Green Electronics Council

227 SW Pine Street, Suite 300 • Portland, OR 97204 • V: (503) 279-9382 • F: (503) 279-9381 • www.epeat.net

OUTCOMES REPORT
EPEAT VERIFICATION ROUND PC-2015-03

1. Overview of Verification Round

This report provides the detailed results of EPEAT Verification Round PC-2015-03. This Round focused on Level 2 and Level 3 investigations of tablets/slates registered in the United States.

In Level 2 investigations, the Conformity Assurance Body obtains a product without the Manufacturer's knowledge or involvement, and has the product disassembled and inspected to assess conformance with one or more criteria. In Level 3 investigations, the Conformity Assurance Body obtains a product without the Manufacturer's knowledge or involvement, and has the product analytically tested to assess conformance with one or more criteria.

Investigations were conducted for seven criteria – three were required and four optional.

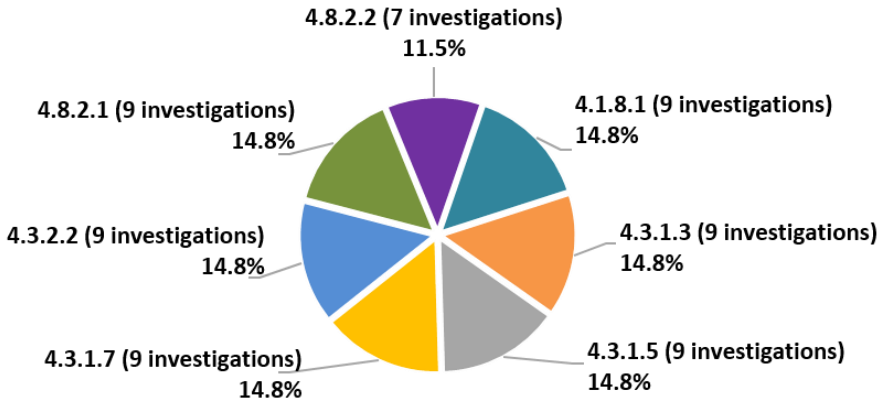
IEEE 1680.1 Criteria Investigated in PC-2015-03

4.1.8.1	*Optional – Large parts free of PVC*
4.3.1.3	*Required – Easy disassembly of external enclosures*
4.3.1.5	*Required – Identification and removal of components containing hazardous materials*
4.3.1.7	*Optional – Molded/glued in metal eliminated or removable*
4.3.2.2	*Optional – Marking of plastics*
4.8.2.1	*Required – Separable packing materials*
4.8.2.2	*Optional – Packaging 90% recyclable and plastics labeled (only plastic markings examined)*

Prior to the beginning of this Round, Green Electronics Council's Registry Services staff examined the number of tablets/slates in the EPEAT Registry and the number of products that declared the optional criteria. Products were selected for investigation as follows:

- All tablets/slates registered in the United States were considered for inclusion in the Verification Round, with one exception. Products that were investigated against one or more of the target criteria in the last six months were excluded from selection.
- After this initial filtering, Green Electronics Council's Registry Services staff reviewed the Registry to determine which products were claiming at least three of the four targeted optional criteria listed above.
- All Manufacturers with tablets/slates registered in the United States had one product selected for investigation, and only one product was chosen per Manufacturer.

FIGURE 1: Criteria Investigated in PC-2015-03
(as percentages of total investigations completed)



In total, 61 investigations were completed for a total of nine products. Of these investigations, 56% were for required criteria (4.3.1.3, 4.4.1.5 and 4.8.2.1) and 44% for optional criteria (4.1.8.1, 4.3.1.7, 4.3.2.2 and 4.8.2.2). The Verification Round Plan originally included the disassembly and testing of eleven products. Because two selected products were not able to be obtained in the market, thirteen investigations were cancelled.

2. Summary of Outcomes

Highlights from this Verification Round are:

- **13** investigations cancelled *(investigations for two selected products not available in market)*
- **61** investigations completed
- **58** decisions of Conformance
- **3** decisions of Non-Conformance *(reasons identified in Figure 2 below)*

FIGURE 2: Overall Conformance Status for PC-2015-03
(as percentages of total investigations completed)

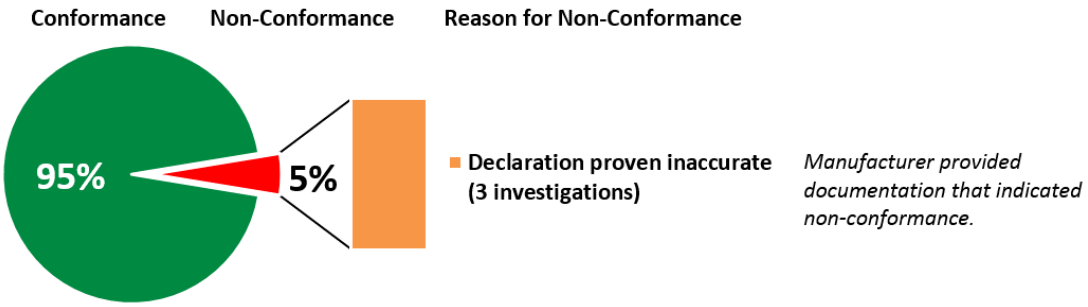


Table 1 summarizes the number of investigations performed and Non-Conformances by criterion.

TABLE 1: Summary of Non-Conformance Findings					
Criterion	Description		Completed Investigations	Non-Conformances	Non-Conformance Rate
4.1.8.1	Optional	Large parts free of PVC	7	0	0%
4.3.1.3	Required	Easy disassembly of external enclosures	9	0	0%
4.3.1.5	Required	Identification and removal of components containing hazardous materials	9	0	0%
4.3.1.7	Optional	Molded/glued in metal eliminated or removable	9	0	0%
4.3.2.2	Optional	Marking of plastics	9	3	33%
4.8.2.1	Required	Separable packing materials	9	0	0%
4.8.2.2	Optional	Packaging 90% recyclable and plastics labeled	9	0	0%

2.1 Summary of Outcomes: Further Examination of Non-Conformances

One hundred percent of the non-conformances for this Round were for criterion 4.3.2.2, which requires that all plastic components greater than 25 grams have a material marking in accordance with ISO 11469. Three of the nine products examined had non-conformance for 4.3.2.2. For these three products, a total of eight plastic components did not have appropriate markings:

- Four components did not have a material marking code at all;
- Three of the components did not include the required reverse angled brackets (the marks “>” and “<”) around the marking codes; and
- One component did not include the code number for the flame retardant in the plastic.

For further insights, see Section 3 on Key Lessons.

2.2 Summary of Outcomes: Actions to Restore Conformance

In Section 6, Table 2 presents further details on Non-Conformances including the identification of Manufacturers and products. Following the investigation phase, corrective actions were taken to resolve all identified Non-Conformances and restore the accuracy of the declarations:

- **1** product — Additional information provided by Manufacturer, bringing the product into Conformance with the criterion as originally declared.
- **1** product — Non-conformant criterion unselected by Manufacturer.
- **1** product — Product already archived by GEC.

3. Key Lessons

Material marking and reversed angle brackets (criterion 4.3.2.2):

Criterion 4.3.2.2 requires the marking of plastic components greater than 25 grams in accordance with the provisions of ISO 11469. In particular, ISO 11469 requires reverse angled brackets (the marks ">" and "<") around the material marking code. The accompanying ISO 1043 series of standards also provides designated abbreviations for polymers, flame retardants, fillers and/or plasticizers. Manufacturers are encouraged to work closely with their suppliers to determine if the verification requirements can be met, and to revisit the Conformity Assurance Protocols to identify the types of information sought by the Conformity Decision Panel to determine conformance.

Material marking and specific flame retardant codes (criterion 4.3.2.2):

The ISO 11469 standard references a series of accompanying standards, which provide details on designated abbreviations for polymers (ISO 1043-1), fillers and reinforcing agents (ISO 1043-2), plasticizers (ISO 1043-3) and flame retardants (ISO 1043-4). Material marking codes on plastic components must include the appropriate abbreviations as per this series of standards. Again, manufacturers are encouraged to work closely with their suppliers to determine if the verification requirements can be met, and to revisit the Conformity Assurance Protocols to identify the types of information sought by the Conformity Decision Panel to determine conformance.

4. General Message to Manufacturers

Understanding documentation requirements for Verification Rounds:

EPEAT's Online Learning Center has pre-recorded training modules for every criterion in the 1680.1 standard. These modules are designed to de-mystify the standard's requirements, and to illustrate the types of information needed during a Verification Round. Manufacturers are encouraged to access these modules on EPEAT's Online Learning Center. If you do not yet have access to the Learning Center, please contact Andrea Desimone.

Initial response to Auditors:

When contacted regarding participation in a Verification Round, Manufacturers should respond to the Auditor as soon as possible to let them know they are communicating with the correct person or to inform them of the correct contact. This also helps the Auditor know the e-mail address is valid.

Provision of information during Verification Rounds:

The IEEE 1680 standard and the EPEAT Manufacturer agreement require that Manufacturers provide the information identified in Verification Requirements to prove the accuracy of their declarations within 30 days of EPEAT's request. Manufacturers are reminded that failure to provide this information is inconsistent with the agreement and may result in termination of the Manufacturer from EPEAT.

Conformance of products that may share similar traits and/or supply chains:

If a Non-Conformance is found for a particular criterion and product, Manufacturers should be prepared to determine if other products on the EPEAT Registry are similarly impacted due to use of

similar materials and/or supply chains, and develop corrective action plans to address the future conformance of these other products. Failure to provide such information may result in future targeted investigations.

5. Looking Forward

Plans for Future Verification Activities:

There are four Verification Rounds planned for 2016 for 1680.1 (Computers and Displays). These Rounds may include Level 1, Level 2 and/or Level 3 investigations.

Conformity Assessment Protocols:

This and all future Verification Rounds have and will be conducted according to the guidance provided in the Conformity Assessment Protocols posted on www.epeat.net.

6. Investigations Table

TABLE 2: Specific Non-Conformance Findings and Corrective Action Taken								
Participating Manufacturer	**Product**	**Country**	**Product Type**	**Criterion**	**Required or Optional**	**Criterion Description**	**NC Finding Description**	**Corrective Action Taken**
GETAC	T800	United States	Tablet/slate	4.3.2.2	O	Marking of plastics	Declaration proven inaccurate	Manufacturer undeclared the non-conformant criterion
HP	Pro Tablet 408 G1	United States	Tablet/slate	4.3.2.2	O	Marking of plastics	Declaration proven inaccurate	Manufacturer provided evidence demonstrating conformance
Xplore Technologies Corporation	iX104C6	United States	Tablet/slate	4.3.2.2	O	Marking of plastics	Declaration proven inaccurate	All manufacturer's products previously archived

7. Background

To assure the credibility of the EPEAT Registry, verification of the claims by Participating Manufacturers are rigorous, independent and transparent. Verification is conducted according to policies and procedures described in documents provided on www.epeat.net. Manufacturers are given no forewarning that their products will be verified, and verification is performed based on the declarations as they are in the Registry at the time the Verification Round begins.

Investigations are performed by expert technical contractors called Auditors working for a Conformity Assurance Body approved by the Green Electronics Council (GEC). Auditors are free of conflicts of interest, and their recommended decisions are reviewed and finalized by a five-person panel of independent technical experts (called the Conformity Decision Panel) who are also contractors free of conflicts of interest. Decisions of conformity by the Conformity Decision Panel are made blind to the identity of the products and companies they are judging, based only on evidence collected and analyzed by Auditors. A serious consequence of receiving a Non-Conformance is that it is published publicly in an Outcomes Report, for purchasers, competitors, and others to see.

- In Level 0 investigations, an Auditor assesses Conformance to a criterion by examining publicly available information only – no products are obtained for inspection or testing, and the Manufacturer is not asked to submit documentation. If the publicly available information is inconclusive (i.e. was not available, could not be found from public sources, or did not provide enough details to determine conformance), the Auditor may be instructed to proceed with a Level 1 investigation.
- In Level 1 investigations, an Auditor assesses Conformance to a criterion by examining information submitted by a Manufacturer. The Manufacturer is required to provide detailed and accurate information in a 30-day period.
- In Level 2 investigations, the Conformity Assurance Body obtains a product without the Manufacturer's knowledge or involvement, and has the product disassembled and inspected to assess conformance with one or more criteria.
- In Level 3 investigations, the Conformity Assurance Body obtains a product without the Manufacturer's knowledge or involvement, and has the product analytically tested to assess conformance with one or more criteria.

Manufacturers must correct Non-Conformances, either by bringing the product into Conformance, by unselecting the criterion until Conformance is achieved, or by removing the product from the Registry. The Green Electronics Council also requires that Manufacturers examine other registered products to determine if their declarations should be corrected as well. If a Manufacturer corrects the Non-Conformance by unselecting the criterion and the criterion is an optional criterion, they lose that point, and possibly the product drops a tier. If it is a required criterion, they must archive the product. If it is a required corporate criterion, they must archive all of their registered products.