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UNEP/POPS/POPRC.4/15/Add.5

Distr.: General
30 October 2008



**Stockholm Convention
on Persistent Organic
Pollutants**

Original: English

Persistent Organic Pollutants Review Committee
Fourth meeting
Geneva, 13–17 October 2008

**Report of the Persistent Organic Pollutants Review Committee
on the work of its fourth meeting**

Addendum

Addendum to the risk profile for pentachlorobenzene

At its third meeting, the Persistent Organic Pollutants Review Committee, by decision POPRC-3/7, adopted the risk profile for pentachlorobenzene (UNEP/POPS/POPRC.3/20/Add.7). An addendum to that risk profile was adopted at its fourth meeting. The text of the addendum is set out below. It has not been formally edited.

Addendum to the risk profile for pentachlorobenzene

Summary of information on unintentional release of pentachlorobenzene submitted during the intersessional period between the third and fourth meetings of the Committee

1. Information on unintentional release (e.g., during combustion processes):

- **Canada:** Pentachlorobenzene may be generated when organic compounds are burned or exposed to a large source of energy in the presence of a chlorine source, e.g., PeCB may be formed and released to the environment as a result of waste incineration and barrel burning of household waste. Details in additional documents.
- **United States of America:** Pentachlorobenzene may also be produced whenever organic compounds are burned in the presence of a chlorine source. (EPA, 1999. Economic Analysis of the Final Rule to Modify Reporting of Persistent Bioaccumulative Toxic Chemicals Under EPCRA Section 313, available at <http://www.epa.gov/tri/lawsandregs/pbt/eapbtfhl.pdf>). For 2005, a total of 1,545 lb. (701 kg) was reported to the Toxics Release Inventory for on-and off-site disposal or other releases, 248 lb. (112 kg) of which was released to air or water (TRI, 2005, data for all U.S. pentachlorobenzene industries, data release June 8, 2007). Additional data is available at www.epa.gov/triexplorer.
- **World Chlorine Council:** PCBs are still in use in some old electrical equipment in North America and Europe so that there is a small potential for release of PeCB from this source. The primary source of potential releases is by-product emissions associated with incomplete combustion with global emissions clearly dominated by combustion of biomass, combustion of solid waste and combustion of coal. Industrial sources of unintentional by-products are relatively minor due to improvements in industrial practices. Emissions of PeCB have declined dramatically.

2. Traces of pentachlorobenzene as impurity in other chemicals:

- **Canada:** The principal current commercial use of pentachlorobenzene is as a chemical intermediate in the formation of pentachloronitrobenzene (also known as quintozone), a fungicide. Pentachlorobenzene is present as an impurity in this fungicide. Pentachloronitrobenzene is currently used, but not produced, in Canada. Pentachlorobenzene can also be found as an impurity in several herbicides, pesticides and fungicides currently in use in Canada. Details in additional documents.
- **Netherlands:** PeCB is found as an impurity in quintozone
- **United States of America:** PeCB is an intermediate in the production of the fungicide pentachloronitrobenzene (quintozone). It may be produced as a by-product or impurity during the production of other chlorinated organic compounds.
- **International POPs Elimination Network:** PeCB is an impurity in pentachloronitrobenzene (quintozone), endosulfan, chlorpyrifos-methyl, atrazine, and clopyrilid.
- **World Chlorine Council:** PeCB was used in the past as an intermediate in the manufacture of pentachloronitrobenzene (quintozone) (van de Plassche et al. 2001). However, quintozone is now made by chlorination of nitrobenzene (Feiler 2001).