



Greetings,

The USEPA has finally published the Revisions to the Lead and Copper Rule. We have summarized the 409 pages in the attached two-page summary and hope you find it helpful.

We are writing to tell you about a new technology that is rapidly being adopted by drinking water surface plants to measure finished water corrosion rates.

Linear polarization resistance is the scientific principle behind measuring corrosion rates accurately and it has been used by the oil and gas industry for the last 60 years.

Our company InstantMPY has been active in the drinking water corrosion control market for 35 years and we have spent the last ten years perfecting and testing our corrosion rate analyzers. Right now, our analyzers are providing data to over 300 water utilities on their corrosion rates.

We feel that everyone can benefit from more corrosion rate data on their finished water so we have set aside a limited number of corrosion analyzers and would like to provide you with a 30-day free trial.

During the trial you will collect valuable information on your corrosion rates to help you make data driven decisions and gain a greater understanding of the impact of water quality on corrosion rates.

Corrosion rates are displayed on the analyzer every 60 seconds and measured and reported in mils per year (mpy). The setup is easy, quick and only requires access to finished water. It's as simple as submerging the corrosion probe tips into a beaker of running water in the laboratory sink.

We will help you with technical support and service and hope that we may have an opportunity to work with you.

Lead and Copper Rule Revisions (LCRR), December 22, 2020

Parameters	▶ Lead: Trigger Level of 10 µg/L, Action Level of 15 µg/L ▶ Copper: Action Level of 1.3 mg/L
Lead in Drinking Water at Schools and Child Care Facilities	▶ Community water systems (CWS) must conduct sampling at 20% of elementary schools and 20% of child care facilities per year and conduct sampling at secondary schools on request for 1 testing cycle (5 years) and conduct sampling on request of all schools and child care facilities thereafter. ▶ Sample results and public education must be provided to each sampled school/child care, primacy agency and local/state health department. ▶ Excludes facilities built or replaced all plumbing after January 1, 2014.
Sample Site Selection	▶ Prioritizes collecting samples from sites served by Lead Service Lines, all samples must be collected from sites served by LSLs, if available. ▶ No distinction in prioritization of copper pipes with lead solder by installation date.
Collection Procedure	▶ Requires collection of the fifth-liter sample in homes with LSLs after water has sat stagnant for a minimum of 6 hours and maintains first-liter sampling protocol in homes without LSLs.
Monitoring Frequency	▶ Some samples may be analyzed for only lead when lead monitoring is conducted more frequently than copper. ▶ Copper follows the same criteria as the current rule. ▶ Lead monitoring schedule is based on P90 level for all systems as follows: P90 > 15 µg/L: Semi-annually at the standard number of sites. P90 > 10 to 15 µg/L: Annually at the standard number of sites.
Corrosion Control Treatment (CCT)	▶ Specifies CCT requirements for systems with exceedance of Trigger Level: ○ No CCT: must conduct a CCT study if required by primacy agency. ○ With CCT: must follow the steps for re-optimizing CCT, as specified in the rule. ▶ Specifies CCT requirements for systems with exceedance of Action Level: ○ No CCT: must complete CCT installation regardless of their subsequent P90 levels ○ With CCT: must re-optimize CCT. ○ CWSs serving ≤ 10,000 people and can select an option other than CCT to address lead. ▶ Removes calcium hardness adjustment as an option and specifies any phosphate inhibitor must be orthophosphate based

Lead Service Line Replacement (LSLR)	▶ LSLR: Rule specifies replacement programs based on P90 level for CWSs serving > 3,300 people: ○ If Action Level exceeded: Must fully replace 3% of LSLs per year based upon a 2-year rolling average (mandatory replacement) for at least 4 consecutive 6-month monitoring periods. ○ If Trigger Level exceeded: Implement an LSLR program with replacement goals in consultation with the primacy agency for 2 consecutive 1- year monitoring periods. ▶ Annual LSLR rate is based on number of LSLs and galvanized line requiring replacement when the system first exceeds the Action Level plus the current number of lead status unknown service lines. ▶ Only full LSLR (both customer-owned and system-owned portion) count toward mandatory rate or goal-based rate. ▶ All systems replace their portion of an LSL if notified by consumer of private side replacement within 45 days of notification of the private replacement. If the system cannot replace the system's portion within 45 days, it must notify the state and replace the system's portion within 180 days.
Lead Service Line Related Inventory and Outreach	▶ All systems must develop an LSL inventory or demonstrate absence of LSLs within 3 years of final rule publication. ▶ LSL inventory must be updated annually or triennially, based on their tap sampling frequency. ▶ All systems with known or possible LSLs must develop an LSLR plan. ▶ Inform consumers annually that they are served by LSL or lead status unknown service line. ▶ If Exceeds Action Level: ○ Current public education requirements apply. ○ Systems must notify consumers of Exceedances of Action Level within 24 hours. ▶ In addition, CWSs must: ○ Deliver notice and educational materials to consumers during water-related work that could disturb LSLs. ○ Provide information to local and state health agencies. ○ Provide lead consumer notice to consumers whose individual tap sample exceeds the Action Level as soon as practicable but no later than 3 days.

*Information taken from EPA Lead and Copper Rule Revisions: 40 CFR Parts 141 and 142

*For informational purposes only

Old Technology



Corrosion Coupon

One corrosion measurement
every 90 days

New Technology



InstantMPY Corrosion Rate Analyzer

One corrosion measurement
every 60 seconds

Measure finished water corrosion rates at the water plant, in the distribution system, or both.

The InstantMPY Corrosion Rate Analyzer provides the following benefits:

- Measure and display drinking water corrosion rates on a real time basis providing data to document corrosion control results
- Optimize corrosion control chemical feed rates and pH adjustment
- Detect changes in finished water corrosivity before water enters distribution system
- No maintenance or calibration required. Replacement tips cost \$30 each year. Useful instrument life 10 years.
- Laboratory Corrosion Analyzers \$2995
- SCADA linked Corrosion Analyzers start at \$4995