

Figure: 30 TAC §290.275(2)

Appendix B - Sources of Regulated Contaminants

Key			
AL	Action Level		
MCL	Maximum Contaminant Level		
MCLG	Maximum Contaminant Level Goal		
MFL	million fibers per liter		
mrem/year	millirems per year (a measure of radiation absorbed by the body)		
n/a	Not Applicable		
NTU	Nephelometric Turbidity Units		
pCi/L	picocuries per liter (a measure of radioactivity)		
ppm	parts per million, or milligrams per liter (mg/L)		
ppb	parts per billion, or micrograms per liter (µg/L)		
ppt	parts per trillion, or nanograms per liter		
ppq	parts per quadrillion, or picograms per liter		
TT	Treatment Technique		
Contaminant (units)	MCLG	MCL	Major sources in drinking water
Microbiological Contaminants			
1. Total Coliform Bacteria	0	For systems that collect 40 or more samples per month - Presence of coliform bacteria in more than 5% of monthly samples. For systems that collect fewer than 40 samples per month - Presence of coliform bacteria in more than 1 sample per month.	Naturally present in the environment.
2. Fecal coliform and <i>E. coli</i>	0	A routine sample and a repeat sample are total coliform-positive, and one is also fecal coliform or <i>E. coli</i> positive. An uncorrected <i>E. coli</i> -positive sample at the raw groundwater source is a TT for the Ground Water Rule (GWR).	Human and animal fecal waste.

3. Fecal indicators (enterococci or coliphage)	n/a	TT. An uncorrected fecal indicator positive sample at the raw groundwater source is a TT for the GWR.	Human and animal fecal waste.
4. Total organic carbon (ppm)	n/a	TT	Naturally present in the environment.
5. Turbidity	n/a	TT	Soil runoff.
Radioactive Contaminants			
6. Beta/photon emitters (mrem/yr)	0	4	Decay of natural and man-made deposits.
7. Alpha emitters (pCi/L)	0	15	Erosion of natural deposits.
8. Combined radium (µg/L)	0	5	Erosion of natural deposits.
Inorganic Contaminants			
9. Uranium (µg/L)	0	30	Erosion of natural deposits.
10. Antimony (ppb)	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
11. Arsenic (ppb)	n/a	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
12. Asbestos (MFL)	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.
13. Barium (ppm)	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
14. Beryllium (ppb)	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
15. Bromate (ppb)	0	10	By-product of drinking water disinfection.
16. Cadmium (ppb)	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.
17. Chloramines (ppm)	MRDL G=4	MRDL=4	Water additive used to control microbes.
18. Chlorine (ppm)	MRDL G=4	MRDL=4	Water additive used to control microbes.
19. Chlorine Dioxide (ppb)	800	800	Water additive used to control microbes.

20. Chlorite (ppm)	1.0	1.0	By-product of drinking water disinfection.
21. Chromium (ppb)	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
22. Copper (ppm)	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
23. Cyanide (ppb)	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
24. Fluoride (ppm)	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
25. Lead (ppb)	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits.
26. Mercury (inorganic) (ppb)	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
27. Nitrate (as Nitrogen) (ppm)	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
28. Nitrite (as Nitrogen) (ppm)	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
29. Selenium (ppb)	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
30. Thallium (ppb)	0.5	2	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories.
Synthetic Organic Contaminants including Pesticides and Herbicides			
31. 2,4-D (ppb)	70	70	Runoff from herbicide used on row crops.
32. 2,4,5-TP (Silvex) (ppb)	50	50	Residue of banned herbicide.
33. Acrylamide	0	TT	Added to water during sewage/wastewater treatment.
34. Alachlor (ppb)	0	2	Runoff from herbicide used on row crops.
35. Atrazine (ppb)	3	3	Runoff from herbicide used on row crops.

36. Benzo(a)pyrene (PAH) (nanograms/L)	0	200	Leaching from linings of water storage tanks and distribution lines.
37. Carbofuran (ppb)	40	40	Leaching of soil fumigant used on rice and alfalfa.
38. Chlordane (ppb)	0	2	Residue of banned termiticide.
39. Dalapon (ppb)	200	200	Runoff from herbicide used on rights of way.
40. Di(2-ethylhexyl) adipate (ppb)	400	400	Discharge from chemical factories.
41. Di(2-ethylhexyl)phthalate (ppb)	0	6	Discharge from rubber and chemical factories.
42. Dibromochloropropane (ppt)	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
43. Dinoseb (ppb)	7	7	Runoff from herbicide used on soybeans and vegetables.
44. Diquat (ppb)	20	20	Runoff from herbicide use.
45. Dioxin (2,3,7,8-TCDD) (ppq)	0	30	Emissions from waste incineration and other combustion; Discharge from chemical factories.
46. Endothall (ppb)	100	100	Runoff from herbicide use.
47. Endrin (ppb)	2	2	Residue of banned insecticide.
48. Epichlorohydrin	0	TT	Discharge from industrial chemical factories; An impurity of some water treatment chemicals.
49. Ethylene dibromide (ppt)	0	50	Discharge from petroleum refineries.
50. Glyphosate (ppb)	700	700	Runoff from herbicide use.
51. Heptachlor (ppt)	0	400	Residue of banned termiticide.
52. Heptachlor epoxide (ppt)	0	200	Breakdown of heptachlor.
53. Hexachlorobenzene (ppb)	0	1	Discharge from metal refineries and agricultural chemical factories.
54. Hexachlorocyclopentadiene (ppb)	50	50	Discharge from chemical factories.
55. Lindane (ppt)	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens.
56. Methoxychlor (ppb)	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.

57. Oxamyl (Vydate) (ppb)	200	200	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes.
58. PCBs (Polychlorinated biphenyls) (ppt)	0	500	Runoff from landfills; Discharge of waste chemicals.
59. Pentachlorophenol (ppb)	0	1	Discharge from wood preserving factories.
60. Picloram (ppb)	500	500	Herbicide runoff.
61. Simazine (ppb)	4	4	Herbicide runoff.
62. Toxaphene (ppb)	0	3	Runoff/leaching from insecticide used on cotton and cattle.
Volatile Organic Compounds			
63. Benzene (ppb)	0	5	Discharge from factories; Leaching from gas storage tanks and landfills.
64. Carbon tetrachloride (ppb)	0	5	Discharge from chemical plants and other industrial activities.
65. Chlorobenzene (ppb)	100	100	Discharge from chemical and agricultural chemical factories.
66. o-Dichlorobenzene (ppb)	600	600	Discharge from industrial chemical factories.
67. p-Dichlorobenzene (ppb)	75	75	Discharge from industrial chemical factories.
68. 1,2-Dichloroethane (ppb)	0	5	Discharge from industrial chemical factories.
69. 1,1-Dichloroethylene (ppb)	7	7	Discharge from industrial chemical factories.
70. cis-1,2-Dichloroethylene (ppb)	70	70	Discharge from industrial chemical factories.
71. trans-1,2-Dichloroethylene (ppb)	100	100	Discharge from industrial chemical factories.
72. Dichloromethane (ppb)	0	5	Discharge from pharmaceutical and chemical factories.
73. 1,2-Dichloropropane (ppb)	0	5	Discharge from industrial chemical factories.
74. Ethylbenzene (ppb)	700	700	Discharge from petroleum refineries.
75. Haloacetic acids (HAA) (ppb)	n/a	60	By-product of drinking water disinfection.
76. Styrene (ppb)	100	100	Discharge from rubber and plastic factories; Leaching from landfills.

77. Tetrachloroethylene (ppb)	0	5	Leaching from PVC pipes; Discharge from factories and dry cleaners.
78. 1,2,4-Trichlorobenzene (ppb)	70	70	Discharge from textile-finishing factories.
79. 1,1,1-Trichloroethane (ppb)	200	200	Discharge from metal degreasing sites and other factories.
80. 1,1,2-Trichloroethane (ppb)	3	5	Discharge from industrial chemical factories.
81. Trichloroethylene (ppb)	0	5	Discharge from metal degreasing sites and other factories.
82. TTHMs (Total trihalomethanes) (ppb)	n/a	80	By-product of drinking water disinfection.
83. Toluene (ppm)	1	1	Discharge from petroleum factories.
84. Vinyl Chloride (ppb)	0	2	Leaching from PVC piping; Discharge from plastics factories.
85. Xylenes (ppm)	10	10	Discharge from petroleum factories; Discharge from chemical factories.