

## EPA’s “Dirty Dozen” Persistent

### Bio-Accumulative pollutants

Pollutant (PBT)	Source of Pollutant
Aldrin/dieldrin--Insecticide	From the 1950s until 1970, aldrin and dieldrin were widely used pesticides for crops like corn and cotton. Because of concerns about damage to the environment and potentially to human health, EPA banned all uses of aldrin and dieldrin in 1974, except to control termites. In 1987, EPA banned all uses. <sup>1</sup>
Benzo(a)pyrene – Aromatic Hydrocarbons	Inhaling fumes from working with coal tar and asphalt
Chlordane – Insecticide	From 1983 until 1988, chlordane's only approved use was to control termites in homes. Prior to 1978, chlordane was also used as a pesticide on agricultural crops, lawns, and gardens and as a fumigating agent. Because of concerns over cancer risk, evidence of human exposure and build up in body fat, persistence in the environment, and danger to wildlife, the EPA canceled the use of chlordane on food crops and phased out other above-ground uses over the next 5 years. <sup>1</sup>
DDT – Insecticide	DDT, DDE, and DDD in air are rapidly broken down by sunlight. Half of what is in air breaks down within 2 days. DDT, DDE, and DDD adhere strongly to soil; most DDT in soil is broken down slowly to DDE and DDD by microorganisms; half the DDT in soil will break down in 2-15 years, depending on the type of soil. Its use in the U.S. was banned in 1972 because of damage to wildlife. <sup>1</sup>
Hexachlorobenzene – Insecticide/Fumigant	Hexachlorobenzene was widely used as a pesticide to protect the seeds of onions and sorghum, wheat, and other grains against

<sup>1</sup> <http://www.atsdr.cdc.gov/>

	fungus until 1965. Currently, there are no commercial uses of hexachlorobenzene in the United States. <sup>1</sup>
Alkyl-lead – Fuel additive	Lead contaminated soils along heavily trafficked areas
Mercury and Compounds – Toxic Metal	Old paint, mining (especially gold mining)
Mirex (Dechlorane)--Insecticide	Mirex has not been manufactured or used in the United States since 1978. Mirex was used to control fire ants, and as a flame retardant (Dechlorane) in plastics, rubber, paint, paper, and electrical goods from 1959 to 1972. <sup>1</sup>
Octachlorostyrene-- Electrolytic production of magnesium from magnesium chloride	NA
Polychlorinated biphenyls (PCBs)-- coolants and lubricants.	maintained hazardous waste sites containing PCBs
Toxaphene – Insecticide	Long-range transport through the air, falling into the lakes through rain, snow, etc.
Dioxins and Furans--trace level unintentional byproducts of most forms of combustion and several industrial chemical processes	Introduced to the environment through the air as trace products of combustion. The principal route by which dioxins are introduced to most rivers, streams and lakes is soil erosion and storm water runoff from urban areas.

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<sup>1</sup> <http://www.atsdr.cdc.gov/>