



Distr.: General
29 August 2007

Original: English



**United Nations
Environment
Programme**

**Stockholm Convention on Persistent Organic Pollutants
Persistent Organic Pollutants Review Committee
Third meeting**

Geneva, 19–23 November 2007

Item 4 (a) of the provisional agenda *

Operational issues: naming of commercial products and mixtures

**Naming of commercial products and mixtures for the purpose of
listing substances under Annexes A, B or C of the Convention**

Note by the Secretariat

1. At its second meeting, the Persistent Organic Pollutants Review Committee discussed how best to name commercial products such as commercial octabromodiphenyl ether and commercial pentabromodiphenyl ether, both of which contain mixtures of isomers and other substances. This issue is considered to be important because of the need for clarity when identifying any critical substance or substances in a mixture of substances for listing under Annexes A, B and/or C of the Stockholm Convention. The matter was also raised by several representatives at the third meeting of the Conference of the Parties and the Conference concluded that further consideration should be given to "...how such... commercial mixtures and isomers should be dealt with under the Convention" (UNEP/POPS/COP.3/30).

2. In the wake of the Committee's second meeting and at the request of its Chair, the Secretariat has consulted with experts and offers the following thoughts on commercial pentabromodiphenyl ether for consideration by the Committee:

(a) Most commercial products are mixtures of substances, the composition of which are determined by the production process and conditions. As processes and conditions can vary, so the composition of the commercial product may vary. Since the value of the commercial product is in its key ingredients which offer the properties desired by the end user, quantitative or qualitative variations of the key ingredients is usually small, and variations in some of the less important ingredients may be of little consequence if they do not have persistent organic pollutant-like characteristics;

* UNEP/POPS/POPRC.3/1/Rev.1.

(b) One approach for naming mixtures and products for the purpose of listing under the Convention is to simply name the commercial mixture, e.g., C-Pentabromodiphenyl ether, as was done at the second meeting of the Committee. As stated in the risk profile adopted in November 2006, "PentaBDE refers to mixtures of bromodiphenyl ether congeners in which the main components are 2,2',4,4'- tetrabromo-diphenyl ether (BDE-47 CAS No. 40088-47-9) and 2,2',4,4',5-pentabromo-diphenyl ether (BDE-99 CAS No. 32534-81-9) which have the highest concentration by weight with respect to other components of the mixture." This approach allows the name of the substance to cover mixtures with a range of compositions. This description includes both the tetrabromodiphenyl ether BDE-47 and the pentabromodiphenyl ether BDE-99 even though they were not nominated separately. Naming the commercial mixture or product in this way means that users and regulators do not need to know the precise composition of the mixture. This approach would not address commercial mixtures which contained only one of BDE-99 or BDE-47;

(c) A second approach would be to name a specific substance in the mixture and/or all its isomers with the same degree of substitution. For example, for commercial pentaBDE, one could name BDE-99 and other penta-substituted BDEs or a particular concentration of BDE-99 in a mixture or mixtures containing pentabromodiphenyl ethers. Specifying a concentration could exempt mixtures containing only small amounts of unintentionally-produced BDE-99. This approach might capture most commercial mixtures of pentaBDE; it would not, however, specifically capture BDE-47 or other non-penta substituted congeners which may have persistent organic pollutant-like characteristics and be formulated into products on their own without pentaBDE;

(d) A third approach would be to name specific components of concern in a mixture or all components with a specified degree of substitution. Using commercial pentabromodiphenyl ether as an example, one could name all isomers of both penta- and tetrabromodiphenyl ether or all polybrominated diphenyl ethers with four or five bromines. This approach would capture mixtures containing BDE-99 and/or BDE-47;

(e) A fourth approach, slightly more comprehensive than that set out in (d) above, might be to name all the chemicals in a class within a specified substitution range. For example, one could name for the purpose of listing under the Convention, all polybrominated diphenyl ethers with a bromine substitution of between 3 and 9. This approach would capture commercial mixtures containing BDE-99 and BDE-47 while exempting the mono-, di- and decaBDE compounds which may not have persistent organic pollutant-like activity.

Possible action by the Committee

3. The Committee may wish:

(a) To consider the information provided in the present note;

(b) To develop and agree upon a generic approach for naming commercial mixtures and products for the purpose of listing mixtures and products under Annexes to the Convention.