



**EPEAT Clarification #14-2**  
**Easy disassembly of external enclosure**

**This Clarification applies to the following IEEE Standards and criteria:**

**Applicable Standards:**

- IEEE 1680.1 – Computers and Displays
- IEEE 1680.2 – Imaging Equipment
- IEEE 1680.3 – Televisions

**Applicable Criteria (enter here):**

4.3.1.3

**PVC Determination:**

The “external enclosures” are those that protect internal parts. The intent of this required criterion is to be able to access and remove internal hazardous materials as specified in the companion required criterion 4.3.1.5: ‘Identification and removal of components containing hazardous materials.’

**Background Analysis:**

*Product criterion: External enclosures shall be easily removable by one person alone with commonly available tools.*

*Question: What is meant by “external enclosures” for a notebook computer?*

This criterion is in section 4.3: ‘Design for end of life’ and in subsection 4.3.1: ‘Design for recovery through recycling systems that utilize shredding.’ The assumption is that removal of external enclosures facilitates removal of WEEE Annex II materials, where applicable.

While the 1680.1 standard does not define this term, the draft 1680.2 Imaging Equipment and 1680.3 Television standards provide the following definition:

***external enclosure:*** *The external housing that protects the internal parts from environmental effects and prevents the user from coming into contact with moving, radiating, or current-carrying components.*

In the absence of a definition in 1680.1 and to promote consistency among 1680 standards, it is reasonable to refer to the definition found in the draft 1680.2 and 1680.3 standards, which were developed and approved in a multi-stakeholder consensus process.

**Change History:**

Created: October 2012