



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
LEAD/COPPER SAMPLE SITE SELECTION POOL AND MATERIALS SURVEY
FOR COMMUNITY WATER SYSTEMS FORM 20467(a)**

THE NUMBER OF SAMPLE SITES REQUIRED IS BASED ON POPULATION AND CAN BE FOUND IN THE INSTRUCTIONS. **PLEASE READ THE INSTRUCTION SHEET BEFORE COMPLETING THIS FORM.**

PWS ID: _____	POPULATION:	<input type="checkbox"/> >100,000
SYSTEM NAME: _____		<input type="checkbox"/> 10,001 to 100,000
ADDRESS: _____		<input type="checkbox"/> 3,301 to 10,000
CONTACT PERSON: _____		<input type="checkbox"/> 501 to 3,300
PHONE NUMBER: _____		<input type="checkbox"/> 101 to 500
EMAIL ADDRESS: _____		<input type="checkbox"/> ≤ 100

SAMPLE SITE CATEGORIES

Systems must pick as many Tier 1 sites as possible before using Tier 2 sites. If there are insufficient Tier 2 sites, Tier 3 sites may be used. If there are insufficient Tier 1, 2 or 3 sites, the sampling pool may be completed using Tier Other sites. The Safe Drinking Water Act (SDWA) lead ban requiring the use of “lead-free” plumbing for drinking water took effect in 1988: buildings constructed after this date would not legally contain lead solder. In 2011 Congress passed the Reduction of Lead in Drinking Water Act (RLDWA) revising the definition of lead free by lowering the maximum lead content of the wetted surfaces of plumbing products (such as pipes, pipe fittings, plumbing fittings and fixtures) from 8% to a weighted average of 0.25%. Community water systems should indicate whether the sampling locations they have chosen are a school or childcare facility.

TIER 1	It is a single family structure that contains lead pipes or is served by lead service lines. Or a single family structure that contains copper pipes <u>with</u> lead solder installed after 1982 but before the SDWA lead ban in 1988.	# of Sites _____
TIER 2	It is a building or multiple-family residence that contains lead pipes or is served by lead service lines. Or a building or multiple-family residence that contains copper pipes <u>with</u> lead solder installed after 1982 but before the SDWA lead ban in 1988.	# of Sites _____
	It is a school or childcare facility that contains lead pipes, or is served by a lead service line. Or a school or childcare facility that contains copper pipes <u>with</u> lead solder installed after 1982 but before the SDWA lead ban in 1988.	# of Sites _____
TIER 3	Applies to CWS Only. Single family structures that contain copper pipes <u>with</u> lead solder installed before 1983.	# of Sites _____
OTHER	Sites not defined by Tiers 1 – 2 or 3: explain: _____	# of Sites _____
	School or childcare facilities that are not defined by Tier 2 explain: _____	# of Sites _____
		TOTAL # OF SITES _____



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
LEAD/COPPER SAMPLE SITE POOL SELECTION FORM**

PWS NUMBER: _____

Make sure you include all regular and backup sites and make as many pages as you need.

No	Location Address (Please also indicate school or childcare facility name if applicable)	Tier 1, 2, 3, Other	Served by a lead service line: Y or N or Unknown	Type of Plumbing Material	Date of Construction
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

I have verified and certify that all sites from which lead and copper tap samples are collected shall be selected from a pool of targeted Tier 1, 2, 3, or "other" sample sites. Sample sites selected are representative of the distribution system and specifically represent areas of the systems most vulnerable to corrosion of lead and copper in water.

Signature: _____ Date: _____
Printed Name: _____ Title: _____



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
INSTRUCTIONS FOR SELECTING LEAD/COPPER SAMPLING SITES**

The objective when selecting sampling sites is to choose sites with interior plumbing materials of lead and/or copper, if possible. These types of sites are categorized on the **Lead/Copper Sample Site Selection Form (SSF)** from highest to lowest risk (#1-Other) based on their likelihood to leach lead and/or copper into the drinking water.

Identify a sample pool consisting of sites that fit in the highest category (ies) as possible (closest to #1). For example, search first for sites that meet the description in Categories #1 or #2 on the Form. If you can't find sites that fit in either of these categories, then try to find sites that fit in Category #3. If you can't find any sites that fit in Categories #1-3, then all of your sampling sites will go in Category Other.

You must list the type of plumbing material and the date of construction for each site. You should also indicate whether the address you are sampling is a school or childcare facility.

Your Sampling Pool should include all identified sites at least EQUAL to the number of sites your system is required to sample during standard or initial monitoring. This is true for all systems on initial or reduced monitoring.

Example: Selecting Tier Sites and Sampling Pool

- A PWS serves 3,301 to 10,000 people and is on reduced monitoring
- It is required to have a pre-approved sampling pool of 40 sites of which to sample from
- If your sampling pool needs updating, please use the site selection form and materials evaluation survey form to help identify the 40 sites. Turn it into TCEQ for approval.
- Your Monitoring Plan will be updated at the same time your sampling pool is updated – keep a copy in your records.
- Your normal tap water sampling is 20 sites on reduced monitoring. Make sure in advance that your customers want to participate.
- Contact an accredited laboratory to receive bottles and to begin sampling.

Number of Sampling Sites Required for Standard / Initial Monitoring

System Size	System Population	Number of PBCU sample sites
Large	>100K	100
	50,001 – 100K	60
Medium	10,000 – 50K	60
	3,301 – 10,000	40
Small	501 – 3,300	20
	101 -500	10
	< 100	5

Number of Sampling Sites Required for Routine / Reduced Monitoring

System Size	System Population	Number of PBCU sample sites
Large	>100K	50
	50,001 – 100K	30
Medium	10,000 – 50K	30
	3,301 – 10,000	20
Small	501 – 3,300	10
	101 -500	5
	< 100	5

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INSTRUCTIONS FOR SELECTING LEAD/COPPER SAMPLING SITES

ADDITIONAL GUIDELINES WHEN SAMPLING TAP WATER MONITORING

1. When a sufficient number of Tier 1 sites do not exist or are inaccessible, you must complete your sample pool with Tier 2 sites.
2. For CWSs, when a sufficient number of Tier 1 and Tier 2 sites do not exist or are inaccessible, you must complete your sampling pool with Tier 3 sites.
3. 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.
4. You are not required to target buildings with lead solder installed after the 1988 Texas Lead ban.
5. You should not monitor at sampling sites that have water softeners; however, if all of your available sampling sites have water softeners, you should identify the highest risk sites (Tier 1) and monitor at those locations kitchen or bathroom sinks.
6. If you are not able to draw at least half of your samples from taps served by lead service lines, you must collect a sample from each available site that is serviced by a lead service line.
7. If you do not have lead service lines, but you have lead goosenecks or pigtails, you can collect tap water samples at the sites with the goosenecks and/or pigtails.
8. You should not sample at sites with point of use devices or point of entry devices.
9. Once monitoring begins, you must use the same sites, unless a site is no longer accessible to you or no longer fits the requirements of a priority site. If your sites have changes you must update your sampling pool.

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
LEAD/COPPER SAMPLING SITE MATERIALS EVALUATION SURVEY**

The following is a checklist of resources for water systems to use when evaluating and identifying plumbing materials in their systems. **Investigate the interior plumbing of your customers or your facility to determine what types of plumbing materials are present in your system. Mark the resource(s) you used in your investigation in the blank(s) provided.** If you use a resource which is not listed below, indicate that in the blanks provided next to "Other Sources".

MATERIALS SURVEY CHECKLIST

1. **Distribution System Materials** - Sources available to determine the number of lead service lines or lead goosenecks in the distribution system.
 Distribution System Maps and Record Drawings (provide)
 Capital improvement plans for distribution system development.
 Utility records including meter installation records, customer complaint investigations and all historical documentation which indicate and/or confirm the location of lead service connections.
 Interview senior personnel.
 Perform community survey.

2. **Interior Plumbing Materials** - Sources available to determine the number of residential or non-residential buildings which have interior lead pipe or copper pipe with lead solder joints.
 County appraisal district records.
 Contacts within the water system, municipal office or other local officials.
 Survey area plumbers about when and where copper pipe with lead solder was used.
 Interview residents - letters, phone survey, personal contact, etc.
 Interview local contractors, developers and builders.

3. **Corrosivity Characteristics** - public water supply systems shall identify whether the following construction materials are present in their distribution system and report to the State with a map showing the locations of the types of plumbing:
 Lead pipes
 Lead service lines
 Lead solder
 Lead from interior lining of distribution mains
 Lead form alloys
 Lead from home plumbing
 Copper from piping and alloys, service lines, and home plumbing.
 Galvanized piping, service lines, and home plumbing.
 Ferrous piping materials such as cast iron and steel.
 Asbestos cement pipe.

Other Sources (explain) _____

Return the form to:

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
PUBLIC DRINKING WATER – LEAD/COPPER PROGRAM - MC 155
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087**

If you have any questions, please call the Lead/Copper Program at Phone: 512/239-4691. Fax: 512/239-6050