

Appendix A

Table 1. Reporting Limits for Analysis of Inorganics	
Analyte	Reporting limit--micrograms/liter (µg/L) except where otherwise noted
antimony	4.0
arsenic	3.0
asbestos	0.2 million fibers/liter (mf/L)
barium	300.0
beryllium	1.0
bromate*	5.0 ^{3,4}
cadmium	1.0
chlorine dioxide**	50
chlorine (total)**	100
chlorite (Distribution System Monitoring) * ¹	20 ³
chlorite (Daily Monitoring)*	100
chromium	10.0
copper	50.0
cyanide	20
fluoride	0.5 milligrams/liter (mg/L)
lead	5.0
mercury	0.5
nickel	20.0
nitrate	0.5 mg/L
nitrite	0.1 mg/L
nitrate-nitrite (as N)	0.5 mg/L
selenium	5.0
thallium	1.5

* disinfection byproduct

** disinfectant residual

Table 2. Reporting Limits for Analysis of Volatile Organic Compounds	
Analyte	Reporting limit--micrograms/liter (µg/L)
benzene	0.5
bromodichloromethane	0.5 ³
bromoform* ²	0.5 ³
carbon tetrachloride	0.5
chloroform* ²	0.5 ³
dibromochloromethane* ²	0.5 ³
o-dichlorobenzene	0.5
p-dichlorobenzene	0.5
1,2-dichloroethane	0.5
1,1-dichloroethylene	0.5
cis-1,2-dichloroethylene	0.5
trans-1,2-dichloroethylene	0.5
dichloromethane	0.5
1,2-dichloropropane	0.5
ethylbenzene	0.5
monochlorobenzene	0.5
styrene	0.5
tetrachloroethylene	0.5
toluene	0.5
total trihalomethanes* ²	2.0
1,2,4-trichlorobenzene	0.5
1,1,1-trichloroethane	0.5
1,1,2-trichloroethane	0.5
trichloroethylene	0.5
vinyl chloride	0.5
xylene (total)	1.5 0.5

* disinfection byproduct

Table 3. Reporting Limits for Analysis of Semivolatile Organic Compounds	
Analyte	Reporting limit--micrograms/liter (µg/L)
alachlor	0.2
atrazine	0.3
benzo(a)pyrene	0.15
carbofuran	0.9
chlordane - total	0.2
dalapon	5.0
dibromoacetic acid* ²	1.0 ³
dibromochloropropane (DBCP)	0.02
dichloroacetic acid* ²	1.0 ³
di(2-ethylhexyl)adipate	0.6
di(2-ethylhexyl)phthalate	0.6
2,4-D	1.0
dinoseb	1.0
diquat	2.0
endothall	9.0
endrin	0.1
ethylene dibromide (EDB)	0.01
glyphosate	30.0
haloacetic acids (five)* ²	6.0
heptachlor	0.2
heptachlor epoxide	0.1
hexachlorobenzene	0.1
hexachlorocyclopentadiene	0.5
lindane	0.1
methoxychlor	0.1
monobromoacetic acid* ²	1.0 ³
monochloroacetic acid* ²	2.0 ³
oxamyl (vydate)	2.0
pentachlorophenol	0.4
picloram	1.0
polychlorinated biphenyls (PCBs) - total	0.1
simazine	0.35
2,3,7,8-TCDD (dioxin)	5 x 10 ⁻⁶
toxaphene	1.0
trichloroacetic acid* ²	1.0 ³
2,4,5-TP (Silvex)	1.0

* disinfection byproduct

Table 4. Reporting Limits for Radionuclide Analysis	
Analyte	Reporting limit--picocuries/liter (pCi/L) except where otherwise noted
cesium-134	10
gross alpha	3
gross beta	4
iodine-131	1
radium 226	1
radium 228	1
strontium-89	10
strontium-90	2
tritium	1,000
uranium	1 micrograms/liter (µg/L)
other radionuclides	1/10th of the applicable limit

Table 5. Reporting Limits for Analysis of Cyanotoxins	
Analyte	Reporting limit--micrograms/liter (µg/L)
microcystins (total)	0.24

Table 6. Reporting Limits for PFAS Analysis	
Analyte	Reporting limit—parts per trillion (ppt)
PFOA	2.0
PFOS	2.0
PFHxS	2.0
HFPO-DA	2.0
PFNA	2.0
PFBS	2.0

Table 7. Acceptance Limits (percent of true value) for Disinfection Byproducts		
Contaminant	Acceptance limit	Comments
TTHM		Laboratory must meet all 4 individual THM acceptance limits in order to successfully pass a proficiency test for TTHM
Chloroform	±20%	
Bromodichloromethane	±20%	
Dibromochloromethane	±20%	
Bromoform	±20%	
HAA5		Laboratory must meet the acceptance limits for 4 out of 5 of the HAA5 compounds in order to successfully pass a proficiency test for HAA5
Monochloroacetic Acid	±40%	
Dichloroacetic Acid	±40%	
Trichloroacetic Acid	±40%	
Monobromoacetic Acid	±40%	
Dibromoacetic Acid	±40%	
Chlorite	±30%	
Bromate	±30%	

¹ Applicable to monitoring as prescribed in paragraphs (M)(2) to (M)(5) of rule 3745-81-23 of the Administrative Code.

² When adding individual trihalomethane or haloacetic acid concentrations to calculate total trihalomethane or haloacetic acid, five concentrations, respectively, a zero is used for any analytical result that is less than the minimum reporting limit concentration for the disinfection byproduct.

³ The calibration curve must encompass the regulatory minimum reporting level (MRL) concentration. Data may be reported for concentrations lower than the regulatory MRL as long as the precision and accuracy are met by analyzing an MRL check standard at the lowest reporting limit chosen by the laboratory. The laboratory must verify the accuracy of the calibration curve at the MRL concentration by analyzing an MRL check standard with a concentration less than or equal to 110% of the MRL with each batch of samples. The measured concentration for the MRL check standard must be +/-50% of the expected value, if any field sample in the batch has a concentration less than 5 times the regulatory MRL. Method requirements to analyze higher concentration check standards and meet tighter acceptance criteria for them must be met in addition to the MRL check standard requirement.

⁴ Laboratories that use EPA Methods 317.0 Revision 2.0, 326.0 or 321.8 must meet a 1.0 µg/L MRL for Bromate.