Summary of Sampling Requirements for Nontransient Noncommunity Water Systems

- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.
- Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- mg/l: Milligrams per liter (mg/l) or parts per million.
- TT :Treatment Technique

BACTERIOLOGIC SAMPLING (Standard frequency of sampling is monthly, quarterly or annually, based on population, sampling history and source protection)

Contaminant	MCL(mg/l)
Total Coliform	*Two positive samples (generally a routine and a repeat sample)*
E. coli	*One or more of the above positive samples, also E. coli positive*

Common sources of coliform bacteria in drinking water:

- Found naturally in the environment
- E. coli found in human and animal waste
- Used as an indicator that other, potentially harmful microbes may be present

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NITRATE/NITRITE SAMPLING (Frequency of sampling is annual, or quarterly, if the results are more than 1/2 the MCL)

Contaminant	MCL (mg/l)
Nitrate, Nitrite	*10 ,1*

Common sources of nitrate/nitrite in drinking water:

- Runoff/leachate from fertilizer application and storage sites
- Runoff/leachate from septic fields, lagoons, and septage application sites
- Found naturally in the environment

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INORGANIC SAMPLING (WITH WAIVER) (Reduced frequency of sampling is one every three years, based on sample results and source protection)

Contaminant	MCL (mg/l)	Contaminant	MCL (mg/l)	Contaminant	MCL (mg/l)
Antimony	*.006*	*Mercury*	*.002*	*Barium*	*2.0*
Arsenic	*.010* *	*Beryllium*	*.004*	*Cadmium*	*.005*
Chromium	*.1*	*Selenium*	*.05*	*Cyanide*	*.2*
Thallium	*.002*			*Asbestos (waived)*	*7 MFL*

*effective 1/23/06

Common sources of metals, including arsenic, in drinking water:

- Erosion of natural deposits
- Corrosion of plumbing fixtures
- Discharge/waste from industry and mining
- Runoff/leachate from landfills

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VOLATILE ORGANIC CHEMICALS (Reduced frequency of sampling is one every six years, based on no detects and source protection)

Contaminant	MCL (mg/l)	Contaminant	MCL (mg/L)	Contaminant	MCL (mg/0)
Benzene	*0.005*	*Vinyl Chloride*	*0.002*	*Carbon tetrachloride*	*0.005*
1,2-dichloroethane	*0.005*	*Trichloroethylene*	*0.005*	*1,1-dichloroethylene*	*0.007*
1,1,1-trichloroethane	*0.20*	*Para-dichlorobenzene*	*0.075*	*Cis-1,2-dichloroethylene*	*0.07*
Ethylbenzene	*0.7*	*O-dichlorobenzene*	*0.6*	*Styrene*	*0.1*
Tetrachloroethylene	*0.005*	*Toluene*	*1.0*	*Trans-1,2-dichloroethylene*	*0.1*
Xylenes (total)	*10.0*	*Dichloromethane*	*0.005*	*1,2,4-trichlorobenzene*	*0.07*
1,1,2-trichloroethane	*0.005*	*1,2-dichloropropane*	*0.005*		
Monochlorobenzene	*0.1*				

Common sources of VOCs in drinking water:

- Leaking underground storage tanks or fuel spills
- Discharge or waste from various industrial processes
- By-products of drinking water chlorination (TTHMs)
- Leaching from landfills
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SYNTHETIC ORGANIC CHEMICAL SAMPLING (WITH WAIVER) (Reduced frequency of sampling is one every six years based on no detects and source protection)

Contaminant	***MCL (mg/l)***	**Contaminant**	**MCL (mg/l)**	**Contaminant**	**MCL (mg/l)**	**Contaminants (Waived)**	**MCL (mg/l)**
Alachlor	*0.002*	*Aldicarb*	*0.003*	*Aldicarb sulfoxide*	*0.004*	*Acrylamide*	*TT*
Aldicarb sulfone	*0.002*	*Atrazine*	*0.003*	*Benzo(a)pyrene*	*0.0002*	*Dalapon*	*.2*
Carbofuran	*0.04*	*Chlordane*	*0.002*	*2,4,5-TP silvex*	*0.05*	*Dioxin (2,3,7,8-TCDD)*	*.00000003*
Di(2-ethylhexyl)adipate	*0.4*	*Di(2-ethylhexyl)phthalate*	*0.006*	*Dinoseb*	*0.007*	*Diquat*	*.02*
Heptachlor	*0.0004*	*Heptachlor epoxide*	*0.0002*	*Hexachlorobenzene*	*0.001*	*Endothall*	*.1*
Hexachlorocyclopentadiene	*0.05*	*Lindane*	*0.0002*	*Methoxychlor*	*0.04*	*Glyphosate*	*.7*
Oxamyl (vydate)	*0.2*	*Pentachlorophenol*	*0.001*	*Picloram*	*0.5*	*Ethylenedibromide*	*.0005*
Polychlorinated biphenyls	*0.0005*	*Simazine*	*0.004*	*Toxaphene*	*0.003*	*Dibromochloropropane*	*.0002*
2,4-D	*0.07*	*Endrin*	*0.002*				

Common sources of SOCs in drinking water:
- Runoff/leachate from pesticide application and storage areas • Emissions from waste incineration • Discharge/waste from chemical manufacturer • Discharge from petroleum refineries • Leachate from treated wood and manufacturers of this product

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LEAD/COPPER MONITORING (Frequency of sampling is two, consecutive six-month periods, annual samples for two years, then sample every three years)

Contaminant	***Action Level (mg/l)***
Lead, Copper	*0.015, 1.3*

Common sources of lead or copper in drinking water: • Found in natural deposits • Corrosion of plumbing fixtures and distribution systems

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The following information is to be provided in the annual Water Quality Report if one of the contaminants listed below exceeds the MCL or Action Level:

CONTAMINANT	SUSCEPTIBLE VULNERABLE SUBPOPULATION	LEVEL OF CONCERN	HEALTH EFFECTS
E. COLI	INFANTS, YOUNG CHILDREN, AND PEOPLE WITH SEVERELY COMPROMISED IMMUNE SYSTEMS	CONFIRMED PRESENCE (any confirmed detect)	May cause diarrhea, cramps, nausea, headaches and other symptoms
COPPER	PEOPLE WITH WILSON'S DISEASE	1.3 MG/L (PPM)	Short-term exposure can cause gastrointestinal distress. Long-term exposure may cause liver or kidney damage. People with Wilson's disease should consult their personal doctor.
FLUORIDE	CHILDREN	4.0 MG/L (PPM)	Children may get mottled teeth. Long-term exposure may cause bone disease.
LEAD	INFANTS AND CHILDREN	15.0 µG/L (PPB)	Young children may experience delay in physical or mental development, as well as slight deficits in attention span and learning disabilities. Long-term adult exposure may result in kidney problems or high blood pressure.
NITRATE	INFANTS BELOW THE AGE OF SIX MONTHS	10.0 MG/L (PPM)	Infants below six months of age could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and "blue baby syndrome."
NITRITE	INFANTS BELOW THE AGE OF SIX MONTHS	1.0 MG/L (PPM)	Infants below six months of age could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and "blue baby syndrome."