

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 | TT | Naturally present in the environment. |
| 2. <i>E. coli</i> | 0 | Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> . | 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 Ground Water Rule (GWR). | Human and animal fecal waste. |

| | | | |
|---|-----------------------|------------------------|---|
| 4. Total organic carbon (ppm) | n/a | TT | Naturally present in the environment. |
| 5. Turbidity (<i>Cryptosporidium</i>)* (<i>Legionella</i>)* *Federal and state surface water treatment rules require systems using surface water or ground water under the direct influence of surface water to (1) disinfect their water, and (2) filter their water so that these contaminants are controlled. | n/a (0) (0) | TT (TT) (TT) | Soil runoff. (Human and animal fecal waste.) (Found naturally in water; multiplies in heating systems.) |
| 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) | MRDLG=4 | MRDL=4 | Water additive used to control microbes. |
| 18. Chlorine (ppm) | MRDLG=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. |