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New available information for HBCDD

Dear Sir or Madam

On 19 June 2008, Norway nominated the flame retardant HBCDD as a possible Persistent Organic Pollutant (POP) under the UNEP Stockholm Convention on Persistent Organic Pollutants. The dossier submitted was a Nordic report showing that the substance was of global concern. At the meeting in 2008, the examination of the proposal was decided to be postponed to 2009. The initial assessment of the POP properties, according to the screening criteria set out in Annex D of the Convention, will start at the next meeting, POPRC 5 in October 2009.

After the nomination of HBCDD, new reports and scientific articles concerning the properties of HBCDD, as well as production and emissions data supporting the conclusions in the Nordic report have been published. This new information is useful for the examination of the nominated HBCDD.

New available reports and international evaluations of HBCDD
HBCDD was identified as a Substance of Very High Concern (SVHC) meeting the criteria of a PBT substance pursuant to Article 57(d) in The REACH regulation and was therefore included in the candidate list for authorisation following The European Chemicals Agency (ECHA) decision ED/67/2008 on 28 October 2008. Moreover ECHA recommended HBCDD for inclusion in Annex XIV in REACH based on its hazardous properties, the volumes used and the likelihood of exposure to humans or the environment. The recent published reports by ECHA evaluate the intrinsic properties of HBCDD and risks related to the production and use of the substance:

- Member state committee support document for identification of Hexabromocyclododecane and all major diastereisomers identified as a substance of very high concern. Adopted on 8 October 2008 (see link for support document for HBCDD on ECHAs website for candidate list: **http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp**
- Background document for hexabromocyclododecane and all major diastereisomers identified (HBCDD) (See link for background document for HBCDD on ECHAs website for Annex XIV Recommendations: **http://echa.europa.eu/chem_data/authorisation_process/annex_xiv_rec/subst_spec_docs_en.asp**)
- Data on manufacture, import, export, uses and releases of HBCDD as well as information on potential alternatives to its use. (See link for technical report for HBCDD on ECHAs website for Annex XIV Recommendations: **http://echa.europa.eu/chem_data/authorisation_process/annex_xiv_rec/subst_spec_docs_en.asp**

Recent reports from the Arctic Monitoring and Assessment Programme (AMAP) highlights HBCDD as a substance of concern in the Arctic region based on its long range transport, persistence, toxicity for the aquatic life, birds and mammals, bioaccumulation in biota and humans, and increasing levels and trends in humans, biota and environment. The reports are based on the scientific work done under the programme:

- AMAP 2009 Assessment of Arctic Pollution Status (see link on AMAP website: **http://amap.no/documents/index.cfm?action=getfile&dirsub=&filename=Human%5Fhealth-near%5Ffinal7.pdf&sort=default**)

- AMAP Assessment 2009: Human Health in the Arctic (see link on AMAP website: (**http://amap.no/documents/index.cfm?action=getfile&dirsub=&filename=Human%5Fhealth-near%5Ffinal7.pdf&sort=default**)

In the European Monitoring and Evaluation Programme (EMEP) report on long-range transport and persistence of HBCDD an evaluation based on Meteorological synthesizing centre-east (MSC-E) POPs multicompartment hemispheric transport model is done. Detailed information on the structure of the model and parameterisation of the media processes can be found on the Internet (**http://www.msceast.org**). According to the report HBCDD fulfils the criteria for long-range transport and persistency and is comparable to known POPs:

- EMEP contribution to the preparatory work for the review of the CLRTAP protocol on persistent organic pollutants. New substances: Model assessment of potential for long-range transboundary atmospheric transport and persistence of Hexabromocyclododecane (HBCDD). Information note 4/2009. MSC-E. **http://www.msceast.org/modelling.html**

New available information in the scientific literature
The environmental focus on HBCDD is increasing and the amount of articles in the scientific literature, as well. New findings on the toxicity, persistency and levels in the environment recently published support the conclusions in the above mentioned reports.

The reasons for concern
The available information supports the conclusions in the Nordic report and demonstrates that HBCDDs fulfils the screening criteria, are produced in large volumes and that the production is increasing as well as the levels in the environment.

HBCDD is considered to be toxic for the aquatic environment, and new findings support the toxic potential in mammals and birds. HBCDD has been found to have a widespread occurrence in the environment. Levels have been found in different environmental compartments and accumulate and biomagnifies in the food webs. HBCDDs persistence in the environment is further supported by time trends and levels in sediments (Tanabe 2008)[1] as well as modelling studies on persistency in water recently reported. There are findings of increasing levels in humans and in remote regions.

The increasing levels in the environment and the large quantities of HBCDD that are produced globally are of great concern. Production has increased with the phasing-out of the penta- and octaBDEs, and there are currently no limitations on production or use of HBCDD. Large part of the emissions is diffuse and not controlled. Norway therefore believes it is important with international actions to avoid large scale pollution and high costs in the future.

Yours sincerely

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Liselott Säll
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Enclosure: An article by Shinsuke Tanabe (referred to in the letter)

[1] Tanabe, Shinsuke. Temporal trends of brominated flame retardants in coastal waters of Japan and South China: Retrospective monitoring study using archived samples from es-Bank, Ehime University, Japan. Center for Marine Environmental Studies (CMES), Ehime University, Japan. **Marine Pollution Bulletin**, **Volume 57, Issues 6-12**, 2008, Pages 267-274. 5th International Conference on Marine Pollution and Ecotoxicology