Before The

MAINE
JOINT COMMITTEE ON NATURAL RESOURCES

On

LD 1790 BROMINATED FLAME RETARDANTS

Testimony of

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IPC – The Association Connecting Electronics Industries – appreciates the opportunity to submit the following testimony on LD 1790 Brominated Flame Retardants in Consumer Products. IPC, the national trade association for the electronic interconnection industry, **is opposed to SD 1790, *Brominated Flame Retardants in Consumer Product.***

IPC represents more than 2,200 member companies involved in the manufacturing and assembly of printed circuit boards. Printed circuit boards and electronic assemblies are the vital backbone in a variety of electronic devices that include computers, cell phones, pacemakers, automobiles, and sophisticated defense systems.

The majority of circuit boards manufactured today are built on epoxy resin-fiberglass substrate. Tetrabromobisphenol-A (TBBPA), a brominated flame retardant (BFR) that would be banned under this legislation, is the primary flame retardant used in printed circuit boards. TBBPA is chemically bound into the epoxy resin matrix of circuit boards and therefore does not present an environmental or heal hazard because it is not released. Because the very function of circuit boards is to transmit electrical charges, fire retardant is an absolute necessity. Although there are other types of non-brominated chemical flame retardants available, they have a non-beneficial effect on the properties and capabilities of circuit board materials and are significantly more expensive than TBBPA.

IPC's Environmental, Health and Safety Committee has prepared a position paper examining the issues surrounding the use of TBBPA. A copy of the position paper is attached for your reference. The committee concluded that there is no data indicating that the halogen flame retardants presently used in printed circuit boards present any significant environmental or health hazard. Although TBBPA has been used in electronic products for many decades, there have been no reports of illness or death attributable to their use. In contrast, injuries and/or death are known hazards of the fires associated with non-flame retarded electronic equipment. There is also no data indicating that any of the materials currently being considered as replacements for these halogenated flame retardants are any better or worse for the environment. For this reason, there are no legislative restrictions on TBBPA anywhere in the world.

While environmental and health concerns have been raised about certain BFRs, industry has responded to these concerns. Industry ended the use of polybrominated biphenyls (PBB) in 2000. Additionally, Industry has announced a voluntary cessation of production of two polybrominated diphenyl ethers (PBDEs), penta-BDE and octa-BDE, by end of 2004. Other brominated flame-retardants, including deca-BDE and TBBPA, have been studied by the National Academy of Sciences and the World Health Organization and been found to have insignificant risks.

These concerns about certain specific PBBs and BDEs present no valid reason for the overly broad ban proposed by LD 1790, particularly because their banning could significantly and adversely affect fire safety. Such a ban would also prohibit the sale in Maine of most common electronic equipment. While some manufacturers might choose to develop Maine-specific products, these products would likely be far more expensive than those sold in the other 49 states and Canada.

Until relevant data are presented proving the current flame retardants used in circuit boards have an adverse environmental impact and the alternatives are better, we urge the state of Maine to reconsider the ramifications of enacting the proposed LD 1790.

Thank you for the opportunity to share our concerns regarding the proposed LD 1790, Brominated Flame Retardants in Consumer Product. Please do not hesitate to contact me if you have any questions.

Sincerely,

Fern Abrams
Director of Environmental Policy