

**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Vision: To be the Healthiest State in the Nation

Rick Scott  
Governor

Celeste Philip, MD, MPH  
State Surgeon General

January 26, 2017

CITY OF PLANT CITY  
PO BOX C  
PLANT CITY, FL 33564

Re: Lead and Copper Tap Sampling Plan for CITY OF PLANT CITY UTILITY PWS ID 6290323

Dear CITY OF PLANT CITY:

Due to recent events regarding lead and copper in drinking water in different cities throughout the United States, there has been an increased focus on implementation of the Lead and Copper Rule (LCR). To ensure public health and safety is protected, our office is requiring all community systems to reevaluate their monitoring sampling site plans and water quality parameters sampling plans and certify that the locations truly represent the "worst case" risk for lead leaching. Systems will need to review the distribution system by completing a materials evaluation to identify Tier 1 locations.

You should also review the population served by your water system as the number of tap sample sites for lead and copper and water quality parameters are based on the population interval. For the LCR this is the sum of the number of permanent residents and the number of additional non-transient persons, such as school children, office and commercial employees and seasonal residents.

Sample locations are selected on the basis of a materials evaluation. Community water systems are required to identify and use tier 1 sites in its sampling pool to meet the minimum number of samples. Due to plumbing changes, home renovations or lack of homeowner participation, your system may not meet the sampling pool requirements for the Lead and Copper Rule. Systems will need to review the distribution system by completing a materials evaluation to identify Tier 1 locations.

In choosing sample site locations, the LCR requires Tier Type to be taken into account. Tier 1 sites must be chosen first, with Tier 2 and Tier 3 being chosen if there are insufficient Tier 1 locations. All sites used for lead and copper compliance tap sampling must be tier 1 unless there are "insufficient tier 1 sampling sites. The sampling location must be from an interior tap typically used for consumption- cold water kitchen or bathroom sink tap.

If a sampling location needs to be changed due to construction, addition of a water softener or lack of cooperation from homeowner, the new location must be of the same Tier type and our office must be notified of the location and tier.

Enclosed are Material Evaluation Worksheets and a Lead and Copper Tap Sampling Plan for your use.

For community systems that are sampling in 2017, you must have your re-evaluated plan sent to our office prior to sampling or by April 15, 2017. For systems sampling in 2018, your plan must be submitted by December 31, 2017. If you have any questions, please contact me by email at [Melinda.swindle@flhealth.gov](mailto:Melinda.swindle@flhealth.gov) or by phone at 813-307-8015 ext. 5932.

Sincerely,

*Melinda Swindle*

Melinda Swindle  
Environmental Specialist III

Enclosure

# Lead and Copper Rule: Materials Evaluation

**Florida Department of Health – Hillsborough County**  
Division of Environmental Health • Safe Drinking Water Program  
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## CONDUCT A MATERIALS EVALUATION

All community and nontransient noncommunity water systems should survey all records documenting the materials used to construct and repair the distribution system and buildings connected to the distribution system. Relevant information can be attained through the following sources:

- Plumbing codes;
- Plumbing permits;
- Distribution maps and drawings;
- Inspection and maintenance records;
- Meter installation records;
- Standard operating procedures;
- Operation and maintenance manuals;
- Permit files;
- Existing water quality data;
- Interviews with senior personnel, building inspectors, and retirees; and
- Community survey.

Several worksheets for organizing the information collected during the materials evaluation are included at the end of this document. These worksheets should be useful when determining the sites that contain the highest priority materials.

## CREATE A SAMPLING POOL

Based on the completed materials evaluation, community water supplies must identify a pool of lead and copper sampling sites large enough to ensure a sufficient numbers of sites are available for sampling. The sampling pool must target high risk sites using the criteria below.

- Samples must be collected from Tier 1 sites, unless
- Insufficient Tier 1 sampling sites are available, then Tier 2 sites must be used, unless
- Insufficient Tier 1 and Tier 2 sampling sites are available, then Tier 3 sites must be used.

If no Tier 1, 2, or 3 sites are available, sampling sites must be representative of plumbing materials typically found throughout the water system.

**TIER 1 SITES - Single family residence (SFR) with:**

- Lead service lines
- Copper plumbing with lead solder installed after 1982 and before 1989
- Interior lead plumbing
- Multiple family residences (MFR) may be used as Tier 1 sites when MFR comprise at least 20 percent of the total service connections.

**TIER 2 SITES - Buildings or Multifamily residences (MFR) (duplexes, apartment complexes) with:**

- Lead service lines
- Copper plumbing with lead solder installed after 1982 and before 1989
- Interior lead plumbing

**TIER 3 SITES - Single family residence with:**

- Copper plumbing with lead solder installed after 1982 and before 1989

**OTHER SITES**

- Sites representative of plumbing materials commonly found throughout the water supply.

**\* If a water system has lead service lines (LSL), at least 50 percent of the sampling sites must have an LSL. EPA has clarified that sites with lead goosenecks or pigtails (usually the publically-owned portion of the service line between the water main and either a connector line or the curb box) should be considered Tier 1 sites. Priority should be placed on full LSLs, then partial LSLs, followed by lad goosenecks.**

**Also Note:**

- Each round of sampling should be conducted at the same sampling sites. If an original sampling site is not available, you should collect a tap sample from another site meeting the same Tier criteria as the original site and document the reason for the change and notify our office.
- For residential sites, samples must be collected from kitchen or bathroom cold water taps typically used for consumption. For non-residential sites, samples must be collected from cold water taps typically used for consumption. Do not sample from outside hose spigots or utility sinks.
- Samples may not be taken from taps that have point of use or point of entry treatment devices designed to remove inorganic contaminants, such as a water softener.

**Attached are three worksheets available for your use:**

Worksheet #1 - Materials Survey Inventory;

Worksheet #2 - Materials Survey Results by Number of Service Connections for each Plumbing Materials Type;  
and

Worksheet #3 - Summary of Material Survey Results

### WORKSHEET #1 - MATERIALS SURVEY INVENTORY

Use this worksheet to record information about sampling sites based on your review of the supply's distribution system material inventory.

Public Water Supply Name: \_\_\_\_\_

PWS ID Number: 629

Population Served: \_\_\_\_\_ \*Note: please reference the key at the bottom of the worksheet to correctly fill out this form.

Type of Structure	Location	Contact Person		LSL (F, P, or G)	Interior Plumbing Material	POE or POU Device	Verified	Volunteered	Selected		Received Training Material
		Name	Phone						Routine	Optional	

**Key:**

Type of Structure	Lead Service Line (LSL)	Interior Plumbing Material
BLDG – Building	F – Full Lead Service Line	LP – Lead Pipe
MFR – Multi-family Residence	P – Partial Lead Service Line	CLS82 – Copper Pipe with Lead Solder installed after 1982 and before 1989
SFR – Single Family Residence	G – Gooseneck or Pigtail	CLS83 – Copper Pipe with Lead Solder installed before 1983
POE – Point of Entry Treatment	<b>Verified</b> – Material verified by utility	<b>Routine</b> – Compliance sampling pool site
POU – Point of Use Treatment	<b>Volunteered</b> – resident/Owner agreed to the sampling	<b>Optional</b> – Additional compliance site if needed

# WORKSHEET #2 - MATERIALS SURVEY RESULTS BY NUMBER OF SERVICE CONNECTIONS FOR EACH PLUMBING MATERIALS TYPE

This worksheet allows you to record the total number of service connections by type of structure and the type of interior and distribution system plumbing materials.

Public Water Supply Name: \_\_\_\_\_ PWS ID Number: 629 \_\_\_\_\_

Population Served: \_\_\_\_\_

Type of Structure	Type of Plumbing Material					
	Interior Plumbing			Distribution System Piping		
	Lead Pipe	Copper with Lead Solder 1983-88 <sup>4</sup>	Copper with Lead Solder <1983 <sup>5</sup>	LSLs		
				Entire Line	Partial Line	Gooseneck or Pigtail
Number of Service Connections			Number of Service Connections			
SFRs <sup>1</sup>						
MFRs <sup>2</sup>						
BLDS <sup>3</sup>						
<b>TOTAL</b>						

<sup>1</sup> SFR – single family residence

<sup>2</sup> MFR – multi-family residence, i.e. duplex, apartment complex

<sup>3</sup> BLDG – public or commercial buildings, businesses, offices, schools

<sup>4</sup> Refers to building that contain copper pipes with lead solder installed after 1982 and before 1989

<sup>5</sup> Refers to buildings that contain copper pipes with lead solder installed before 1983

# WORKSHEET #3 - SUMMARY OF MATERIAL SURVEY RESULTS

This worksheet allows you to tally the number of service connections by type of structure and type of plumbing material.

Public Water Supply Name: \_\_\_\_\_ PWS ID Number: 629

Population Served: \_\_\_\_\_

Plumbing Material	Type of Structure		
	SFR <sup>1</sup>	MFR <sup>2</sup>	BLDG <sup>3</sup>
Number of Service Connections			
<i>Interior Plumbing</i>			
Lead Pipe			
Copper Pipe with Lead Solder installed after 1982 and before 1989 <sup>4</sup>			
Copper Pipe with Lead Solder installed before 1983 <sup>5</sup>			
<i>Lead Service Lines</i>			
Entire Line			
Partial Line			
Gooseneck or Pigtail			
<b>Total Available Sites</b>			

<sup>1</sup> SFR – single family residence

<sup>2</sup> MFR – multi-family residence, i.e. duplex, apartment complex

<sup>3</sup> BLDG – public or commercial buildings, businesses, offices, schools

<sup>4</sup> Refers to building that contain copper pipes with lead solder installed after 1982 and before 1989

<sup>5</sup> Refers to buildings that contain copper pipes with lead solder installed before 1983