Press Release No. 50/2008

Press Relations Officer: Martin Ittershagen **PR-staff:** Anke Döpke, Dieter Leutert,

Fotini Mavromati, Theresa Pfeifer, Martin Stallmann **Address:** Postfach 1406, 06813 Dessau-Roβlau

Telephone: +49 340/21 03-2122, -2827, -2250, -2318, -3927, -2507

E-Mail: pressestelle@uba.de

Internet: www.umweltbundesamt.de



Ban on DecaBDE flame retardant in electronic and electrical equipment in effect on 1 July 2008

Federal Environment Agency calls for similar move for textiles

Electronic and electrical equipment that is marketed in Europe may no longer contain the flame retardant Decabromodiphenyl ether (DecaBDE) after 1 July 2008. This regulation applies regardless of the origin of the product and all its components. The President of the Federal Environment Agency, Prof. Dr. Andreas Troge, said, "This finally puts an end to the presence of the highly problematic substance DecaBDE in new electronic and electrical devices. The textile industry should also forego use of DecaBDE when fire-proofing drapes, blinds, and upholstery. There are more environmentally friendly alternatives available." These include fibres with integrated phosphorous-based flame retardants or highly inflammable synthetics such as polyramides, or fibreglass. The flammability of textiles and furniture can be drastically reduced through use of different weaving techniques or denser upholstery foam. In such cases the use of a flame retardant would become unnecessary.

DecaBDE is very persistent in the environment and is bio-accumulative. It can therefore be traced among foxes, birds of prey and polar bears in the polar regions as well as other animals at the end of the food chain. DecaBDE has also been traced in breast milk. Although it is not immediately toxic, it is suspected to have a long-term adverse impact on embryonic development (developmental neurotoxicity) and on account of its persistence, to be classified as one of the more toxic compounds penta and octabromodiphenyl ether (PentaBDE, OctaBDE), which have already been banned entirely. UBA believes its properties to be so problematic on the whole that it assesses DecaBDE as a persistent, bio-accumulative and toxic substance— a so-called PBT substance— and has long called for a ban on its use in electronics and electrical devices.

More suitable environmentally friendly alternatives to DecaBDE include certain halogen-free, organophosphorous or nitrogenous flame retardants such as magnesium hydroxide. Many producers of electronics and electrical devices therefore already shun the use of brominated

flame retardants entirely in favour of these alternative substances. "When less harmful substances exist in problematic chemical applications, manufacturers should make a quick switch to this alternative", said UBA President Troge. "It will otherwise cost far too much time and money until there is conclusive knowledge about the harmfulness of a substance". In the case of DecaBDE, this means that a substitute flame retardant should also be found for the textile industry. To date, fire prevention standards for textiles in Germany only apply in public buildings. Since flame-proof textiles are in widespread use in indoor spaces, and laundering is feasible, for example of flame-proofed drapes, it is essential that harmful substances be avoided in textiles. In so doing, indoor air pollution as well as contamination of wastewater and sewage (and of water and soil as a result) could be avoided in the first place.

The European Union already sought to ban the use of DecaBDE as a flame retardant in electronics and electrical equipment two years ago. Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (known as the RoHS Directive) had provided for this. Before the ban on the use of DecaBDE for this application could even enter into force, the European Commission lifted the ban in Autumn 2005, drawing objections from the EU Parliament and Denmark. The European Court of Justice (ECJ) has now ruled in their favour. According to the ECJ, the ban on the use of substances in electronics and electrical equipment covered by the RoHS Directive may only be lifted if no viable technical alternative exists or would otherwise have an even more harmful impact on the environment and health than the substance whose use is banned. As alternatives do exist, the ban on the use of DecaBDE in new electrical and electronic equipment will now again become effective on 1 July 2008.

Further information on Decabromodiphenyl ether in electronics and electrical equipment can be found at

http://www.umweltbundesamt.de/produkte/flammschutzmittel/decabromdiphenylether.htm.

A background paper titled *Bromierte Flammschutzmittel - Schutzengel mit schlechten*Eigenschaften? [Brominated flame retardants - guardian angel with a bad streak?] is available at http://www.umweltbundesamt.de/uba-info-presse/hintergrund/flammschutzmittel.pdf.

Dessau, 30 June 2008