



Andrew N. Liveris
President, Chairman and Chief Executive Officer
The Dow Chemical Company
2030 Dow Center
Midland, MI 48674

6 December 2012

Dear Mr. Liveris,

As a leading industry voice for steady progress toward sustainable chemistry, we respectfully request that you act in response to a new peer-reviewed scientific study.

In the report published last week in *Environmental Science & Technology*, Stapleton et al. determined that 85% of residential couch cushions sampled in the U.S. contained flame retardant chemicals of concern, which are released into American homes during normal use and expose children to potential harm. The most frequently detected chemical flame retardant was tris(1,3-dichloro-2-propyl) phosphate, commonly known as TDCPP or chlorinated tris, which was measured in more than 40% of all couch cushion samples.¹ In a related report in the same journal, 45 flame retardant chemicals were measured in household dust; TDCPP was present in 100% of the homes sampled.²

Scientific evidence continues to mount about the hazards, exposures and risks of TDCPP. Last year, the State of California determined that TDCPP was known to cause cancer.³ In 2005, the U.S. Environmental Protection Agency characterized TDCPP as a "moderate hazard concern" for cancer, reproductive harm, developmental toxicity, systemic toxicity, and genotoxicity in humans; and ecotoxicity and environmental persistence.⁴ Americans are alarmed about their family's exposure to toxic flame retardant chemicals in the home, and the health threats posed by these chemicals, to pregnant women and children.

Dow Chemical manufactures all three of the feedstock raw materials used to produce TDCPP, namely chlorine, phosphorus oxychloride, and epichlorohydrin. In fact, Dow is the world's largest producer of both chlorine⁵ and epichlorohydrin⁶.

Therefore, we respectfully request that The Dow Chemical Company commit forthwith to *not* selling chemicals into the TDCPP market or its supply chain, i.e. that you agree not to supply chlorine, phosphorus oxychloride or epichlorohydrin for use to manufacture TDCPP, effective immediately and globally.

We know that you primarily produce these chemicals for other markets, so not supplying the TDCPP market as requested will not substantially affect your business. However, from your powerful position at the base of the supply chain, you would send an important signal to the marketplace that fire safety goals should be met with safer alternatives to the use of TDCPP.

Laudably, your website says that: "As the body of scientific research grows, we are committed to changing, evolving and continuously improving."⁷ Please act now on this new science and demonstrate your leadership for more sustainable chemistry. We look forward to a reply at your earliest convenience.

Sincerely,



Andy Igrejas, National Campaign Director
Safer Chemicals, Healthy Families

Notes:

¹ Stapleton HM, Sharma S, Getzinger G, Ferguson PL, Gabriel M, Webster TF and Blum A (2012). Novel and High Volume Use Flame Retardants in US Couches Reflective of the 2005 PentaBDE Phase Out. *Environmental Science & Technology*. Article ASAP.

<http://pubs.acs.org/doi/pdf/10.1021/es303471d>

² Dodson RE, Perovich LJ, Covaci A, Van den Eede N, Ionas AC, Dirtu AC, Brody JG and Rudel RA (2012). After the PBDE Phase-Out: A Broad Suite of Flame Retardants in Repeat House Dust Samples from California. *Environmental Science & Technology*. Article ASAP.

<http://pubs.acs.org/doi/pdf/10.1021/es303879n>

³ Office of Environmental Health Hazard Assessment (OEHHA), 2011. Evidence on the Carcinogenicity of Tris(1,3-dichloro-2-propyl) phosphate. California Environmental Protection Agency, OEHHA, Reproductive and Cancer Hazard Assessment Branch, July 2011, available at: http://oehha.ca.gov/prop65/hazard_ident/pdf_zip/TDCPP070811.pdf.

⁴ U.S. Environmental Protection Agency. Furniture Flame Retardancy Partnership: Environmental Profiles of Chemical Flame Retardant Alternatives for Low-Density Polyurethane Foam, Volume 1. September 2005. p. 4-2.

<http://www.epa.gov/dfe/pubs/flameret/altrep-v1/altrepv1-f1c.pdf>

⁵ ICIS. U.S. chemical profile: chlorine. March 2011.

<http://www.icis.com/Articles/2011/03/07/9440670/us-chemical-profile-chlorine.html>;

The Dow Chemical Company. "Dow Plans Major Capital Investment to Support Continued Growth in Performance Businesses." Press release. June 28, 2008.

<http://www.dow.com/news/corporate/2008/20080129b.htm>

⁶ The Dow Chemical Company. Product Safety Assessment (PSA): Epichlorohydrin.
<http://www.dow.com/productsafety/finder/epi.htm>. Revised June 18, 2012.

⁷ The Dow Chemical Company. Issues and Challenges. Web site:
<http://www.dow.com/sustainability/issues/>.