Candidate POPs

Candidate Byproducts :

Brominated dioxins and bromo-chloro-dioxins – formed through combustion of brominated products and chemicals; suspected carcinogens and endocrine disruptors

Polycyclic Aromatic Hydrocarbons (PAHs) - formed during incomplete combustion of organic material. Also used in dyes, plastics and pesticides; persistence, bioaccumulates in aquatic organisms; five PAHs probable or possible human carcinogens (included in LRTAP, OSPAR)

Octachlorostyrene – formed during electrolytic production of magnesium when graphite anodes used; persistent, bioacculumates, toxic to aquatic life, suspected endocrine disruptor

Organometals – e.g., organotins, methyl mercury – industrial uses and biocides; very persistent, neurotoxins, developmental effects, linked with cancer (included in LRTAP, OSPAR)

Candidate Pesticides :

Lindane/ hexachlorocyclohexane – an insecticide for the treatment of seeds, lice and scabies; persistent, long-range transport in the atmosphere; endocrine disruptor and linked to cancer (included in LRTAP, OSPAR)

Endosulfan – an insecticide and acaricide (kills mites), moderately persistent, toxic to birds and very toxic to aquatic life, potential for endocrine disruption

Dicofol – an acaricide, structurally similar to DDT; persistent in food and water, highly toxic to aquatic life, causes egg-shell thinning in some bird species

Chlordecone – an insecticide, fungicide and degradation product of the POPs insecticide Mirex; persistent, affects nervous system, skin, kidney, liver, and reproductive system, causes tumours in liver, adrenal gland, and kidneys in laboratory test animals (included in LRTAP)

For more information :

- IPEN Keep the Promise Campaign 2005 and IPEN PBDE Fact Sheet, http://www.ipen.org
- Proposal to add a new substance (PentaDBE) to the Stockholm Convention on POPs; 28th January 2005 from the Government of Norway to the Secretariat of the Stockholm Convention http://www.pops.int/documents/meetings/cop_1/chemlisting/

A LIVING DOCUMENT- ADDING NEW POPS TO THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS

Community Monitoring Working Group

International POPs Elimination Network
www.ipen.org

Contact:
Community Monitoring Working Group:
www.oztoxics.org/cmwg/

ADDING NEW POPS TO THE STOCKHOLM CONVENTION

The Stockholm Convention on Persistent Organic Pollutants (POPs) does more than address the 'dirty dozen'. It recognizes the need to take global action on all chemicals with POP-like characteristics; those that are persistent in the environment; travel long distances via air and water; that are toxic; and bioaccumulate in living things. These chemicals pose an unacceptable threat to human health and the environment. The Stockholm Convention establishes a science-based process for identifying candidate POPs.

The process applies the precautionary approach by recognizing that there does not have to be absolute proof that a chemical is doing harm before action on it is taken. The Stockholm Convention establishes the rules for identifying and listing additional POPs.

The ***Persistent Organic Pollutants Review Committee (POPRC)*** will review nominations for new POPs. If the committee agrees that a nominated chemical shows POP-like characteristics, the POPRC may recommend that it should be added to the Convention.

The ***Conference of the Parties*** (all the countries that have ratified the Convention) make the final decision on whether to list a chemical as a POP.

There are many chemicals with POP-like characteristics which need priority consideration. Some are already scheduled for elimination through countries' national action or regional treaties like the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP) on POPs and the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). Once added to the Stockholm Convention, their production and use can be eliminated in many more countries.

Norway has nominated PentaBDE for consideration at the first meeting of the parties (COP1) in May

Candidate POPs in Consumer Products

Polybrominated diphenylethers (PBDEs)
Three commercial formulations of PBDEs (penta, octa, decaBDEs) are used as flame retardants in plastics for TVs and computers, in carpets, car interiors and polyurethane foams for furniture and bedding. PBDEs are persistent, mobile in the environment, bioaccumulate, disrupt thyroid hormones and are linked with cancer and reproductive damage.

Perfluorooctane Sulfonate (PFOS)
Perfluorooctanoic Acid (PFOA)
These perfluorochemicals are used as soil/stain resistance treatments for fabrics/paper, in coatings for metal surfaces including non-stick cookware and in electronics components and fire fighting foams. They are very persistent, bioaccumulate, have developmental and reproductive effects and are linked with cancer.

Candidate Industrial Chemicals

Short-Chained Chlorinated Paraffins (SCCPs) **–** used as lubricants, surface coatings, rubber / leather finishing; persistent, mobile, bioaccumulates, highly toxic to aquatic invertebrates and algae, toxic to liver, kidney and thyroid, inhibits intercellular communication.

Polychlorinated Napthalenes – uses include cable insulation, wood preservative, engine oil additive, capacitor fluids, dye intermediate, flame retardant; similar chemical and physical properties as PCBs, e.g., induce dioxin-like responses in fish and mammals

Hexabromobiphenyl (HxBB) – used as a fire retardant in thermoplastics for industrial and electrical products; persistent, endocrine disruptor and linked to cancer (included in LRTAP)

Hexachlorobutadiene – used as a solvent and heat transfer fluid; persistent, causes kidney and liver damage, developmental effects, carcinogen

Pentachlorobenzene – used as a fire retardant and to make fungicides, high potential for PCB generation; can affect the central nervous system, liver and kidneys, linked to toxic effects on human reproduction