

GLOSSARY OF POLLUTION-RELATED CHEMICALS (4-27-2026)

ARSENIC

A naturally occurring element also used in pesticides and industrial processes. Found in soil and groundwater. Long-term exposure is linked to skin, lung, and bladder cancers.

ASBESTOS

A mineral once used in construction materials and sometimes found in old fill. When disturbed, fibers become airborne and can be inhaled, causing lung disease and cancer.

BENZENE

A colorless, sweet-smelling chemical found in gasoline and industrial waste. It evaporates easily into the air and can contaminate groundwater. Long-term exposure is linked to leukemia and other blood disorders.

BIOACCUMULATION

A process in which chemicals like mercury and PCBs accumulate in fish and shellfish over time. Humans can be exposed to contaminated seafood.

CADMIUM

A metal used in batteries and industrial processes. Found in contaminated soil and water. Long-term exposure can damage the kidneys and bones and is linked to cancer.

CONTAMINATED SEDIMENT

Refers to polluted material at the bottom of creeks, bays, and wetlands. Often contains a mixture of toxins, such as PCBs, metals, and PAHs, that can be stirred up by storms or dredging.

DIOXINS

Highly toxic chemicals are produced during industrial processes and waste burning. They persist in the environment and accumulate in the food chain. Linked to cancer and immune system damage.

GROUNDWATER CONTAMINATION

Occurs when chemicals move underground through soil and rock. Contaminants can travel and potentially enter homes or drinking water supplies.

HEAVY METALS

A group including lead, arsenic, mercury, and cadmium. These do not break down and can remain in soil and sediment for generations, affecting organs and neurological function.

LANDFILL LEACHATE

Liquid formed when rainwater passes through landfill waste, carrying toxic chemicals into surrounding soil, groundwater, and nearby waterways.

LEAD

A toxic metal once widely used in paint, gasoline, and industry. Remains in soil and dust for decades. Particularly harmful to children, affecting brain development and behavior.

MERCURY

A toxic metal that enters waterways and accumulates in fish. Exposure affects the brain and nervous system, especially in children.

METHANE GAS

A colorless, odorless gas produced as waste decomposes in landfills. It can move underground and accumulate in enclosed spaces, posing an explosion risk.

PAHs (POLYCYCLIC AROMATIC HYDROCARBONS)

Chemicals are formed from burning oil, gas, coal, or garbage. Found in industrial areas and contaminated soils. Some are known carcinogens.

PCBs (POLYCHLORINATED BIPHENYLS)

Man-made chemicals were once used in electrical equipment. They persist in the environment and accumulate in fish. Linked to cancer and immune system effects.

PETROLEUM HYDROCARBONS

Compounds found in gasoline, diesel, and oil. Can contaminate soil and groundwater and release vapors that affect the nervous system and organs.

VAPOR INTRUSION

Occurs when chemicals from contaminated soil or groundwater volatilize and enter buildings through cracks in foundations.

VINYL CHLORIDE

A gas used to make plastic (PVC). Can move through soil and groundwater into indoor air. Known to cause liver cancer.

VOCs (VOLATILE ORGANIC COMPOUNDS)

A large group of chemicals that easily evaporate into the air. Found in fuels and industrial solvents. Exposure can range from irritation and dizziness to cancer.