

## **Toshiba Environmental**

### **Toshiba commits to eliminating PVCs and BFRs from notebook PCs**



#### **Toshiba commits to using suitable alternatives to PVC and BFR**

To aid the global effort seeking to reduce the harmful impact posed by polyvinyl chloride (PVC) and brominated flame retardants (BFRs), Toshiba has committed to eliminate PVC and BFRs from the external cases and plastic moulding.

The environmentalist group Greenpeace advocates the global phase-out of PVC to reduce the threat posed by the dioxins produced as a by-product when manufacturing PVC. Today, PVC is widely used in the production of computer and electrical components.

BFRs are a chemical commonly applied to components within electronic devices to reduce the flammability of the product. Specifically in computers, BFRs are applied to printed circuit boards, to components such as connectors, to plastic covers, and to cables. There are several groups of BFRs, differentiated by their chemical properties (polybrominated diphenyl ether (PBDE), polybrominated biphenyl (PBB), and brominated cyclohydrocarbons). Recently, environmental advocate groups and the public alike have expressed concern about the potential harmful effects of BFRs.

Currently, Toshiba does not use PVC in packing materials, and has sourced PVC alternatives in the external casing of Toshiba brand notebook PCs. Toshiba also prohibits the use of PBDE and PBB subgroups (including DecaBDE) in all Toshiba brand notebook PCs, and uses printed wiring boards that are free of BFRs in some notebook PCs.

In addition, Toshiba plans to eliminate PVC from notebook PC parts, cables, and components by 2009 as suitable alternatives are identified. By this date, Toshiba will also source substitute alternatives for all remaining uses of BFRs. Economically feasible alternatives must alleviate health and environmental impacts, while also maintaining product functions, performance, and quality.

