

Safe Drinking Water Act Regulations

Surface Water Treatment Rule (SWTR)

Objective

- To ensure adequate treatment of raw water

Requirements

- Treat to provide 3 log *Giardia* and 4 log virus inactivation daily
- Maintain detectable residual disinfectant at the entry point to the distribution system (concentration cannot be <0.2 mg/L for more than 4 hours).
- Maintain detectable residual in the distribution system (residual disinfectant concentration cannot be undetectable in greater than 5% of samples in a month, for any 2 consecutive months)
- Meet filtration avoidance criteria
 - Maintain <100 MPN/100 ml total coliforms, and <20 MPN/100 ml fecal coliform in 90% of source water samples
 - Prior to the first point of disinfectant application, turbidity levels cannot exceed 5 NTU
- Annual watershed inspection and report
- Sanitary surveys (every 3 years) (2017)

Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

Objectives

- To treat raw water for *Cryptosporidium*
- To cover or treat remaining finished water reservoirs

Requirements

- Meet requirements of the Bull Run Treatment Variance (granted March 2012) or install approved treatment
- Plan to end use of Mt. Tabor and Washington Park reservoirs by 2020.

Total Coliform Rule (TCR)

Objective

- To monitor the health of the distribution system, and in particular, microbial contamination.

Requirements

- Collect 240 samples per month, test for total coliform & *E.coli*
- TCR Revision: final rule went into effect in 2016.

Lead and Copper Rule (LCR)

Objective

- Optimized corrosion control to limit corrosion of lead and copper in customer pipes

Requirements

- Maintain minimum pH at entry point
- Quarterly distribution system water quality monitoring (pH and alkalinity)
- Sample twice per year at 100 Tier 1 homes in the joint monitoring plan
- Lead Hazard Reduction Program

Phase I, Phase II, Phase V Rules

Objective

- The chemical phase rules define regulations for three contaminant groups: Volatile Organic Compounds (VOCs), Synthetic Organic Compounds (SOCs), and Inorganic Compounds (IOCs)

Requirements

- Monitoring requirements vary: depending on the contaminant in question, monitoring must take place every 1, 3, 6, or 9 years at the entry point to the distribution system

Consumer Confidence Report Rule (CCR)

Objective

- To educate the public about contaminants found in their drinking water

Requirement

- Annually send CCR to all customers (postcard with link) and post on website

Unregulated Contaminant Monitoring Rule 1, 2, 3, 4 (2019) (UCMR)

Objective

- To monitor nationwide to assess occurrence of contaminants. This information is then utilized in conjunction with other data (health effects, cost of treatment, etc) to determine whether a contaminant should be regulated in the future.

Requirement

- Typically requires quarterly monitoring for one year at the entry point and in the distribution system

Stage 2 Disinfectants/Disinfection-By-Products Rule (DBPR)

Objective

- To monitor and manage two groups of disinfection by products, THMs and HAAs, at maximum residence time sites in the distribution system

Requirements

- Quarterly monitoring in the distribution system
- Do not exceed 4.0 mg/L of chlorine/chloramines in the distribution system
- Monitor TOC in the source water (to qualify for reduced monitoring)

Public Notification Rule

Objective

- Notify the public of any acute or chronic health risks related to drinking water

Requirements

- Tier 1 notification – within 24 hours, using approved delivery methods
- Tier 2 notification – within 30 days
- Tier 3 notification – within 1 year

Groundwater Rule

Objective

- To address fecal contamination in groundwater systems

Requirement

- The groundwater source must be sampled if total coliforms are detected in the distribution systems served

Radionuclide Rule

Objective

- To monitor and regulate for beta/photon emitters, gross alpha particles, combined radium-226/228 and uranium.

Requirements

- Monitor source water every 6 or 9 years, depending on the contaminant.

Arsenic Rule

Objective

- To improve public health by reducing exposure to arsenic in drinking water.

Requirement

- Monitor at the entry point every 9 years

Radon (proposed)

Objective

- To monitor and regulate radon in water

Requirements

- Rule is not finalized yet (and there is no indication that it will be finalized in the near future)

Secondary MCLs

National Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, some states may choose to adopt them as enforceable standards.