



The City of Slidell

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Freddy Drennan
MAYOR

Billy Palmisano
Superintendent
PUBLIC UTILITIES

March 6, 2018

Attn: Mr. Jeremy Harris
Safe Drinking Water Program
LDH/OPH Engineering Service
P.O. Box 4489
Baton Rouge, LA 70821

RE: City of Slidell Water System LA1103041
Lead and Copper Rule – Improving Transparency and Public Information
Distribution System Materials Inventory

Dear Mr. Harris,

In an effort to comply with the request outlined in your letter dated February 1, 2018, I am enclosing a copy of our Lead and Copper Monitoring Program for your review. This submittal includes elements of our L&C program such as protocol used for identifying and selecting sample locations, an updated materials inventory, a description of our sample collection procedure, our initial and historical L&C results, and an explanation of action levels. If it does not, please advise and we will revise it accordingly.

If you have any questions, or need further information, feel free to contact myself, or David Adams at (985) 646-4259.

Sincerely,

Billy Palmisano
Superintendent of Public Utilities
City of Slidell

BP/sj



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Lead & Copper Monitoring Program

City of Slidell

PWS #LA1103041

Revised: March 6, 2018

1. Purpose

The City of Slidell Lead & Copper Monitoring Program was implemented in 1992 in order to comply with the requirements of EPA's Lead and Copper Rule (LCR). The primary objective of this rule was for water systems to identify high risk areas within their distribution systems and to determine the lead and copper concentrations in those locations. Based on the concentrations found, EPA would notify the system if any corrective actions were needed and would assign a sampling frequency for future monitoring. Systems with higher lead and copper concentrations would be required to sample more frequently than those with lower concentrations.

2. Identifying Sample Locations

The LCR dictates that the water systems monitor lead and copper concentrations at Tier I (high risk) locations throughout their water systems. In order to identify those Tier I sample sites, each system had to perform a materials inventory evaluation of its distribution systems. Once the materials inventory evaluation was complete, the system would identify numerous sites that met the Tier I selection criteria. From those locations, 60 sample sites were selected to create the initial Tier I sampling pool. Participants from this pool would be used for the initial round of L&C monitoring and for all subsequent monitoring.

a. Distribution Materials Inventory

Materials inventory information was gathered from various resources including distribution system maps, and conversation with senior personnel and retirees. In some cases, the figures provided below are estimates due to the limited availability of specific records. All records, maps, etc. were destroyed in Hurricane Katrina. However, collectively, the resources used to support the accuracy of this information to the best of our knowledge. The City of Slidell's updated materials inventory evaluation revealed the following.

i. Distribution System Piping:

As of March 6, 2018, The City of Slidell has an estimated 178 miles of water lines in its distribution system. Most of those lines are cast iron, polyvinyl chloride (PVC), A/C asbestos concrete, or HDPE piping. Together, these four pipe materials account for approximately 95% of the total piping in our system. The remaining 5% consist of various types of pipe materials. Our mapping software indicates what size of each pipe. However, our mapping software does not have all the information due to Hurricane Katrina.

ii. Service Lines:

The City of Slidell has polyethylene (plastic), tubing, iron and copper service lines throughout its distribution system. Although our distribution maps do not provide specific information regarding service lines, we were able to estimate the percentage of each based on the quantities of those materials purchased. Additional resources such as conversations with senior personnel and retirees were used to confirm the following:

- a. Polyethylene (Plastic) Service Lines – From past materials repaired water leaks. Since 1995, tubing has been used exclusively for all new and replaced services to customer property.
- b. Copper Service Lines – Again, using our senior service and retirees, we've established that the service tubing material consisted of type K copper.
- c. Lead Service Lines – There are **ZERO LEAD SERVICE LINES** in the City of Slidell's distribution system.

iii. Water Meters:

When a gooseneck (tap connection) is found it is **IMMEDIATELY REMOVED AND REPLACED**. The city had approximately 11,913 water meters in its' distribution system constructed of brass. Information found in meter inventory reports that were from 2005, revealed the following:

- a. Plastic Meters – Our meter inventory records indicate that there are no plastic meters.
- b. Brass Meters – Using the same meter inventory records, we estimate that there are 11,913 brass meters in our distribution system. This figure equates to 100% of the total meters in our service area. Of those meters, 11,913 were purchased after April 18, 2008 and comply with NSF/AMSI Standard 61 is marked on housing NSF-61.

iv. Private Plumbing Material:

City of Slidell has no jurisdiction over private plumbing materials in its distribution system. Piping and fixtures inside the home are the responsibility of the homeowner. Notification given if you are concerned that your home is plumbed with lead materials, the following precautions can be taken:

- a. Use only cold water for cooking and drinking.
- b. Flush your taps by running the cold water for 30-60 seconds or until the water reaches a steady temperature to flush potential lead containing water from your plumbing,

b. **Selecting Sample Locations:**

Since The City of Slidell does not have Lead Service Lines (LSLs) in its system, the LCR requires that the next highest risk Tier I locations are used to establish lead and copper monitoring sites (See Tier I description below). After identifying a number of Tier I locations in 1992, The City of Slidell contacted the owners of those residences and requested their participation in our Lead and Copper monitoring program. Once participants were secured, the ones that provided the best geographical coverage were included in our initial pool of 60 sample sites. Again, all of the sample locations selected met the criteria for Tier I sites as described below.

i. **Tier Site Descriptions:**

Tier I Sites are sites that are considered single family structures and contain either lead plumbing, serviced by a lead service line, or contain copper pipes with lead solder and were installed after 1982.

Tier II sites are sites that include buildings and multiple family residences containing lead plumbing, serviced by a lead service line, or contain copper pipes with lead solder and were installed after 1982.

Tier III sites are sites that are considered single family structures containing copper pipes with lead solder and were installed prior to 1983.

3. **Sample Collection Procedure:**

Lead and copper tap sampling is performed in accordance with procedures established by EPA and LDH. Sample locations are selected from the initial pool of sample sites and samples are collected by either water system personnel or by residents who are given collection instructions. Typically, City of Slidell requests that the owner collects the lead or copper sample. If they agree, each participant is provided a packet of instructions on how to collect the sample, a 1-liter sample bottle, and a form to be completed once the sample has been collected. They are then asked to collect the sample out of a cold water kitchen tap or bathroom sink tap after the water has stood motionless in their plumbing system for at least six hours. They are also encouraged to collect the sample either upon waking up in the morning or returning home from work. Once the samples are collected, city personnel delivers them to LDH laboratory for analysis.

4. **Initial Lead and Copper Monitoring:**

City of Slidell performed its initial lead and copper monitoring in 1992. The 1992 monitoring involved collecting lead and copper samples from 60 Tier I sample sites throughout the distribution systems (as described above). This was done twice in 1992 during two consecutive six-month periods. Louisiana

Department of Health evaluated the results from both samples sets and immediately granted The City of Slidell “Reduced Monitoring Status”. This was issued because the results from 1992 confirmed our system demonstrated optimal corrosion control. Optimal corrosion control is achieved when the difference between the source water and tap water lead concentrations are less than 0.005 mg/l. Below were the results obtained during the initial round of sampling in 1992:

a. Initial Monitoring Tier I Results:

<u>Date</u>	<u>Lead 90th Percentile</u>	<u>Copper 90th Percentile</u>
3/12/1992	0.001 mg/l	0.3 mg/l
9/8/1997	0.001 mg/l	0.3 mg/l
10/4/2002	0.001 mg/l	0.3 mg/l
9/14/2006	0.001 mg/l	0.1 mg/l
9/30/2008	0.004 mg/l	0.2 mg/l
9/15/2011	0.001 mg/l	0.3 mg/l
7/31/14	0.002 mg/l	0.2 mg/l
Switched to Chloramines		
10/20/17	0.002 mg/l	0.1 mg/l
12/18/17	0.002 mg/l	0.1 mg/l

5.

Following the initial round of sampling, The City of Slidell was placed on a “Reduced Monitoring” schedule. Reduced monitoring is only offered to those systems who have optimal corrosion control and whose sample results demonstrate that their water’s corrosiveness characteristics minimize the release of lead and copper from private plumbing. Systems who qualify are allowed to reduce their monitoring frequency from annually to triannually, (every 3 years). It also allows those systems to decrease the quantity of samples collected from 60 to 30 sample sites during subsequent monitoring periods. However, at any time, the “Action Level” for either lead or copper is exceeded, the system would lose its reduced status and revert back to standard monitoring. The City of Slidell has kept the reduced monitoring status since it was originally granted it in 1992, till 2017 when the City of Slidell switched to chloramine disinfection. Below are our historical lead and copper results.

a. Subsequent Monitoring Tier I Results

<u>Year</u>	<u>Lead 90th Percentile</u>	<u>Copper 90th Percentile</u>
2006	0.001 mg/l	0.1 mg/l
2008	0.004 mg/l	0.2 mg/l
2011	0.001 mg/l	0.3 mg/l
2014	0.002 mg/l	0.2 mg/l
2017	0.002 mg/l	0.1 mg/l

6. Lead & Copper Action Level:

EPA set “Action Levels” at 0.015 mg/ for lead and 1.3 mg/l for copper. In accordance with the Lead and Copper Rule, corrective action must be taken if lead or copper concentrations exceed their action levels (0.015 mg/l Pb or 1.3 mg/l Cu) in more than 10% of the samples collected. In other words, if 10% of the concentrations (or the 90th percentile value) obtained during any monitoring period exceeds the “AL”, systems would be required to implement additional corrosion control, educate the public on how they can reduce their exposure to lead, forfeit their reduced monitoring status (if applicable), and revert back to the standard monitoring frequency for lead and copper sampling.

7. More Information

For more information, you can visit the LDH website at www.dhh.la.gov or the EPA’s website at www.epa.gov. As always, you can also call The City of Slidell at (985) 646-4291