
FLEXIBILITY

SMALL SYSTEM ISSUES WRKGRP



CORROSION
CONTROL



SOURCE WATER
MONITORING &
TREATMENT

ENGINEERING WORKGROUP



COMPLIANCE
MONITORING

**COMPLIANCE
MONITORING
WORKGROUP**



SCHOOLS &
DAYCARE



PUBLIC NOTICE
& EDUCATION

EDUCATION WORKGROUP

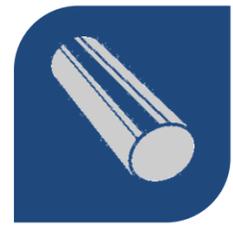


Compliance Monitoring Team

Main Scope Areas: Tap Sample Collection Methods • Tier Criteria & Monitoring Site Plan Updates • 90th percentile calculation • Monitoring frequency • WQP & Source Water Monitoring

Significant Deliverables

- Updated tap sampling instructions/guidance.
- Updated spreadsheet template and instructions for collecting materials information according to revised tier criteria.
- Monitoring site plan and frequency guidance for PWSs based on LCRR.
- Updated monitoring site plan in DWS for each PWS.
- Updated monitoring frequency assigned to each PWS.
- Inventory of needed DWS updates
- Inventory of communication needs and key messages



Service Line Materials Team

Main Scope Areas: Materials Inventory • Lead Service Line Replacement

Significant Deliverables

- Spreadsheet template/instructions for collection of materials information needed to classify all service lines per §141.84.
- Plan for coordinating annual service line materials reporting between state agencies to minimize duplicative reporting.
- Informational materials on the following topics: materials inventory requirements and how to support their PWSs in this effort; lead service line replacement plan requirements
- New and/or updated informational material for PWS on the following topics: how to develop an inventory that meets §141.84; how to develop LSL replacement plan that meets §141.84 (a), including all elements required by §141.84 (b).
- Inventory of needed DWS updates
- Inventory of communication needs and key messages



Public Education & Schools Team

Main Scope Areas: Public Education • Consumer Notification • Health Agency Reporting • Schools & Child Care Center Monitoring

Significant Deliverables

- Updated PE materials incorporating revised lead health risk language and required LSL information.
- Instructions and templates for meeting PE and CN requirements, including when PWS fail to meet their LSLR goal; when PWS selects POU devices as their small system compliance option; and when disturbances occur due to a service line being shut off or bypassed.
- Instructions and templates for meeting annual health agency reporting requirements and for notifying consumers with service lines that contain, or potentially contain lead.
- Inventory of needed DWS updates
- Description of roles, SOPs, and templates for receiving, reviewing and tracking PWS compliance with PE and CN requirements and school and child care monitoring requirements.
- Instructions and templates for PWS on meeting school and child care facilities requirements, including compiling a list of facilities served; notifying them when the PWS will be sampling; providing information about sampling and health risks from lead; reporting results; waiver eligibility requirements; and meeting documentation requirements when a facility is non-responsive or declines to participate.
- Inventory of communication needs and key messages



Engineering Team

Main Scope Areas: Corrosion Control Treatment (CCT) Steps & Applicability for Medium & Large PWSs • Source Water and Treatment Changes • Setting & Monitoring Optimal Water Quality Parameters

Significant Deliverables

- Template letters for action level, trigger level, and practical quantitation level exceedances; for PWSs being modified; and for PWS being assigned OCCT and/or OWQPs
- Instructions PWS on meeting CCT steps and triggers, and how a system achieves optimization.
- Updated to CCT guidance documents, including monitoring and reporting requirements for source water and treatment changes; CCT study requirements; and optimal water quality parameter monitoring requirements.
- Summary of DWS tracking needs for corrosion control treatment target ranges and approved corrosion control; corrosion control treatment steps applicability and deadlines.
- Description of roles, SOPs, and templates for responding to action level, trigger level, and practical quantitation level exceedances; for PWSs being modified; and for PWS being assigned OCCT and/or OWQPs.
- Inventory of needed DWS updates
- Inventory of communication needs and key messages



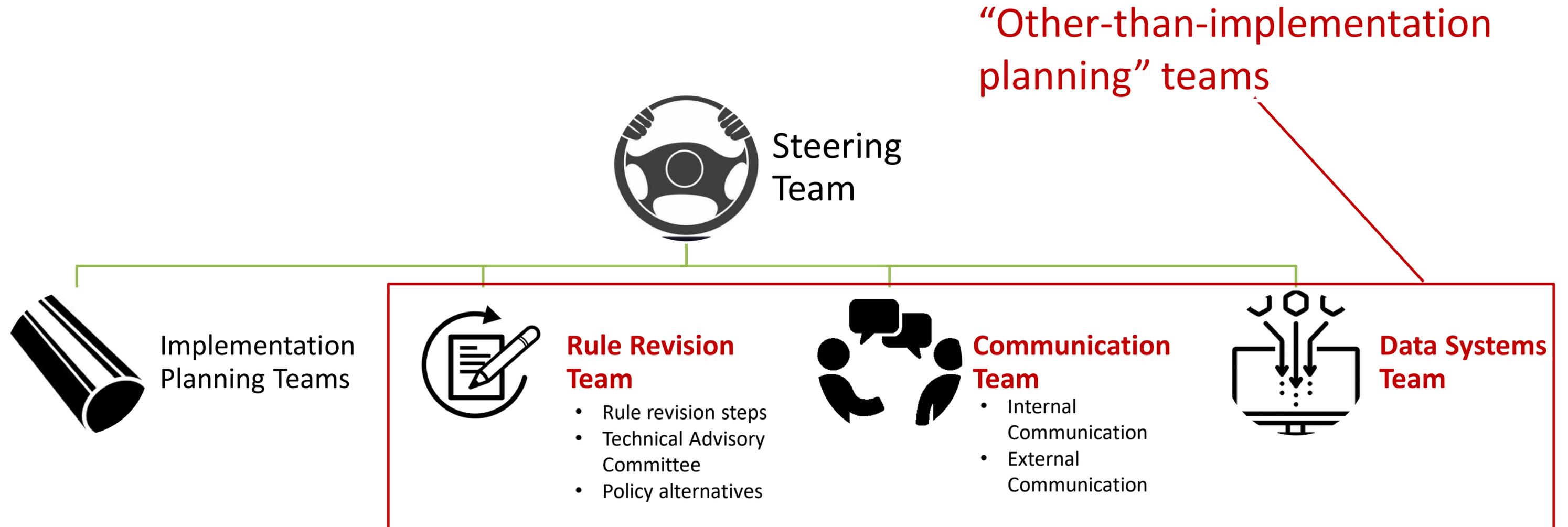
Small Systems Team

Main Scope Areas: Small System Flexibility • Fix-and-Fix

Significant Deliverables

- Guidance documents/infographic for each of the four flexibility options and for find-and-fix requirements.
- Template forms (multiple CCT Rec forms, submittal and certification of find-and-fix actions) and letters (small system TLE/ALE letters, individual high lead sample letter, CCT Rec response letters) for staff use in responding to impacted systems.
- Inventory of needed DWS updates
- Inventory of communication needs and key messages

LCRR Teams





Rule Revision Team

| Scope of Work | Deliverables |
|--|--|
| Scope Statement | Draft and final scope statement |
| Technical Advisory Committee | To the extent directed by the Division Administrator, establish and facilitate meetings with the Technical Advisory Committee |
| Board Order Revisions to NR 809 Subch. II | Draft and final Board Order of Revisions to NR 809 Subchapter II |
| Fiscal Estimate and EIA | Fiscal Estimate and Economic Impact Analysis (EIA) |
| Final Adoption | Responses to comments, green sheet package and power point presentations. |
| LCRR Primacy Package | Primacy package application for the Lead and Copper Rule Revision, including a side-by-side review of the state rule to the Federal Rule, and an explanation of any differences. |



Communication Team

Scope of Work

- Develop a plan for strategically deploying the communication deliverables developed by the five LCRR Implementation Planning teams.
- Develop LCRR communication deliverables where identified by the plan as necessary to for achieving LCRR communication objectives.



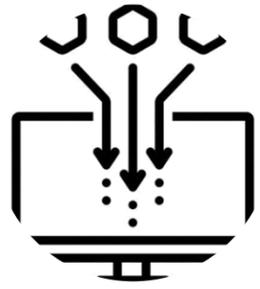
Communication Team

Example Communication Deliverables – Type

Infographics • Information documents • Tables, flow charts & decision trees • In-person meetings • GovDelivery Messages • Live and recorded webinars or videos

Example Communication Deliverables – Content

- How to develop a materials inventory
- How to develop a lead service line replacement plan
- LSL removal requirements and triggers
- Compliance sampling protocols (including 1st and 5th liter sampling)
- How to update compliance monitoring site plans
- Updated monitoring frequency
- General public education and consumer notice requirements
- Targeted supplemental public notice and consumer notice requirements
- School and child care sampling requirements
- Small system flexibility options and associated requirements of each
- Find-and-Fix requirements
- Corrosion control pathways for and triggers



Data Systems Team

Scope of Work

- Update DWS to meet the needs identified by the five LCRR Implementation Planning teams to administer the LCRR in Wisconsin.
- Review the data entry instructions from EPA for Federal Reporting and DWS program for issues such as reporting violations and creating requirements.

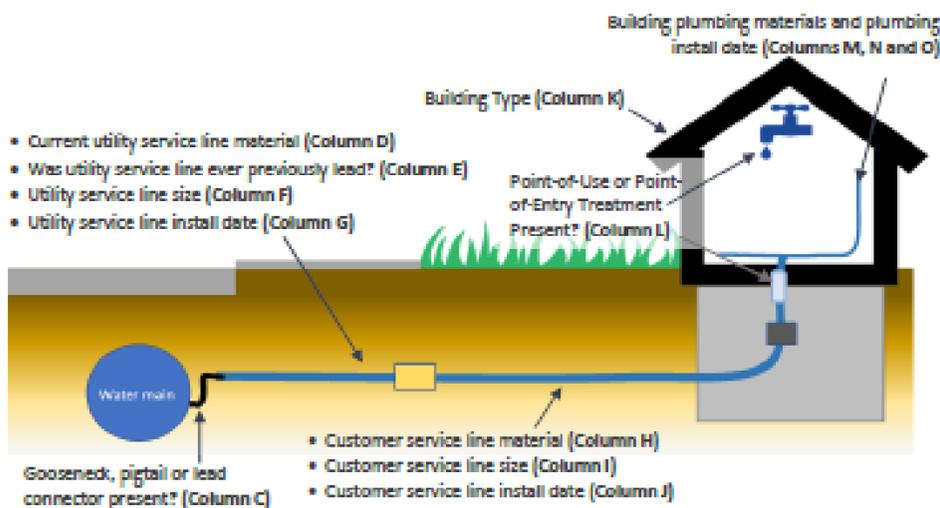


What have we already
done?

MATERIALS INVENTORY TEMPLATE INSTRUCTIONS



Materials Inventory Template For Drinking Water Systems Under The Lead And Copper Rule Revisions



1. Why do Public Water Systems (PWSs) need to provide this information?

Under Section §141.84 of the Lead and Copper Rule Revision (LCRR), all community Public Water Systems (PWS) "must develop an inventory to identify the materials of service lines connected to the public water distribution system. The inventory must include all service lines connected to the public water distribution system regardless of ownership status."

2. What specifically does the LCRR materials inventory require (columns D, E and F)?

Subparagraph §141.84 (a) (4) of the LCRR states that "each service line, or portion of the service line where ownership is split, must be categorized" as belonging to one of the following groups: lead; non-lead; lead status unknown; or galvanized requiring replacement. The information provided in columns D, E and H of the materials spreadsheet will enable the department to correctly assign every service line or portion thereof to one of these four categories.

3. What is the Site ID (column A)? Is this required?

The PWS can use this column to identify the site ID of lead and copper monitoring sites. For all other locations, the site ID is optional. PWSs that do not wish to report site addresses to the department in column B may want to use this column to "link" their materials inventory table to a separate service address table for their own use.

What is a locational identifier (column B)?

Sub-subparagraph §141.84 (a)(8)(i) of the LCRR requires a location identifier associated with each service line. The locational identifier can be the site address, or it can be a block, intersection or landmark.

The LCRR defines some categories of materials, such as "lead status" and "galvanized downstream of lead" differently in different sections of the rule. Thus, the spreadsheet is intended to be a simple and easy way for municipal PWSs to collect and report the information required now and in the future. The DNR will use the materials inventory data collected by the water system to categorize each of their service connections appropriately under each section of the LCRR.



Materials Inventory Template For Drinking Water Systems Under The Lead And Copper Rule Revisions

5. Why do PWSs need to indicate whether a gooseneck is present (column C)?

Paragraph §141.86 (a) of the LCRR directs every public water system to "identify a pool of targeted sampling sites based on the service line inventory." However, the materials information needed to categorize service lines in accordance with §141.84 alone is insufficient to identify these targeted sampling sites. Specifically, as per LCRR sub-paragraph §141.86 (a) (5), Tier 3 sampling sites include both single-family structures served by galvanized lines located downstream of a lead service line (i.e. confirmed galvanized requiring replacement) or downstream of a lead gooseneck, pigtail or connector.

6. Why do PWSs need to indicate whether a service line that is not currently lead was ever previously lead (column E)?

The materials history of the upstream utility service line is needed to correctly categorize customer-side galvanized service lines as either non-lead or galvanized requiring replacement under the LCRR. Sub-paragraph §141.84 (a)(4)(ii) of the LCRR requires that public water systems identify locations where a galvanized service line "is or was at any time downstream of a lead service line" or "lead status unknown" service line as "galvanized requiring replacement". If a water system knows with certainty that the utility side of a service line is not now, and never has previously been lead, then the downstream customer-side galvanized service line is identified as "non-lead". If a PWS does not know this with certainty, the material is categorized as "galvanized requiring replacement." However, as per paragraph §141.86 (a), galvanized service lines currently or formerly downstream of a lead gooseneck, pigtail, or connector are not identified as galvanized requiring replacement.

7. Are PWSs required to track the interior premise plumbing materials and install date at every service location in their system (columns M, N and O)?

This information is only required for service locations that are potential compliance sampling sites. If the PWS has at least as many Tier 1, Tier 2 and/or Tier 3 sampling sites as their required number of monitoring sites, then they are not required to track this information at this time. However, the PWS may be required to collect this information in the future, once all of their lead service lines and galvanized lines requiring replacement are removed.

8. Are PWSs required to track whether there is a point-of-entry (POE) or point-of-use (POU) treatment device at every service location (column L)?

This information is only required for service connections that are potential monitoring sites. Sub-paragraph §141.86 (1) of the LCRR states that "Sampling sites may not include sites with installed point-of-entry (POE) treatment devices and taps used at sampling sites may not have point-of-use (POU) devices designed to remove inorganic contaminants..." However, the department recommends that PWSs collect this information concurrently with premise plumbing materials at a given residence, so that PWSs don't need to revisit residences that become potential monitoring sites once their lead and galvanized lines are removed.

9. Are PWSs required to use the DNR template?

No, PWSs are not required to use the DNR template for their materials inventory. However, PWSs that track their drinking water distribution system materials using a different method should provide all of the information requested in the template.

10. Do Municipal PWSs have to report this information to the DNR and PSC both?

Due to differences in the frequency and timing of reporting and the type of information reported, municipal public water systems will continue to report service line information annually to the Public Service Commission (W-22 and W-29) for the foreseeable future. However, the DNR and PSC are in discussions about how they can collaborate to minimize the amount of similar reporting to multiple agencies after the LCRR compliance date.

MATERIALS INVENTORY TEMPLATE INSTRUCTIONS

MATERIALS INVENTORY SPREADSHEET TEMPLATE COLUMNS

| COLUMN | DESCRIPTION | | |
|--------|--|----------------|--|
| A | SITE ID This column is optional. PWSs that do not wish to report site addresses to the department in column B may want to use this column to "link" their materials inventory table to a separate service address table for their own use. | | |
| B | LOCATION IDENTIFIER The location identifier can be the site address. If the PWS does not wish to report addresses to the department it can be a block, intersection or landmark. This column is required per sub-subparagraph §141.84 (a)(8)(i) of the LCRR which requires a that a location identifier be associated with each service line. | | |
| COLUMN | DESCRIPTION | ANSWER OPTIONS | ANSWER OPTION DESCRIPTIONS |
| C | GOOSENECK CURRENTLY PRESENT? Is there a gooseneck, lead connector or pigtail present? | Y | YES - WITH CERTAINTY |
| | | N | NO - WITH CERTAINTY |
| | | UNK | NOT KNOWN WITH CERTAINTY |
| | | L | CONFIRMED LEAD |
| | | C | CONFIRMED COPPER |
| | | G | CONFIRMED GALVANIZED |
| | | P | CONFIRMED PLASTIC |
| D | CURRENT UTILITY SERVICE LINE MATERIAL Service line pipe material, from the water main to curb stop. | DI | CONFIRMED DUCTILE IRON |
| | | CI-L | CONFIRMED LINED CAST IRON |
| | | CI-U | CONFIRMED UNLINED CAST IRON |
| | | UNK-LG | UNKNOWN - MAY CONTAIN LEAD OR GALVANIZED |
| | | UNK-NOLG | UNKNOWN - DEFINITELY DOES NOT CONTAIN LEAD OR GALVANIZED |
| | | Y | YES - SERVICE LINE WAS PREVIOUSLY LEAD |
| | | N | NO - PWS KNOWS WITH CERTAINTY THAT SERVICE LINE MATERIAL WAS NEVER PREVIOUSLY LEAD |
| E | WAS UTILITY SERVICE LINE MATERIAL EVER PREVIOUSLY LEAD? Was the service line ever previously lead? | UNK | NOT KNOWN WITH CERTAINTY IF MATERIAL WAS EVER PREVIOUSLY LEAD |
| | | | |
| COLUMN | DESCRIPTION | | |
| F | UTILITY SERVICE LINE SIZE Service line pipe diameter in inches, from the water main to curb stop. The DNR does not require this information, however, PWSs are required to report service line size to the PSC for their annual report. This column may be used by PWSs that wish to track information required by both agencies in a single document. | | |
| G | UTILITY SERVICE LINE INSTALL DATE CURRENT The four-digit year that the utility-side service was installed (i.e. 1974). If the exact year is not known, enter the decade (i.e. enter 1970 for some time in in the 1970s). | | |
| H | CUSTOMER SERVICE LINE MATERIAL Service line pipe material, from the curb stop to water meter. See Row D answer options. | | |
| I | CUSTOMER SERVICE LINE SIZE¹ Service line pipe diameter, in inches, from the curb stop to water meter. As is the case with utility service line size, the DNR doesn't require this information, however, this column may be used by PWSs that wish to track information required by PSC and DNR in a single document. | | |
| J | CUSTOMER SERVICE LINE INSTALL DATE The four-digit year that the customer side service line was installed (i.e. 1974). If the exact year is not known, enter the decade (i.e. enter 1970 for some time in in the 1970s). | | |

MATERIALS INVENTORY SPREADSHEET TEMPLATE COLUMNS

| COLUMN | DESCRIPTION | ANSWER OPTIONS | ANSWER OPTION DESCRIPTIONS |
|--------|---|----------------|--|
| K | BUILDING TYPE The type of structure that is served water by the service connection. At a minimum, the PWS must identify the connection either SF, MF or NONRES. | SF | SINGLE-FAMILY RESIDENTIAL |
| | | MF | MULTI-FAMILY RESIDENTIAL |
| | | SCH/CC | SCHOOL OR CHILD CARE <i>This category may be used by the PWSs to track locations that must to be monitored under §141.92.</i> |
| | | RES/CC | RESIDENTIAL & IN-HOME CHILD CARE <i>This category may be used by the PWSs to track locations that must to be monitored under §141.92.</i> |
| | | NONRES | NONRESIDENTIAL ONLY |
| | | MIX | MIXED RESIDENTIAL & NONRESIDENTIAL |
| L | POINT-OF-ENTRY OR POINT-OF-USE TREATMENT PRESENT? Is the cold-water kitchen tap treated by point-of-entry or point-of-use softening, filter or other treatment? | O | OTHER |
| | | Y | YES - THE SAMPLE TAP IS TREATED BY A POINT OF USE OR POINT OF ENTRY SOFTENER OR FILTER |
| | | N | NO - THE SAMPLE TAP IS NOT TREATED BY A POINT OF USE OR POINT OF ENTRY SOFTENER OR FILTER |
| | | UNK | PRESENCE OR ABSENCE OF POU AND POE IS UNKNOWN |
| M | BUILDING PLUMBING MATERIAL 1 The type of plumbing materials inside the structure served water. If there is more than one known plumbing material type, select the second material type in column N. Column N is not required. | CLS | COPPER WITH LEAD SOLDER |
| | | C | COPPER, NO LEAD SOLDER |
| N | BUILDING PLUMBING MATERIAL 2 The type of plumbing materials inside the structure served water. If there is more than one known plumbing material type, select the second material type in column N. Column N is not required. | O | OTHER MATERIAL THAT IS <u>NOT</u> COPPER, OR COPPER WITH LEAD SOLDER |
| | | UNK | UNKNOWN |
| COLUMN | DESCRIPTION | | |
| O | BUILDING PLUMBING MATERIAL INSTALL DATE The four-digit year that the interior premise plumbing was installed. If the exact year is not known, you may enter the decade if the decade is not the 1980s. If the decade is the 1980s, you may enter one of the following: 1983-1984, <1983 or >1984. | | |
| P | COMMENTS Use this column information to enter any other information that the PWS finds helpful to them or any information they wish to share with the department. This column is optional. | | |



Lead Service Line

- Service line material confirmed to be lead.

Non-lead service line

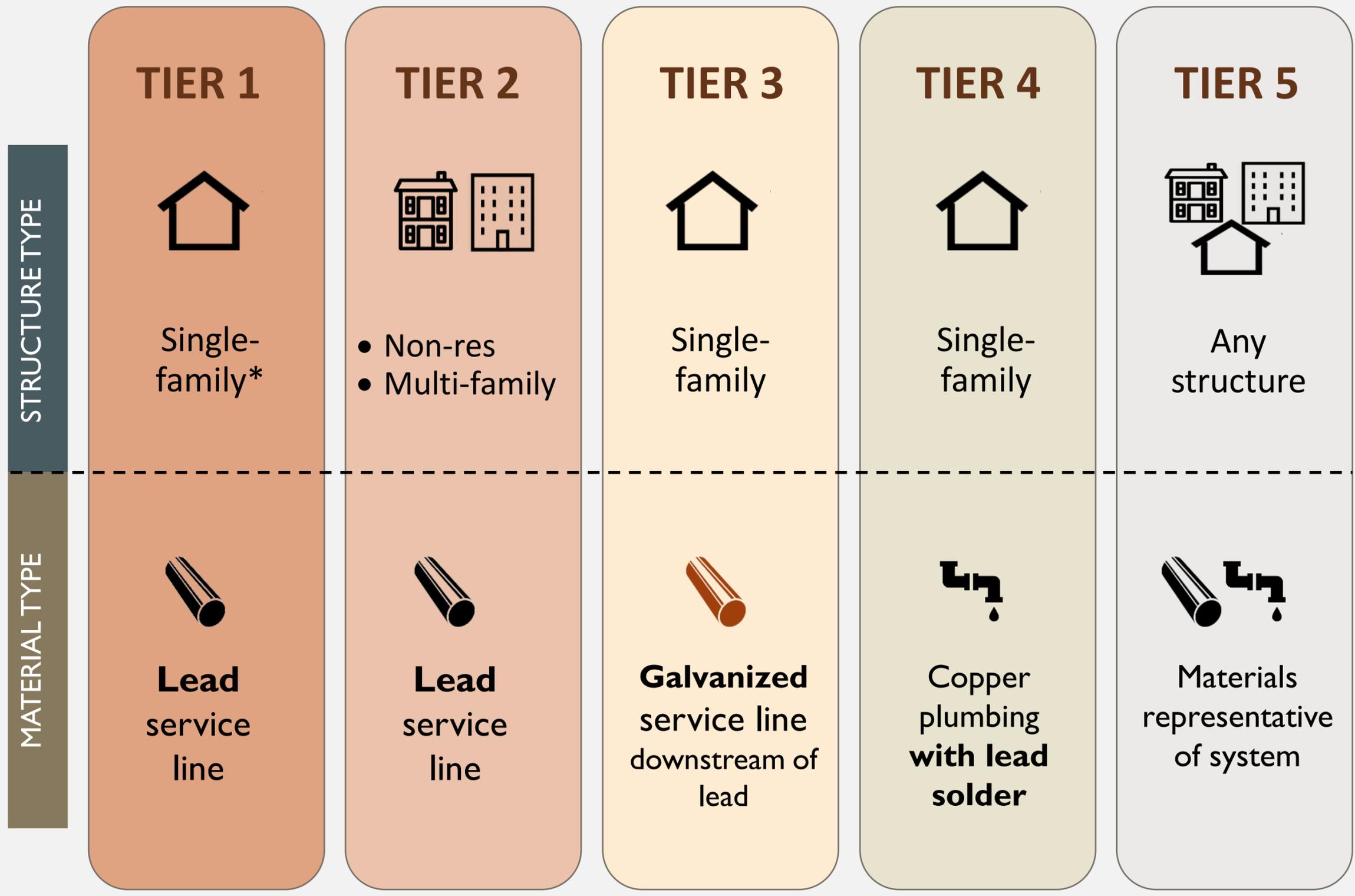
- Service line material confirmed to be non-lead. **AND**
- Service line material confirmed to not be galvanized requiring replacement.

Lead status unknown

- It is not known with certainty whether service line materials is lead or non-lead. **OR**
- It is not known with certainty that the service line is **not** galvanized requiring replacement.

Galvanized requiring replacement

- Any galvanized service line, currently or previously, downstream of a lead service line. **OR**
- Any galvanized service line, that is not known with certainty to not now be, or ever previously have been, downstream of lead.



* Tier 1 may include multi-family structures if MF structures comprise $\geq 20\%$ of structures served by the PWS

RELATIONSHIP BETWEEN SERVICE LINE
CATEGORIES [§ 141.84(a)] AND MONITORING SITE
TIERS [§ 141.86(a)] UNDER THE LCRR

SERVICE LINE CATEGORY

Confirmed
Lead

Galvanized
Requiring
Replacement

Lead status
unknown

Confirmed
Non-Lead

COMPLIANCE
MONITORING CATEGORY

Tier 1
Lead



Tier 2
Lead



Tier 3
Galvanized
Downstream
of Lead



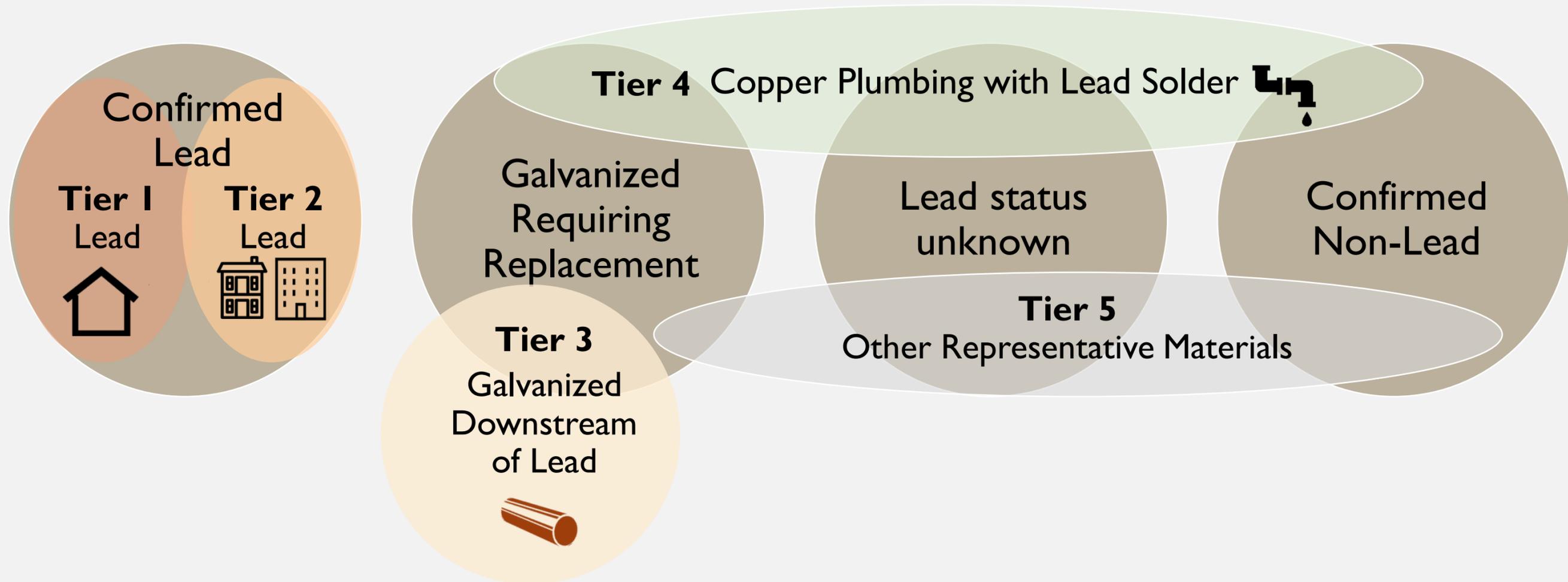
Tier 4
Copper
Plumbing with
Lead Solder



Tier 5
Other
Representative
Materials



RELATIONSHIP BETWEEN SERVICE LINE CATEGORIES [§ 141.84(a)] AND MONITORING SITE TIERS [§ 141.86(a)] UNDER THE LCRR



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"WILD WISCONSIN:
OFF THE RECORD"