| **Contaminant** | **Sources to groundwater** | **Potential health and other effects** |
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| **Aluminum** | Naturally occurring in some rocks. | Increased turbidity, discolored water. |
| **Arsenic** | Naturally occurring. Also industrial activities and waste. Pesticides | Liver and kidney damage. A carcinogen. |
| **Barium** | Occurs naturally in some limestone, sandstone, and soils. | Cardiac, gastrointestinal, and neuromuscular effects. |
| **Chloride** | Saltwater intrusion. Industrial and domestic waste. | Deteriorates plumbing and water heaters. Taste can become noticeable. |
| **Copper** | Industrial and domestic waste, mining, and mineral leaching. | Liver and kidney damage. Staining to clothes and fixtures. Essential trace element but toxic to plants and algae at moderate levels. |
| **Cyanide** | Steel processing, plastics, synthetic fabrics, and fertilizer production. | Damage to spleen, brain, and liver. |
| **Fluoride** | Occurs naturally or as an additive to municipal water supplies; widely used in industry. | Decreases incidence of tooth decay but high levels can stain or mottle teeth. Causes crippling bone disorder at very high levels. |
| **Hardness** | Concentration of calcium carbonate. Calcium carbonate is derived from dissolved limestone or from mines. | Decreases the lather formation of soap. Increases scale formation in hot-water heaters. |
| **Lead** | Mining, plumbing, burning gasoline and coal. | Affects red blood cells. Delays physical and mental development in babies and children. Causes deficits in attention span, hearing, and learning in children. Probable carcinogen. |
| **Mercury** | Industrial waste, mining, pesticides, coal and other fossil-fuel combustion. | Damages the kidneys and nervous system. |
| **Nitrite (combined nitrate/nitrite)** | Fertilizer, sewage, human and farm-animal waste. | "Bluebaby disease", which threatens oxygen-carrying ability of the blood. |
| **Sodium** | Leaching of surface and underground deposits of salt. Use of de-icing and washing products. | Can be a health risk factor for those individuals on a low-sodium diet. |
| **Sulfate** | Saltwater intrusion, mineral dissolution, and industrial waste. | Damages boilers and heat exchangers. Affects taste of water. A laxative effect in high doses. |
| **Zinc** | Found naturally in water. Industrial waste and plumbing. | Aids in the healing of wounds. Undesirable taste to water. Toxic to plants at high levels. |
| **Volatile organic compounds** | Used to make plastics, dyes, rubbers, polishes, insecticides, inks, paints, disinfectants, gasoline products, pharmaceuticals, spot removers and many more. | Cancer and liver damage, gastrointestinal disorder, blurred vision, damage to the nervous system, and respiratory tract irritation. |
| **Pesticides** | Herbicides, insecticides, fungicides. | Cause poisoning, headaches, dizziness, numbness, and cancer. Destroys nervous system, thyroid, reproductive system, liver, and kidneys. |

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| **Coliform bacteria** | Occur naturally in the environment from soils and plants and in the intestines of humans and other warm-blooded animals. Domestic sewage, animal waste, or plant or soil material. | Bacteria, viruses, and parasites can cause polio, cholera, dysentery, and infectious hepatitis. |
| **Turbidity** | Caused by the presence of suspended matter such as clay, silt, and fine particles of organic and inorganic matter, and other microscopic organisms. A measure how much light can filter through the water sample. | May not adversely affect health but may cause need for additional treatment. Following rainfall, variations in groundwater turbidity may be an indicator of surface contamination. |
| **Color** | Decaying leaves, plants, organic matter, copper, iron, and manganese. | Suggests that treatment is needed. No health concerns. Aesthetically unpleasing. |
| **pH** | Represented on a scale of 0-14 where 0 is the most acidic, 14 is the most alkaline, and 7 is neutral. | High pH causes a bitter taste; water pipes and water-using appliances become encrusted. Low-pH water will corrode or dissolve metals and other substances. |