



Stirling Technology, Inc.

Computer Pollution Fact Sheet

- TV receivers, computer screens and other warm consumer electronics with cabinets and circuit boards made of plastic emit chemical compounds to the air, which appears to be absorbed into the human bloodstream.
- Flame retardants consist mostly of polybromine diphenyl ether (PBDE), and tetrabromobisphenol-A (TBBPA). Both compounds are in the study found in blood tests from forty people.
- PBDE is chemically close to PCB. PCB is under serious investigation for hormonal effects, which means it can disrupt the development of human and animal fetuses. Researchers think the bromine flame retardants can have a similar effect.
- The two chemicals are used on printed circuit boards and in plastic cabinets for electronic equipment, where they prevent fires. Those two uses account for about sixty percent of the world consumption of bromine flame retardants, which is estimated at 150,000 tons a year.
- The Danish producer of consumer electronics, Bang & Olufsen (B&O), has already stopped the use of PBDE-treated circuit-boards in their TV-sets, due to these concerns. Instead, they use TBBPA, which will not be substituted in the near future, says Engineer and Technical Consultant Rikke Nedermark, B&O.
- In 1998, the World Health Organisation recommended that brominated flame retardants be phased out. In 1999, Sweden drafted a national proposal for the phase-out of PBDEs and PBBs, two groups of brominated flame retardants.
- Greenpeace demands a phase-out of all halogenated flame retardants by 2004 in the future EC directive on waste electrical and electronic equipment, as well as of toxic heavy metals (lead, cadmium, mercury, hexavalent chromium) and PVC. Ultimately, electrical and electronic goods should be free of all hazardous substances.
- Proper ventilation can expel toxic air and replace it with fresh, filtered air.

**For more information about indoor air quality and ventilation,
call us at 1.800.535.3448 or visit healthyairpeople.com**

Sources: "Halogenated Flame Retardants — A Threat to Life," Greenpeace; "Health Issues with Flame Retarding Chemicals in Computers and Consumer Electronics," Danish Engineering Weekly

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*Stirling Technology is home of the RecoupAerator® home air cleaning system,
the #1-rated energy recovery ventilator.*