

**NORTH BEACH WATER DISTRICT
LEAD & COPPER 90TH PERCENTILE CALCULATION:**

MCL 0.015

1.3

# of samples	LEAD		COPPER						
1	0.001	1	0.008	90th percentile:		Sample #			
2	0.001	1	0.012	20	x	0.9	=	18	
3	0.001	1	0.023						
4	0.001	1	0.025						
5	0.001	1	0.027						
6	0.001	1	0.029						
7	0.001	1	0.037						
8	0.001	1	0.053						
9	0.001	1	0.072						
10	0.001	1	0.074						
11	0.002	2	0.081						
12	0.002	2	0.091						
13	0.002	2	0.104						
14	0.002	2	0.166						
15	0.003	3	0.199						
16	0.004	4	0.311						
17	0.006	6	0.323						
18	0.02	20	ppb	0.331					
19	0.029	29	ppb	0.35					
20	0.072	72	ppb	0.499					



SAMPLING REQUIRED AFTER ACTION LEVEL EXCEEDANCE

The Lead and Copper Rule requires additional sampling after a system exceeds an action level. The increased levels of lead and/or copper in your water system may originate from your source(s), treatment, or corrosion of distribution and household plumbing materials. The additional sampling described below will help sort this out.

Note - your design engineer may wish to be involved with, or even have specific procedures for, this monitoring. Therefore, you may wish to retain your engineer prior to conducting this monitoring.

1. SOURCE WATER ANALYSIS

The source water can have elevated lead or copper levels. Take a single sample from each entry point to the distribution system (this means at each permanent and seasonal source before it enters the distribution system) and analyze it for **lead and copper**. Unlike lead and copper distribution samples, this is a flushed sample to represent the source water, not a stagnant water sample. If you have this information from your source groundwater sources as part of a complete inorganic chemical analysis within the last three years or your surface water sources within the last year, then you can use those results.

2. WATER QUALITY PARAMETERS

Certain characteristics of water can lead to corrosion of pipes and other plumbing fixtures in your distribution system. These characteristics are "water quality parameters" (WQPs). Your design engineer needs the WQPs in order to identify the type of corrosion control treatment that will best reduce corrosion in your system.

Take WQP samples **from each entry point** to the distribution system **and from the number of representative point(s) in the distribution system** as indicated in the table below. You can use coliform sample sites to collect the distribution samples and be sure to flush the tap prior to collecting all samples.

Total System Population served	under 501	501-3,300	3,301-10,000
Number of distribution samples required	1	2	3

You are required to take WQP samples on two separate days. You must take both sample sets **prior to November 30th of this year, as indicated in the cover letter.**

Analyze the following parameters using *Standard Methods* from each sample:

- pH and temperature (**field measurements by a qualified person, do not send to lab**).
- Alkalinity, calcium, and conductivity.
- Orthophosphate, if you add a polyphosphate or orthophosphate compound to the water.
- Iron and manganese, if your system uses sources known to have iron or manganese levels near or above their respective MCL. (The presence of these metals in the water may affect the treatment performance.)

We recommend you consider collecting other parameters known to affect corrosion control including:

- Chloride
- Ammonia
- Oxidation-reduction potential (ORP)
- Sulfate
- Hardness
- Free chlorine residual

You must send the following sheet, or all the data on it, along with the corrosion control recommendation report, to us **by the date specified in the cover letter.**

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

PUBLIC EDUCATION PROGRAM For Systems Exceeding The Lead Action Level

Public education is required when a water system exceeds the action level for lead. The purpose of public education is to inform the affected community about the risks associated with elevated lead levels, especially to children and expectant or nursing mothers, to provide information on what the water system is doing to address the lead in drinking water, and to advise the community on actions they can take to reduce their exposure. This document is designed to help you to understand what you need to do to complete your public education requirements.

Because public education helps to reduce lead exposure, not conducting public education is a treatment technique violation.

Required Language

Enclosed with this packet is a sample lead public education notice. This template includes the minimum EPA-required language for medium sized Group A Community water systems. This language must be included in all printed materials distributed as part of a lead public education program. If you choose to develop your own public education materials in accordance with the Code of Federal Regulations (CFR 141.85(a)(1) and (2)), they must be approved by the Washington State Office of Drinking Water (ODW) *prior* to delivery.

In addition to the public education materials, you must notify customers the following required language with every billing statement. **“[Insert name of water system] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [insert name of water system] or visit (insert your web site here).”** If you don’t have billing statements, this must be sent at a minimum of quarterly to all billed costumers.

Delivery Requirements

Within 60 days of receiving this notice, a community water system must deliver public education materials as follows:

- Distribute printed information to all bill-paying customers, in water utility bills or by a separate mailing. Deliver educational materials to local public health agencies even if they are not located within the water system’s service area, along with an informational notice encouraging distribution of these materials to all potentially affected customers or water users.
- Contact your local health agency directly by phone or in person about the situation and enlist their assistance in targeting at risk populations and organizations. If they provide a list, directly deliver the public education materials to these organizations.
- Deliver educational materials to specified facilities and organizations within the water system’s service area, including, but not limited to:
 1. Public and private schools and local school boards;
 2. City or county health departments;
 3. Woman, Infant and Children (WIC); r
 4. Head Start programs (if available);
 5. Public and private hospitals or clinics;
 6. Family planning clinics;
 7. Pediatricians; and,
 8. Local welfare agencies that are served by your water system.
- You must choose to implement at least *three* of the following activities:
 1. Public service announcement
 2. Paid advertisements
 3. Public area information displays
 4. Emails to customers
 5. Public meetings
 6. Household deliveries



PUBLIC EDUCATION CERTIFICATION FORM For Systems Exceeding the Lead Action Level

Within 10 days of completing your public education campaign, you are required to send this completed form and a copy of each type of notice you distributed (hand-delivered notices, press releases, newspaper articles, etc.) to the appropriate Office of Drinking Water Regional Office (see address below). This form certifies that you have met all public education requirements. Initial public education is due no later than 60 days after a lead action level exceedance. Activities must be repeated annually until a sample set is collected that doesn't exceed the lead action level. We require you provide a Public Education Certification Form to the Department of Health to document all completed activities.

With this certification, you are also stating that you will meet future requirements for notifying new billing units of the violation or situation.

Water System: _____ ID #: _____ County: _____

Completed by Date: ____ / ____ / ____

- ☐ Distribute informational notices, in water utility bills or by separate mailing, to each customer normally billed by your water system.
- ☐ Deliver materials to local public health agencies. Contact them directly for assistance in reaching all susceptible populations.
- ☐ Deliver pamphlets, brochures, or posters to the following facilities and organizations in your service area:
 - ☐ Public and private schools
 - ☐ Woman, Infant and Children (WIC) and
 - ☐ Head Start programs
 - ☐ Public and private hospitals or clinics
 - ☐ Pediatricians
 - ☐ Family planning clinics
 - ☐ Local welfare agencies
 - ☐ Other at risk facilities or organizations as identified by local health agency including those that may be outside your service area
 - ☐ Not applicable/ none in our service area
- ☐ Make a good faith effort to deliver materials to licensed childcare centers, preschools, and obstetricians-gynecologists and midwives in your service area.
 - ☐ Not applicable/ none in our service area
- ☐ Implement **three** of the following activities (check all that apply):
 - ☐ Public service announcement
 - ☐ Paid advertisements