Polychlorinated Biphenyls

What are Polychlorinated Biphenyls?

PCBs are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the US by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the US in 1977 because of evidence that they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

Does Polychlorinated Biphenyls have any additional names?

PCBs; Aroclor

What are the known health effects?

Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

How does exposure occur?

Exposure to PCBs may occur in the following ways: Using old fluorescent lighting fixtures and electrical devices and appliances, eating contaminated food, especially fish, breathing air near hazardous waste sites, and drinking contaminated water.

You can reduce your exposure to PCBs in the following ways: Obey advisories that warn about catching and eating contaminated fish and wildlife. Discourage children from playing near old appliances, electrical equipment, transformers, or playing in dirt near hazardous waste sites.

Is this contaminant regulated?

Yes, and water supplied to Mount Laurel MUA customers is in compliance with USEPA and NJDEP requirements. The maximum concentration of Polychlorinated Biphenyls permitted in drinking water is .5 ppb; water supplied by the MLTMUA system has not reported any detections of Polychlorinated Biphenyls.

How can I reduce exposure?

Polychlorinated Biphenyls in drinking water can be removed at point of use by granular activated carbon filtration.

Additional information regarding Polychlorinated Biphenyls, including the information referenced, can be found at:
https://www.epa.gov/pcbs
https://www.atsdr.cdc.gov/toxprofiles/tp17.pdf