



## Lead and Copper Sampling Plan Requirements

### Subsection 10.7.1 of State of Delaware Regulations Governing Public Drinking Water Systems

Introduction:

All community water systems (CWS) and non-transient, non-community water systems (NTNCWS) were required to have a lead and copper sampling plan submitted to the Office of Drinking Water (ODW) at the start of the Lead and Copper Rule (LCR) in the early 1990's. ODW is requiring these water systems to update and resubmit their sampling plans. New systems and those that did not create a sampling plan when the rule began are now required to create one.

Instructions:

Complete all sections in this packet. ODW will review your plan once received. Incomplete submissions will be returned to the system. ODW will notify you in writing if your plan meets the requirements of the regulations.

This plan should be provided to and reviewed by all persons responsible for lead and copper sampling. If at any time in the future this plan needs to be modified, you must resubmit the plan with those changes.

If you have any questions about lead and copper sampling plan requirements, contact the Lead and Copper Rule Manager at the Office of Drinking Water at 302-741-8630.

**I. General Information**

Public Water System (PWS) Name: \_\_\_\_\_

PWSID#: \_\_\_\_\_

PWS Type:     Community             Non-Transient, Non-Community

Resident Population Served: \_\_\_\_\_ Transient Population Served: \_\_\_\_\_

PWS Owner: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Water Operator: \_\_\_\_\_ Phone Number: \_\_\_\_\_



## II. Records Review

Locate and review existing plans, drawings, and reports of the water system to identify the total number of lead service lines, lead piping, copper pipe with lead solder installed after December 31, 1982, copper pipe with lead solder installed before January 1, 1983.

Per the **State of Delaware Regulations Governing Public Drinking Water**, the following sources of review are required:

- Plumbing codes
- Plumbing permits
- Building department, town hall, or state regulatory agencies for historical documentation of the service area development

Additional sources of reviews may include:

- Building codes
- Distribution system maps and drawings
- Interviews with building inspectors for inspection and/or maintenance records
- Interviews with building inspectors, plumbers, and/or residents in the sections of the service area where lead pipe and/or copper pipe with lead solder is suspected to exist.

## III. Tier Classifications

Lead and copper regulations require water systems to sample at locations that may be particularly susceptible to high lead or copper concentrations. The LCR established a tiering system for prioritizing sampling sites. A materials evaluation is required to help classify sampling sites into tiers.

### Community Water Systems:

**Tier 1** sampling sites are **single-family structures** that:

- contain copper pipes with lead solder installed **after 1982** or contain lead pipes; and/or
- are served by a lead service line.

Note: When multiple-family structures comprise at least 20 percent of the structures served by a water system, the system may count them as Tier 1 sites.

**Tier 2** sampling sites consist of buildings, including **multiple-family structures** that:

- contain copper pipes with lead solder installed **after 1982** or contain lead pipes; and/or
- are served by a lead service line.

**Tier 3** sampling sites are **single-family structures** that contain copper pipes with lead solder installed **before 1983**.

**“Representative Site”**: If a CWS cannot collect enough samples from tiered sites, it must collect them from sites where the plumbing is similar to that used at other sites served by the water system.



Non-Transient, Non-Community Water Systems:

**Tier 1** sampling sites consist of buildings that:

- contain copper pipes with lead solder installed **after 1982** or contain lead pipes; and/or
- are served by a lead service line.

**Tier 2** sampling sites consist of buildings that contain copper pipes with lead solder installed **before 1983**.

“**Representative Site**”: If a NTNCWS cannot collect enough samples from tiered sites, it must collect them from sites where the plumbing is similar to that used at other sites served by the water system.

**IV. Materials Evaluation**

The worksheet on the following page is to be filled out after the Records Review (see Section II above) has been completed. The purpose of the materials evaluation is to determine which sites contain the highest priority materials, and therefore shall be included in your pool of sample sites. If there is an insufficient number of Tier 1 sites, you must complete your sampling pool with Tier 2 sites. If there is an insufficient number of Tier 1 and 2 sites, Tier 3 sites must be used. Any water system that cannot complete its sampling at sites that meet the applicable tier criteria must complete sampling at Representative Sites throughout the distribution system.

EPA recommends that water systems should identify their primary sampling sites and additional sampling sites on their sampling plan for each monitoring period to cover for unforeseen circumstances (e.g.: volunteer unavailability). To determine the number of samples required during initial monitoring, refer to the table below:

System Size	Number of Lead and Copper Tap Sample Sites	
	Standard	Reduced
>100000	100	50
10,001 – 100,000	60	30
3,301 – 10,000	40	20
501 - 3,300	20	10
101 - 500	10	5
≤ 100	5	5



### Materials Evaluation - Primary Sampling Sites

No.	Address	Tier Level <sup>1</sup>	Type of Structure <sup>2</sup>	Plumbing Material <sup>3</sup>	Plumbing Material Verified	Served by Lead Service Line	Sampling Instructions Issued to Addressee
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

1. Use N/A if this is a "Representative Site."
2. Structure choices are: single family structure, multiple-family structure, and other (specify).
3. Plumbing materials are: lead service line and/or pipes (including goose necks), copper pipe and/or copper pipe with lead solder, plastic (PVC, CPVC, PEX), galvanized steel pipe.



### Materials Evaluation - Alternate Sampling Sites

No.	Address	Tier Level <sup>1</sup>	Type of Structure <sup>2</sup>	Plumbing Material <sup>3</sup>	Plumbing Material Verified	Served by Lead Service Line	Sampling Instructions Issued to Addressee
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

1. Use N/A if this is a "Representative Site."

2. Structure choices are: single family structure, multiple-family structure, and other (specify).

3. Plumbing materials are: lead service line and/or pipes (including goose necks), copper pipe and/or copper pipe with lead solder, plastic (PVC, CPVC, PEX), galvanized steel pipe.



**V. Map**

Provide a map of the water system with the primary and alternate sampling sites identified. Include the name of the water system and PWSID number. You may add lead and copper sample locations to your already existing total coliform, chemical and/or disinfection byproducts sampling map if that applies.

**VI. CERTIFICATION by System Owner, Administrative Contact or Water Operator**

I have read the Lead and Copper Sampling Plan Requirements document and certify that the above information is true and accurate to the best of my knowledge:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Job Title