

Drinking water regulatory requirements affecting small drinking water systems have steadily increased since enactment of the Safe Drinking Water Act (SDWA) in 1974. Not only has the number of regulated contaminants increased, but regulations have also increased in complexity. As a new regulation is implemented by the U.S. Environmental Protection Agency (USEPA), small water systems face a *compounding effect*. That is, compliance with one particular regulation may be much more difficult as a result of one or more prior regulations, or one or more future regulations.

Currently, National Primary Drinking Water Regulations (NPDWRs) are set for 92 contaminants. These include turbidity, 8 microbials or indicator organisms, 4 radionuclides, 19 inorganic contaminants, and 60 organic contaminants. Maximum contaminant levels (MCLs) have been set for 83 contaminants and 9 contaminants have treatment technique requirements. MCLs and treatment technique requirements are enforceable by USEPA, whereas maximum contaminant level goals (MCLGs) are not. Secondary standards are recommended for 15 contaminants to ensure the aesthetic quality of drinking water, although a few states have adopted them as enforceable standards.

Existing rules affecting small systems intended to control microbial risks include:

- Total Coliform Rule (TCR)
- Surface Water Treatment Rule (SWTR)
- Unregulated Contaminant Monitoring Rule (UCMR)
- Filter Backwash Recycle Rule (FBRR)

Existing rules intended to control chemical risks include:

- National Interim Primary Drinking Water Regulations (NIPDWRs)
- Fluoride Rule
- Volatile Organic Chemicals (Phase 1) (VOCs)
- Lead and Copper Rule (LCR)
- Synthetic Organic Chemicals and Inorganic Chemicals (Phase II) (SOCs & IOCs)
- SOCs & IOCs (Phase V)
- Stage 1 Disinfectants/Disinfection Byproducts Rule (D/DBPR)
- Radionuclides
- Consumer Confidence Reporting (CCR) Rule
- Public Notification (PN) Rule
- Unregulated Contaminant Monitoring Rule (UCMR)

USEPA currently in the process of developing or implementing new regulations as required by the SDWA. Future rules intended to control microbial risks include:

- Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR)
- Long-Term 2 ESWTR
- Ground Water Rule (GWR)

Rules intended to control chemical risks include:

- Arsenic
- Radon
- Stage 2 Disinfection Byproducts (DBPs)
- NPDWR Revisions
- Drinking Water Candidate Contaminant List (DWCCCL)

**CWS** = Community Water System: A public water system that supplies water to the same population year-round.

**NTNCWS** = Non-Transient Non-Community Water System: A public water system that regularly supplies water to at least 25 of the same people at least six months per year, but not year-round. Some examples are schools, factories, office buildings, and hospitals, which have their own water systems.

**TNCWS** = Transient Non-Community Water System: A public water system that provides water in a place such as a gas station or campground where people do not remain for long periods of time.

### Applicability of Current Drinking Water Regulations

Contaminant/Rule	CWSs	NTNCWSs	TNCWSs
Organic Contaminants	All	All	Some (Only epichlorohydrin and acrylamide)
Disinfection Byproducts	All (TTHMs, HAA5) Some (Chlorite if system uses chlorine dioxide) Some (Bromate if system uses ozone) Enhanced coagulation (surface water systems using conventional treatment)	All (TTHMs, HAA5) Some (Chlorite if system uses chlorine dioxide) Some (Bromate if system uses ozone)	None
Maximum Disinfectant Residual Levels (MRDLs)	All	All	Some (Only those using chlorine dioxide)
Inorganic Contaminants	All	Some (All except arsenic and fluoride)	None
Nitrate and Nitrite	All	All	All
Radionuclides	All	None	None
Total Coliform Rule (TCR)	All	All	All
Surface Water Treatment Rule (SWTR)	Some (Only PWSs using surface water or ground water sources under the direct influence of surface water)	Some (Only PWSs using surface water or ground water sources under the direct influence of surface water)	Some (Only PWSs using surface water or ground water sources under the direct influence of surface water)
Interim Enhanced SWTR	Some serving more than 10,000 persons.	Some serving more than 10,000 persons.	Some serving more than 10,000 persons.
Lead and Copper Rule	All	All	None
Consumer Confidence Report Rule	All	None	None
Unregulated Contaminant Monitoring Rule	All serving more than 10,000 persons.	All serving more than 10,000 persons.	None
Filter Backwash Recycle Rule	Some (Only PWSs using surface or ground water under the direct influence of surface water and practice conventional or direct filtration and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes)	Some (Only PWSs using surface or ground water under the direct influence of surface water and practice conventional or direct filtration and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes)	Some (Only PWSs using surface or ground water under the direct influence of surface water and practice conventional or direct filtration and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes)

**Existing Rule Compliance Dates  
For Small Systems**

<b>Regulation</b>	<b>Compliance Date</b>
FBRR	2003/2004/2006 <sup>1</sup>
Radionuclides	Dec. 7, 2003 <sup>2</sup>
Stage 1 D/DBPR	January 2004
UCMR	January 2001 – 2003
CCRs	July 1 each year
Phase V SOC/IOC	January 1994
Lead and Copper	December 1992
Phase II SOC/IOC	July 1992
SWTR	December 1990
TCR	December 1990
Phase I VOCs	January 1989
Fluoride	October 1987
NPDWRs	July 1977
LT1ESWTR	2004 <sup>3</sup>
GWR	2004 <sup>4</sup>
Radon	Undetermined <sup>5</sup>
Arsenic	February 2006
Stage 2 M/DBP <sup>6</sup>	May 2005 <sup>7</sup>
Revised NPDWRs	Undetermined <sup>8</sup>
Contaminants Selected from DWCL	2010 <sup>9</sup>