Fact Sheet: Protocol for a Public Water System Selecting Reduced Lead and Copper Tap Sites

(Version 1, July 2017)

Introduction

Sites chosen for reduced monitoring (i.e., monitoring that is conducted at a one-year or three-year frequency) must be representative of those sites that were used during standard monitoring and must follow tier requirements.

IT IS NOT RECOMMENDED that a system randomly select the reduced number of sites from the pool used during standard monitoring. (Be sure not to only use those sampling locations with the lowest lead or copper levels.)

THE DIVISION OF WATER SUPPLY AND GEOSCIENCE may determine if specific sample locations must be used.

Number of Reduced Sampling Sites

A system must collect at least one sample from the number of sites specified in the table based on the system's population during each monitoring period. For information regarding reduced lead and copper monitoring eligibility please refer to the Department's Reduced Lead and Copper Monitoring Requirements for Public Water Systems Fact Sheet.

Reduced Monitoring	
Residential & Nontransient Population	Number of DS Sites
>100,000	50
10,001 to 100,000	30
3,301 to 10,000	20
501 to 3,300	10
101 to 500	5
≤100	5*

*Same number of sites as standard monitoring

ONCE REDUCED MONITORING BEGINS, you must use the same sites, unless a site is no longer accessible or no longer meets the requirements of a priority site under the Lead and Copper Rule (e.g., the lead service line that served the site has been removed).

STEP 1: Select Tier 1 Sites (over Tier 2 or Tier 3 sites)

USING YOUR STANDARD SAMPLING POOL, if you have enough Tier 1 sites, use all possible Tier 1 sites before moving on to Tier 2 or Tier 3 sites. For example, if a system has 100 standard sites, of which 75 are Tier 1 and 25 are Tier 2, it must collect all 50 reduced sites from Tier 1 sites if they are available. (For detailed information on Tier designation please refer to the Department's Fact Sheet – Material Evaluation & Sample Location Identification.)

IF YOU CANNOT FIND ENOUGH TIER 1 SAMPLING SITES:

If you are unable to collect all of your reduced samples from Tier 1 sites, then you must follow the procedures outlined below:

- When a sufficient number of Tier 1 sites does not exist or are inaccessible (e.g., homeowner denies permission for you to collect a sample), you must complete your reduced sampling pool with Tier 2 sites.
- When a sufficient number of Tier 1 and 2 sites do not exist or are inaccessible, you must complete your sampling pool with Tier 3 sites.

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STEP 2: 50% of Reduced Samples Must be Collected from Sites with Lead Service Lines

IF YOUR SYSTEM HAS a variation of Tier 1 sites including those served by lead service lines, half of the required reduced sampling sites must be served by a lead service line. [1]For example, a system required to collect 40 samples must include 20 sites in their sampling plan that are served by a lead service line. The other 50% must be from other Tier 1 sites containing lead pipes or copper pipes with lead solder (installed between 1983 & 1987).

- If your system has an insufficient number of sites served by a lead service line to meet the 50% requirement, you must collect a sample from each available site served by a lead service line and sample from the remaining Tier 1 sites.
- If you have no lead service lines, but you have lead goosenecks or pigtails, you must collect a sample from 50% of sites with the goosenecks and/or pigtails.

[1]The system must also maintain a list of all sampling sites served by lead service lines to ensure access to enough sites, and to identify the sites needed if lead service line replacement (LSLR) must commence.

STEP 3: Select Sample Sites with Elevated Lead Levels vs. Non-Detect

REVIEW RESULTS FROM THE LAST TWO MONITORING PERIODS and determine which sites contain the highest lead and copper results (assuming they are of the highest Tier). Rank samples (by lead and/or copper) in ascending order by highest value and select sites from the list to be used for reduced monitoring.

STEP 4: If the System's Service Connections are Comprised of 20% or More Multi-Family Residences

IF A SYSTEM COUNTS THEIR TIER 2 SITES TOWARDS THEIR TIER 1 SITES, ensure that Tier 1 and multifamily Tier 2 sites selected for reduced monitoring are representative of the system's distribution system. Target residence Tier 1 and Tier 2 sites not other buildings. Remember to still identify the 50% requirement as outlined under Step 2.

STEP 5: Even Distribution (i.e., DS is comprised primarily of the same Tier)

MAKE SURE ALL REDUCED SAMPLE SITES are evenly distributed throughout the system to account for each pressure gradient and in locations where the water flow is unique, such as dead-ends. Keep in mind if all Tier 1 sites are in a specific area or pressure zone, your sample sites will not be evenly distributed.

Representative Sample: If a CWS or 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.

References

EPA Lead and Copper Rule: Monitoring and Reporting Guidance for Public Water Systems

Additional Lead and Copper Rule Guidance is available on our website at http://www.nj.gov/dep/watersupply/dwc-lead-public.html

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