

# Required Initial Sampling for New Drinking Water Sources for Public Water Systems (PWS)

COM = Community categorized PWS; NTNC = Non-Transient Non-Community categorized PWS; TNC = Transient Non-Community categorized PWS

Required Sampling	C O M	N T N C	T N C
<b>Primary Inorganic Contaminants R309-200-5(1) Table 200-1 MCL's</b>			
1. Antimony ..... 0.006 mg/l	Y	Y	Y
2. Arsenic ..... 0.010 mg/l	Y	Y	Y
3. Asbestos (> than 10 µm)..... 7 Million Fibers/liter	a	a	a
4. Barium ..... 2 mg/l	Y	Y	Y
5. Beryllium ..... 0.004 mg/l	Y	Y	Y
6. Cadmium ..... 0.005 mg/l	Y	Y	Y
7. Chromium ..... 0.1 mg/l	Y	Y	Y
8. Cyanide (as free Cyanide) ..... 0.2 mg/l	Y	Y	Y
9. Fluoride ..... 4.0 mg/l	Y	Y	Y
10. Mercury ..... 0.002 mg/l	Y	Y	Y
11. Nickel ..... 0.1 mg/l	Y	Y	Y
12. Nitrate (as Nitrogen) ..... 10 mg/l	Y	Y	Y
13. Nitrite (as Nitrogen) ..... 1 mg/l	Y	Y	Y
14. Total Nitrate and Nitrite (as Nitrogen) .... 10 mg/l	Y	Y	Y
15. Selenium ..... 0.05 mg/l	Y	Y	Y
16. Sodium (see Note 1) .....	Y	Y	Y
17. Sulfate (see Note 2) ..... 1000 mg/l	Y	Y	Y
18. Thallium ..... 0.002 mg/l	Y	Y	Y
19. Total Dissolved Solids (see Note 3) ..... 2000mg/l	Y	Y	Y
<b>Secondary Inorganic Contaminants R309-200-6 Table 200-5 MCLG's</b>			
1. Aluminum ..... 0.05 to 0.2 mg/l	Y	Y	Y
2. Chloride ..... 250 mg/l	Y	Y	Y
3. Color ..... 15 Color Units	Y	Y	Y
4. Copper ..... 1 mg/l	Y	Y	Y
5. Corrosivity ..... Non-corrosive	Y	Y	Y
6. Fluoride (see Note 4) ..... 2.0 mg/l	Y	Y	Y
7. Foaming Agents ..... 0.5 mg/l	Y	Y	Y
8. Iron ..... 0.3 mg/l	Y	Y	Y
9. Manganese ..... 0.05 mg/l	Y	Y	Y
10. Odor ..... 3 Threshold Odor Number	Y	Y	Y
11. pH..... 6.5-8.5	Y	Y	Y
12. Silver ..... 0.1 mg/l	Y	Y	Y
13. Sulfate (see Note 4) ..... 250 mg/l	Y	Y	Y
14. Total Dissolved Solids (see Note 4) ..... 500 mg/l	Y	Y	Y
15. Zinc ..... 5mg/l	Y	Y	Y

Required Sampling	C O M	N T N C	T N C
<b>Pesticides/PCB's/SOC's R309-200-5(3)(a) Table 200-2 MCL's</b>			
1. Alachlor ..... 0.002mg/l	b	b	N
2. Aldicarb (see Note 5) .....	b	b	N
3. Aldicarb sulfoxide (see Note 5) .....	b	b	N
4. Aldicarb sulfone (see Note 5) .....	b	b	N
5. Atrazine ..... 0.003mg/l	b	b	N
6. Carbofuran ..... 0.04mg/l	b	b	N
7. Chlordane ..... 0.002mg/l	b	b	N
<del>8. Dibromochloropropane</del> (see Note 6) .. 0.0002mg/l	b	b	N
9. 2,4-D ..... 0.07mg/l	b	b	N
<del>[10. Ethylene dibromide]</del> ..... 0.00005mg/l	b	b	N
11. Heptachlor ..... 0.0004mg/l	b	b	N
12. Heptachlor epoxide ..... 0.0002mg/l	b	b	N
13. Lindane ..... 0.0002mg/l	b	b	N
14. Methoxychlor ..... 0.04mg/l	b	b	N
15. Polychlorinated biphenyls ..... 0.0005mg/l	b	b	N
16. Pentachlorophenol ..... 0.001mg/l	b	b	N
17. Toxaphene ..... 0.003mg/l	b	b	N
18. 2,4,5-TP ..... 0.05mg/l	b	b	N
19. Benzo(a)pyrene ..... 0.0002mg/l	b	b	N
20. Dalapon ..... 0.2mg/l	b	b	N
21. Di(2-ethylhexyl)adipate ..... 0.4mg/l	b	b	N
22. Di(2-ethylhexyl)phthalate ..... 0.006mg/l	b	b	N
23. Dinoseb ..... 0.007mg/l	b	b	N
<del>[24. Diquat]</del> ..... 0.02mg/l	b	b	N
<del>[25. Endothall]</del> ..... 0.1mg/l	b	b	N
26. Endrin ..... 0.002mg/l	b	b	N
<del>[27. Glyphosate]</del> ..... 0.7mg/l	b	b	N
28. Hexachlorobenzene ..... 0.001mg/l	b	b	N
29. Hexachlorocyclopentadiene ..... 0.05mg/l	b	b	N
30. Oxamyl (Vydate) ..... 0.2mg/l	b	b	N
31. Picloram ..... 0.5mg/l	b	b	N
32. Simazine ..... 0.004mg/l	b	b	N
<del>[33. 2,3,7,8 TCDD (Dioxin)]</del> ..... 0.00000003mg/l	b	b	N
<b>Radiologic Chemicals R309-200-5(4) MCL's</b>			
Combined Radium-226 & Radium-228 ..... 5 pCi/l	Y	N	N
Gross alpha particle activity ..... 15 pCi/l	Y	N	N

Required Sampling	C O M	N T N C	T N C
<b>Volatile's R309-200-5(3)(b) Table 200-3 MCL's</b>			
1. Vinyl chloride ..... 0.002mg/l	Y	Y	N
2. Benzene ..... 0.005mg/l	Y	Y	N
3. Carbon tetrachloride ..... 0.005mg/l	Y	Y	N
4. 1,2-Dichloroethane ..... 0.005mg/l	Y	Y	N
5. Trichloroethylene ..... 0.005mg/l	Y	Y	N
6. para-Dichlorobenzene ..... 0.075mg/l	Y	Y	N
7. 1,1-Dichloroethylene ..... 0.007mg/l	Y	Y	N
8. 1,1,1-Trichloroethane ..... 0.2mg/l	Y	Y	N
9. cis-1,2-Dichloroethylene ..... 0.07mg/l	Y	Y	N
10. 1,2-Dichloropropane ..... 0.005mg/l	Y	Y	N
11. Ethylbenzene ..... 0.7mg/l	Y	Y	N
12. Monochlorobenzene ..... 0.1mg/l	Y	Y	N
13. o-Dichlorobenzene ..... 0.6mg/l	Y	Y	N
14. Styrene ..... 0.1mg/l	Y	Y	N
15. Tetrachloroethylene ..... 0.005mg/l	Y	Y	N
16. Toluene ..... 1mg/l	Y	Y	N
17. trans-1,2-Dichloroethylene ..... 0.1mg/l	Y	Y	N
18. Xylenes (total) ..... 10mg/l	Y	Y	N
19. Dichloromethane ..... 0.005mg/l	Y	Y	N
20. 1,2,4-Trichlorobenzene ..... 0.07mg/l	Y	Y	N
21. 1,1,2-Trichloroethane ..... 0.005mg/l	Y	Y	N
<b>Additional Contaminants R309-515-4(5)(b) MCL's</b>			
1. Ammonia as N .....	Y	Y	Y
2. Boron.....	Y	Y	Y
3. Calcium.....	Y	Y	Y
4. Lead.....	Y	Y	Y
5. Magnesium.....	Y	Y	Y
6. Potassium.....	Y	Y	Y
7. Turbidity, as NTU (groundwater)..... 5 NTU	Y	Y	Y
8. Specific Conductivity at 25°C, µmhos/cm .....	Y	Y	Y
9. Bicarbonate .....	Y	Y	Y
10. Carbon Dioxide.....	Y	Y	Y
11. Carbonate .....	Y	Y	Y
12. Hydroxide .....	Y	Y	Y
13. Phosphorous, Ortho as P.....	Y	Y	Y
14. Silica, dissolved as SiO <sub>2</sub> .....	Y	Y	Y
15. Surfactant as MBAS .....	Y	Y	Y
16. Total Hardness as CaCO <sub>3</sub> .....	Y	Y	Y
17. Alkalinity as CaCO <sub>3</sub> .....	Y	Y	Y

(a) Not required unless new source is located in area of natural deposits of asbestos. Map available at the Division of Drinking Water.

(b) Use Waivers may be issued prior to sampling if it is documented in an "approved" PER or Drinking Water Source Protection plan that: pesticides, PCB's and SOC's have not been used, stored, manufactured, transported, or disposed of; in zone 3 of the PER or Drinking Water Source Protection plan.

Notes:

- (1) No maximum contaminant level has been established for sodium. However, this contaminant must be monitored and reported in accordance with the requirements of R309-205-5(3)
- (2) If the sulfate level of a public water system (COM, NTNC or TNC) is greater than 500 mg/l, the supplier must satisfactorily demonstrate that:
  - (a) No better quality water is available, and
  - (b) The water shall not be available for human consumption from commercial establishments.
- (3) In no case shall the Board allow the use of water having a sulfate level greater than 1000 mg/liter.
- (4) If TDS is greater than 1000 mg/l, the supplier shall satisfactorily demonstrate to the Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source of water (i.e. lower in TDS) is available.
- (5) Maximum allowable Fluoride, TDS and Sulfate levels are given in the Primary Drinking Water Standards, R309-200-5(1). They are listed as secondary standards because levels in excess of these recommended levels will likely cause consumer complaint.
- (6) The MCL for this contaminant is under further review, however, this contaminant shall be monitored in accordance with R309-205-6(1).
- (7) State Wide Waivers have been issued for those contaminants which have been struck-out; such as [~~8. Dibromochloropropane~~]

<b>Disinfection ByProducts (DBP's)</b>	<b>R309-200-5(3)(c)</b>
Refer to specific Rule language or call Disinfection ByProduct rule manager at 801 536-4200.	
<b>Regardless of PWS category proposed Surface Water Sources should be sampled for Total Organic Carbon (TOC), as mg/l.</b>	