

Lead / Copper Sampling Plan

PWS # 0000783

City of Florence
P.O. Box 1023
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Lead and Copper Rule (LCR) Summary

Source: ADEM

EPA promulgated the Lead and Copper Rule (LCR) in 1991, and ADEM adopted the rule in 1992. Implementation of this rule is a critical component of ADEM's efforts to protect public health and ensure the safety of our state's drinking water. The following information outlines how the LCR is implemented and identifies ways for the public to find information about the quality of its drinking water.

- The LCR has four basic requirements:
 1. Require water systems to optimize their treatment system to control corrosion in the distribution system and the customer's plumbing;
 2. Determine tap water levels of lead and copper for customers who have lead service lines or lead-based solder in their plumbing system;
 3. Rule out the source water as a source of significant lead levels; and
 4. If lead action levels are exceeded, the water system is required to take additional actions, which may include:
 - a. Developing and implementing a plan to optimize corrosion control in the finished drinking water;
 - b. Educating their customers about lead and suggesting actions they can take to reduce their exposure to lead through public notices and public education programs;
 - c. Replacing the portions of level service lines under the system's control; and
 - d. Offering to replace lead service lines under their customers' control at an equitable cost to the customer.
- The LCR requires water systems to monitor at least every 3 years. Some water systems monitor more frequently. The water system selects the sites based on criteria set out in the rules. The criteria for the lead and copper sampling sites are:
 1. Tier 1 sites-These sites include single family structures containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.
 2. Tier 2 sites-These sites include buildings and multiple family residences containing lead pipe or plumbing, are served by a lead service line, or contain copper pipes with lead solder and were constructed after 1982.
 3. Tier 3 sites-These sites include single family structures containing copper pipes with lead solder which were constructed prior to 1983.

- The LCR prescribes a specific sampling protocol for water systems to utilize for collecting lead and copper samples at a residence or business (see below).
 1. Tap monitoring (collecting a water sample from a faucet) for lead and copper shall be the first draw and one liter in volume.
 2. The water shall stand motionless in the plumbing system for at least six hours prior to collection. Pre-stagnation flushing shall not be performed.
 3. Collection shall be from the cold water kitchen tap or bathroom sink tap from tier 1 sites or from an interior tap typically used for obtaining water for consumption from tier 2 and tier 3 sites.
 4. Aerators shall not be removed from taps or cleaned prior to or during the collection of samples.
 5. Wide-mouth bottles shall be used to collect samples to allow for a higher flow rate during sample collection which is more representative of the flow that a consumer may use to fill a glass or water.
 6. Monitoring may be conducted by the resident after proper instructions and procedures have been provided by the water system.
 7. Follow up tap monitoring shall be conducted from the same sites.
 8. Should a site no longer be available, an alternate acceptable site may be selected which is in reasonable proximity of the original site.
 9. Taps used for monitoring may not include faucets that have point of use or treatment devices installed.
- EPA published a memo clarifying recommended tap sampling procedure for the LCR on February 29, 2016, to provide recommendations on how public water systems should address the removal of cleaning aerators, pre-stagnation flushing, and bottle configuration for the purpose of the LCR.
- More Information on the LCR can be found on EPA’s website at: <http://www.epa.gov/dwreginfo/lead-and-copper-rule>.
- EPA’s LCR Quick Reference Guide can be found at: [LCR Quick Reference Guide](#).
- More information specifically about your drinking water system can be found in your water system’s Annual Consumer Confidence Report (Water Quality Report) available at your water system or on its website. These reports are also submitted to ADEM, so they are available in ADEM’s eFile system. You can also find information at EPAs Enforcement and Compliance History Online (ECHO) website at: <https://echo.epa.gov/>.

Homeowner Tap Sample Collection Procedures

Florence Water/Wastewater Department

256-760-6490

Revised Version: February 2016

These samples are being collected to determine the lead and copper levels in your tap water. This sampling effort is required by the U.S. Environmental Protection Agency and ADEM under the Lead and Copper Rule, and is being accomplished through collaboration between the public water system and their consumers (e.g. residents).

Collect samples from a tap that has not been used for at least 6 hours. To ensure the water has not been used for at least 6 hours, the best time to collect samples is either early in the morning or in the evening upon returning from work. Be sure to use a kitchen or bathroom cold water tap that has been used for drinking water consumption in the past few weeks. The collection procedure is described below.

1. Prior arrangements will be made with you, the customer, to coordinate the sample collection. Dates will be set for sample kit delivery and pick-up by water system staff.
2. There must be a minimum of 6 hours during which there is no water used from the tap where the sample will be collected and any taps adjacent or close to that tap. Either early mornings or evenings upon returning home are the best sampling times to ensure that the necessary stagnant water conditions exist. Do not intentionally flush the water line before the start of the 6 hour period.
3. Use a kitchen or bathroom cold-water faucet for sampling. If you have water softeners on your kitchen taps, collect your sample from the bathroom tap that is not attached to a water softener, or a point of use filter, if possible. Do not remove the aerator prior to sampling. Place the opened sample bottle below the faucet and open the cold water tap as you would do to fill a glass of water. Fill the sample bottle to the line marked "1000-mL" and turn off the water.
4. Tightly cap the sample bottle and place in the sample kit provided. Please review the sample kit label at this time to ensure that all information contained on the label is correct.
5. If any plumbing repairs or replacement has been done in the home since the previous sampling event, note this information on the label as provided. Also if your sample was collected from a tap with a water softener, note this as well.
6. Place the sample kit in the same location the kit was delivered to so that water system staff may pick up the sample kit.
7. Results from this monitoring effort and information about lead will be provided to you as soon as practical but no later than 30 days after the system learns of the tap monitoring results. However, if excessive lead and/or copper levels are found, immediate notification will be provided (usually 1-2 working days after the system learns of the tap monitoring results).

Call _____ at _____ if you have any questions regarding these instructions.

TO BE COMPLETED BY RESIDENT

Water was last used: Time _____ Date _____

Sample was collected: Time _____ Date _____

Sample Location & faucet (e.g. Bathroom sink): _____

I have read the above directions and have taken a tap sample in accordance with these directions.

Signature _____ Date _____

Consumer Notification Letter (sample)

Consumer Notification of Lead Tap Monitoring Results

The Florence Water/Wastewater Department appreciates your participation in the lead and copper tap monitoring program. This letter is to report the lead and copper results from the sample collected at your residence _____, on July 31, 2013.

| Contaminant | Action Level | Unit of Measurement | | 90 th percentile | Results at your home | | Compliance Violation? |
|-------------|--------------|---------------------|---|-----------------------------|----------------------|---|-----------------------|
| Lead | 0.015 | mg/l | → | <0.005 | | → | No |
| Copper | 1.3 | mg/l | → | <0.050 | | → | No |

Under the authority of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) set the Action Level for lead in drinking water at 0.015 mg/l (milligrams per liter) and the Action Level for Copper at 1.3 mg/l. The Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Important Health Information about Lead

Utilities must ensure that water from the customer's tap does not exceed the Action Level for lead in at least 90 percent of the homes sampled (90th percentile value). Because lead may pose serious health risks, the EPA also set a Maximum Contaminant Level Goal (MCLG) for lead of zero. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Some individual homes may have high lead concentrations while the 90th percentile value for the entire waterworks is below the Action Level. These individual site lead levels may be due to conditions unique to the individual home, such as the presence of lead solder or brass faucet, fittings and valves that may contain lead. Our waterworks strives to keep the corrosion level of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead). Additionally, there are actions you can take to reduce your exposure. We strongly urge you to review the enclosed Fact Sheet and take the steps listed to reduce your exposure to lead in drinking water.

If you have questions please contact Chad Smith at 256-718-5104.

Sincerely,



Michael Doyle
Manager

Reporting Form (sample)

| Lead Monitoring Results | | | | | | |
|------------------------------|--------------------|--|-----------------------|--|---------------------------|---------------------|
| | | System Name and PWSID | | 0000783 Florence Water & Wastewater Department | | |
| | | Monitoring Period | | August 2010 | | |
| Name and Address of Customer | Tier 1, 2, or 3 | Lead Service Line Sample (Yes or No) | Date of Collection | Date of Analysis | Lead Results (mg/l) | Year of Plumbing |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1988 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1985 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1984 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1984 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1984 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1984 |
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| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1984 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1986 |
| Homeowner Address City | 1 | No | 18-Aug-10 | 01-Sep-10 | <0.005 | 1985 |

Water System Materials Inventory

| Material | Quantity | Notes |
|------------------------|-----------------|---|
| | | |
| Cast / ductile iron | 293 miles | Some old cast iron may be lead-jointed. Quantity unknown. |
| PVC | 164 miles | |
| Asbestos Cement | 1 mile | |
| Other | 113 miles | Majority – small diameter (<3”) galvanized |
| Valves, Fittings, Etc. | unknown | Older materials may contain lead of unknown content. |

Water Department Contacts

| Name | Office Phone | Cell Phone | Position |
|----------------|--------------|--------------|-----------------------------|
| Chad Smith* | 256-718-5104 | 256-347-2099 | Water Plants Superintendent |
| Michael Doyle | 256-718-5100 | 256-335-0344 | Manager |
| Regina Hall | 256-718-5101 | 256-767-2588 | Administrative Assistant |
| Dolphus King | 256-718-5102 | 256-335-3655 | Operations Assistant |
| Water Dispatch | 256-760-6490 | NA | |

* Lead/Copper Sampling Contact