How are local governments supporting the Tidal Potomac River PCB TMDL?

Local governments create action plans to document how they intend to meet the PCB TMDL for the Potomac River. Local governments implement action plans through their local Municipal Separate Storm Sewer System (MS4) permits. MS4 permits authorize the discharge of stormwater to waters of the state. Under a MS4 permit, municipalities must work to reduce the amount of pollution entering waterways. Localities use Special Use Permits (SUPs) that require screening for PCBs for new developments. Localities assess municipal properties and stormwater runoff for sources of PCBs. Localities monitor and inspect construction sites for sediment and nutrient control measures aimed to control sediment-laden pollutants, including PCBs.

Resources

U.S. Environmental Protection Agency

www.epa.gov/pcbs

City of Alexandria

www.alexandriava.gov

Fairfax County

www.fairfaxcounty.gov

Icons by Freepik

www.flaticon.com

Virginia Department of Environmental Quality

www.deq.virginia.gov

Virginia Department of Health

www.vdh.virginia.gov

Photos by Will Parson, Chesapeake Bay Program

Division of Planning and Environmental Services

July 2020

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Polychlorinated Biphenyls in Northern Virginia

PCBs

What are PCBs?

Polychlorinated Biphenyls (PCBs) are man-made chlorinated chemicals that are legacy pollutants. The U.S banned the manufacture of PCBs in 1979 after 50 years of production. The ban was due to the toxicity of PCBs. Many industrial and commercial businesses used PCBs in lubricants, coolants, electrical equipment, and hydraulic equipment. PCBs were also used as plasticizers in paints, plastics, and rubbers; and in pigments, dyes, and inks.

Where are PCBs found?

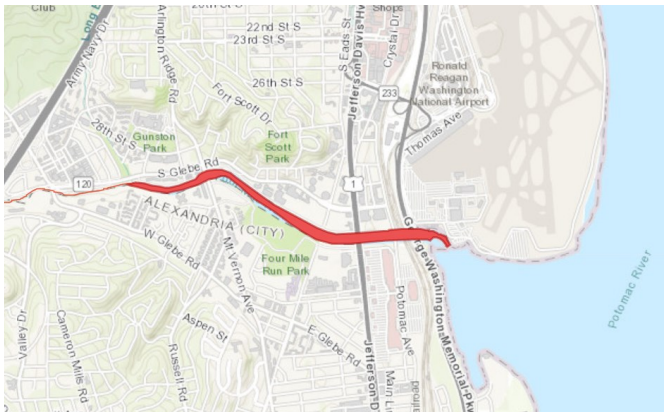
PCBs entered the environment during their manufacture and use prior to 1979 and are still present in both land and water environments. PCBs release into the environment from illegal or improper dumping of PCB waste, poorly maintained hazardous waste sites, or leaks from electrical transformers. Paints, fluorescent light ballasts, pesticides, and inks are everyday products that may contain PCBs.

Why are PCBs an issue?

PCBs do not readily decompose under normal environmental conditions allowing them to remain in air, water, and soil for long periods of time. PCBs settle into the sediment of our waterways and adhere to soils on our land. PCBs remain buried at the bottom of water bodies and bioaccumulate in plants, food crops, or fish. People who ingest PCB exposed fish or food crops risk exposure to PCBs. This is dangerous because PCBs are known to cause cancer and have adverse health effects on the immune, reproductive, neurological, and nervous systems.

How are PCB levels regulated in Northern Virginia?

The Toxic Substances Control Act (TSCA) of 1976 addresses the production, importation, use, and disposal of chemicals, including PCBs. The level of PCB contamination is high enough in Northern Virginia to impair the Potomac River and its tributaries under the Clean Water Act. This requires a Total Maximum Daily Load (TMDL) for PCBs. A TMDL is the maximum amount of pollution that can enter a body of water to meet water quality standards. As a result, parts of the Potomac River have recommended limits on fish consumption to avoid ingesting PCBs.



This map shows an example of a current PCB fish consumption advisory in Four Mile Run from VDH's interactive map.

Find your local fish consumption advisories

www.vdh.virginia.gov/environmental-health/public-health-toxicology/fish-consumption-advisory/