



COMMON BROWNFIELD SITE CONTAMINANTS

Brownfield sites are properties that were previously used for industrial, commercial, or other activities and may have leftover contamination.



HOW TO IDENTIFY

Contaminants are identified through Environmental Site Assessments that pair historical site research with targeted sampling of soil, groundwater, vapors, and/or building materials.

Knowing the types of contaminants present at a brownfield site helps determine the appropriate cleanup approach, whether that involves engineered controls, removal of contaminated material, or ongoing monitoring. It also informs the design and implementation of safety measures such as vapor intrusion mitigation, soil capping, and other protective strategies. Ultimately, understanding site contamination ensures that the property can be safely redeveloped for housing, offices, or commercial use.

Listed are some common contaminants found on brownfield sites:

VOLATILE ORGANIC COMPOUNDS (VOCs)

Easily evaporate into the air; can enter buildings as vapors. **Trichloroethylene (TCE), Tetrachloroethylene (PCE / Perc), Benzene.** Found at former factories, dry cleaners, gas stations, and fuel storage sites.

PETROLEUM HYDROCARBONS

Products like **gasoline, diesel, and oil from leaks or spills.** Often associated with gas stations, refineries, or vehicle maintenance shops. It can contaminate soil and groundwater.

ASBESTOS

Found in old **insulation, flooring, roofing, and building materials.** Can release fibers if disturbed, which may cause lung disease or cancer.

LEAD-BASED PAINT

Present in buildings constructed before ~1978. It can be **hazardous if paint chips or dust** are ingested or inhaled during renovation or demolition.

HEAVY METALS

Metals that can remain in soil for decades. Examples: **lead, arsenic, cadmium, mercury.** Common at former industrial sites, smelters, battery plants, and painted structures.

HISTORIC FILL

Coal ash, cinders, and industrial debris used as fill contain PAHs like benzo(a)pyrene. These contaminants are widespread in urban areas and often managed through soil capping or containment.

POLYCHLORINATED BIPHENYLS (PCBS)

Oils used in electrical equipment and some building materials can contaminate soils around industrial or utility sites. PCBs are highly persistent and tightly regulated, often requiring specialized cleanup.