Module 2: Learning About Lead in Drinking Water

Glossary of Terms

**Aerator:** Also called a “screen” and is typically located on the fixture valve (e.g., where the water comes out) to improve water flow out of a tap or drinking water fountain. These aerators can collect sediment and lead particulate and should be cleaned regularly. See the Established Routine Practices factsheet for more detail.

**Chiller:** A central refrigeration unit providing cold water to some types of drinking water fountains.

**Corrosion:** A dissolving and wearing away of metal caused by a chemical reaction (e.g., between water and the piping that the water contacts).

**Cross-connection:** A point in a plumbing system where it is possible for a nonpotable substance to come into contact with the potable drinking water supply.

**Detailed Fixture Evaluation:** A sampling process designed to pinpoint where (i.e., fixtures or interior plumbing) lead is getting into drinking water so that appropriate corrective measures can be taken.

**Drinking Water Fountain:** A fixture connected to the water supply that provides water as needed. There are different types of drinking water fountains: fountains without central chillers, fountains with central chillers, water coolers, bottled water fillers, etc.

**Faucet:** A valved outlet device attached to a pipe that normally serves a sink or tub fixture. A faucet discharges hot and/or cold water for a variety of consumptive uses, including drinking, cooking, and washing. The term “faucet” is used interchangeably with the term “tap.”

**First-Draw Samples:** These are the samples taken immediately after turning on the faucet or valve, without spilling, if possible. These samples represent the lead content of water sitting in water outlets that are used for drinking or cooking within the building(s).

**Fittings:** These are generally static parts that are used to join sections of pipe, or to join pipe to outlet fixtures.

**Flush Samples:** These samples are taken after water has been running from the fixture for some pre-determined length of time. They can be used to determine if lead is coming from the fixture itself or from interior plumbing.

**Flux:** A substance applied during soldering to facilitate the flow of solder. Flux often contains lead and can itself be a source of lead contamination in water. The “lead-free” requirements of the 1986 Safe Drinking Water Act Amendments require that solders and flux not contain more than 0.2 percent lead.

**Fountain Valve:** The valve and discharge device that mounts on top of the bubbler fixture and discharges water for consumption. This document does not distinguish bubbler drinking water fountains from other types of fountains. Therefore, the term “fountain valve” is used interchangeably with bubbler valve.
**Header:** The main pipe in the internal plumbing system of a building (see Interior Plumbing definition below for context within this document). The header supplies water to lateral pipes.

**Inlet:** A location where the water enters a plumbing component, such as where the water from the pipes enters a central chiller (defined above).

**Interior Plumbing:** For the sake of this document, interior plumbing is the plumbing within the wall and upstream of the fixture.

**Lateral:** A plumbing branch between a header or riser pipe and a fixture or group of fixtures. A lateral may or may not be looped. Where more than one fixture is served by a lateral, connecting pipes are provided between the fixtures and the lateral.

**Lead-free:** Per the Reduction in Lead Drinking Water Act of 2011: not containing more than 0.2 percent lead when used with respect to solder and flux; and not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

**Outlet:** A location where water may be accessed for consumption, such as a drinking fountain, water faucet, or tap.

**Potable Water Pipe:** The pipe in a distribution system and in a building which carries water intended for human consumption.

**Public Water System:** Any system for the provision of water for human consumption through pipes or other constructed conveyances if the system has 15 or more service connections, or regularly serves an average of at least 25 persons daily at least 60 days per year.

**Riser:** The vertical pipe that carries water from one floor to another.

**Sediment:** Matter from piping or other water conveyance device that settles to the bottom of the water in the apparatus. If lead components are used in plumbing materials, lead sediments may form and result in elevated water lead levels.

**Sequential Samples:** Water samples collected at the fixture, one after another, without flushing beforehand, or wasting water in between samples.

**Service Line:** Also called a connection line. The pipe that carries tap water from the public water main to a building. Service lines were often composed of lead materials, particularly those installed prior to 1986.

**Source Water:** Untreated water from streams, rivers, lakes, or underground aquifers that is used to supply private wells and public drinking water.
**Solder:** A metallic compound used to seal the joints between pipes. Until 1986, solder containing up to 50 percent lead was legally used in potable water plumbing and the law prohibiting that may not have been enforced in your state until 1990. “Lead-free” solders, which can contain up to 0.2 percent lead, often contain one or more of the following metals: antimony, tin, copper, or silver. Several alloys are available that melt and flow in a manner similar to lead solder.

**Strainers:** Are typically located within the fixture itself (e.g., at the inlet to a water fountain or cooler) and collect debris and/or sediment. These strainers should be checked and regularly cleaned since they can be a contributing source of elevated lead levels.

**Valve:** A mechanical device by which the flow of water may be started, stopped or regulated by a movable part that opens, shuts, or partially obstructs one or more ports of passageway.

**Water Cooler:** A mechanical device affixed to drinking water supply plumbing that actively cools water for human consumption. The reservoir can consist of a small tank or a pipe coil.