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02/14/2006 07:57 PM

To NCIC OPPT@EPA

cc "Thomson, Kirk J" <kirk.j.thomson@boeing.com>,
"Ferguson, Edward L" <Edward.L.Ferguson@boeing.com>

bcc

Subject Comments on POP

Dear Sir:

Please accept the attached comment from the Boeing Company on the docket
EPA-HQ-OPPT-2005-0555
Review of Chemical Proposals for
Addition under the Stockholm
Convention on Persistent Organic
Pollutants; Solicitation of Information
for the Development of Risk Profiles

<<POPcomments.doc>>

Thanks,

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The Environmental Protection Agency
Docket ID No. EPA-HQ-OPPT-2005-0555,
Document Control Office (7407M),
Office of Pollution Prevention and Toxics (OPPT), Environmental Protection
Agency,
1200 Pennsylvania Ave., NW.,
Washington, DC 20460-0001.

Re: Review of Chemical Proposals for Addition under the Stockholm Convention on Persistent Organic Pollutants (POP); Solicitation of Information for the Development of Risk Profiles; 71 Fed Reg. 4913 (Jan. 30, 2006).

Dear Sir or Madam:

The Boeing Company is a major aircraft and military equipment manufacture with direct employment of 156,636 people in 26 states. We have an extensive national and international supplier and vendor base that may be affected by the proposed POP restrictions on two of the chemicals identified in the Federal Register notice. Our commercial aircraft operate under the stringent safety rules imposed by the Federal Aviation Administration or the FAA's overseas counterparts. As such the selection and qualification of materials for use in commercial aircraft is a lengthy and difficult process- with the target of ensuring maximum passenger safety. The military specification requirements impose a similar, although in many instances more stringent, set of criteria for equipment used by our country's war-fighters.

Two of the three chemicals identified in the notice, PBDE and PFOS are used in qualified applications in our products. PFOS is a critical component of the hydraulic fluid "Skydrol" which is the basic operational fluid in an aircrafts flight control, landing and braking systems. PBDE's is a flame retardant that is used in epoxy resins used in the maintenance and repair of aircraft.

1) PFOS are used in photolithography, industrial photographic coatings, mist suppressants for chrome plating, hydraulic fluids for aviation (an anti-erosion agent in phosphate ester fluids), and in controlled closed systems. Boeing requests an exemption for PFOS used in hydraulic fluids and closed systems for all aircraft and aerospace products and related support equipment. This request is consistent with reported position of the European Union (EU) on PFOS. (See 2/5/05 draft EU Directive (amending 76/769/EEC) that would exempt PFOS used in aerospace hydraulic fluids and closed systems from the POPs restrictions.) The exemption would promote commercial aviation safety and improved military aerospace product survivability. Negligible harm would occur to health of the environment as the usage volumes are relatively small and essentially closed. Maintenance and repairs on aircraft hydraulic systems are normally conducted at

FAA certified (or overseas equivalent) facilities qualified to handle such wastes and protect employees from exposure.

2) Pentabromodiphenyl ether (PBDE) (CAS No. 32534-81-9) is a flame retardant used historically in multiple applications in Boeing commercial and military aircraft, including epoxy resins. Boeing has ceased using Penta-BDE since it was banned in the EU for its commercial aircraft. There however, may be some military use of Penta-BDE . Penta-BDE continues to be used in epoxy fillers used to repair many previously produced aircraft; particularly military products. The usage quantity is very small -- mainly small repair kits of several ounces in size. Replacement epoxy resin repair kits are being developed for qualification at this time. As noted above this is a lengthy process, stretching into five years for some materials. Boeing therefore requests that EPA seek a seven year exemption on the use of Penta-bde containing repair and maintenance materials where no qualified substitute exists. This exemption will provide adequate time to identify, qualify and manufacture replacement FAA and military specification compliant repair kits for use in aircraft.

If you have any questions, please do not hesitate to contact Edward L. Ferguson at 703 465-3604.

Sincerely,

Kirk Thomson
Director, Environmental Affairs
The Boeing Company