

Appendix A: Types of Contaminants

The eight specific types of contaminants pertinent to the Property Profile Form are defined below. To the extent available, the Chemical Abstract Services (CAS) numbers are also provided. Please consult with your EPA Regional Representative if you need additional assistance in classifying the contaminants at your targeted properties.

- **Petroleum/Petroleum Products** (CAS Number: 8002-05-9) Petroleum is defined under CERCLA as "crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)" (40 USC Section 9601).

Please note that the Brownfields Law restricts eligibility for EPA brownfields funding to petroleum contaminated properties that EPA or the state determines: (1) are of "relatively low risk" compared with other "petroleum-only" properties in the state; and (2) for which there is no viable responsible party and will be assessed, investigated, or cleaned up by a person that is not potentially liable for cleaning up the property. In addition, petroleum-contaminated properties must not be subject to a corrective action order under a Resource Conservation and Recovery Act (RCRA) Section 9003(h) order.

- **Controlled Substances** (CAS Number: None) The Brownfields Law refers to Section 102 of the Controlled Substances Act (21 USC Section 802) to define a "controlled substance" as "a drug or other substance, or immediate precursor, included in schedule I, II, III, IV, or V of part B of this title (21 USC Section 812). The term does not include distilled spirits, wine, malt beverages, or tobacco as those terms are defined or used in subtitle E of the Internal Revenue Code of 1954 (26 USC Section 5001 et seq.)."

Please note that properties eligible for brownfields funding include real property, including residential property, which is contaminated by a controlled substance. For example, properties eligible for brownfields funding may include private residences, formerly used for the manufacture and/or distribution of methamphetamines or other illegal drugs where there is a presence or potential presence of controlled substances or pollutants, contaminants, or hazardous substances (e.g., red phosphorous, kerosene, acids).

- **Asbestos** (CAS Number: 1332-21-4) EPA's Substance Registry System defines asbestos as "a grayish, noncombustible fibrous material. It consists primarily of impure magnesium silicate minerals." The Agency for Toxic Substances and Disease Registry further defines asbestos as "a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment."

- **PCBs** (CAS Number: 1336-36-3) The regulations issued under the Toxic Substances Control Act (TSCA, 15 USC 2601 et seq.), 40 CFR Section 461.3, define polychlorinated biphenyls (PCB) and PCBs as "any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance."

Please note that the Brownfields Law excludes from funding eligibility portions of facilities where there has been a release of PCBs that are subject to remediation under the Toxic Substances Control Act (TSCA).

- **VOCs** (CAS Number: None) Organic compounds are chemicals composed of carbon. Volatile organic compounds (VOCs) produce vapors readily. At room temperature and normal atmospheric pressure, vapors escape easily from volatile liquid chemicals. Volatile organic compounds include a variety of chemicals such as gasoline, benzene, toluene, xylene, formaldehyde, tetrachloroethylene, and perchloroethylene.
 - **Lead** (CAS Number: 7439-92-1) The Agency for Toxic Substances and Disease Registry defines lead as “a naturally occurring bluish-gray metal found in small amounts in the earth’s crust.”
 - **Other Metals** (CAS Number: None) A metal is an element characterized by a tendency to give up electrons and by good thermal and electrical conductivity. These chemical elements cannot be broken down by any chemical or biological process and includes elements such as arsenic, mercury, cadmium, and chromium.
 - **PAHs** (CAS Number: 1340489-29-2) The Agency for Toxic Substances and Disease Registry defines polycyclic aromatic hydrocarbons (PAHs) as “a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.”
- EPA Form