



OUTCOMES REPORT

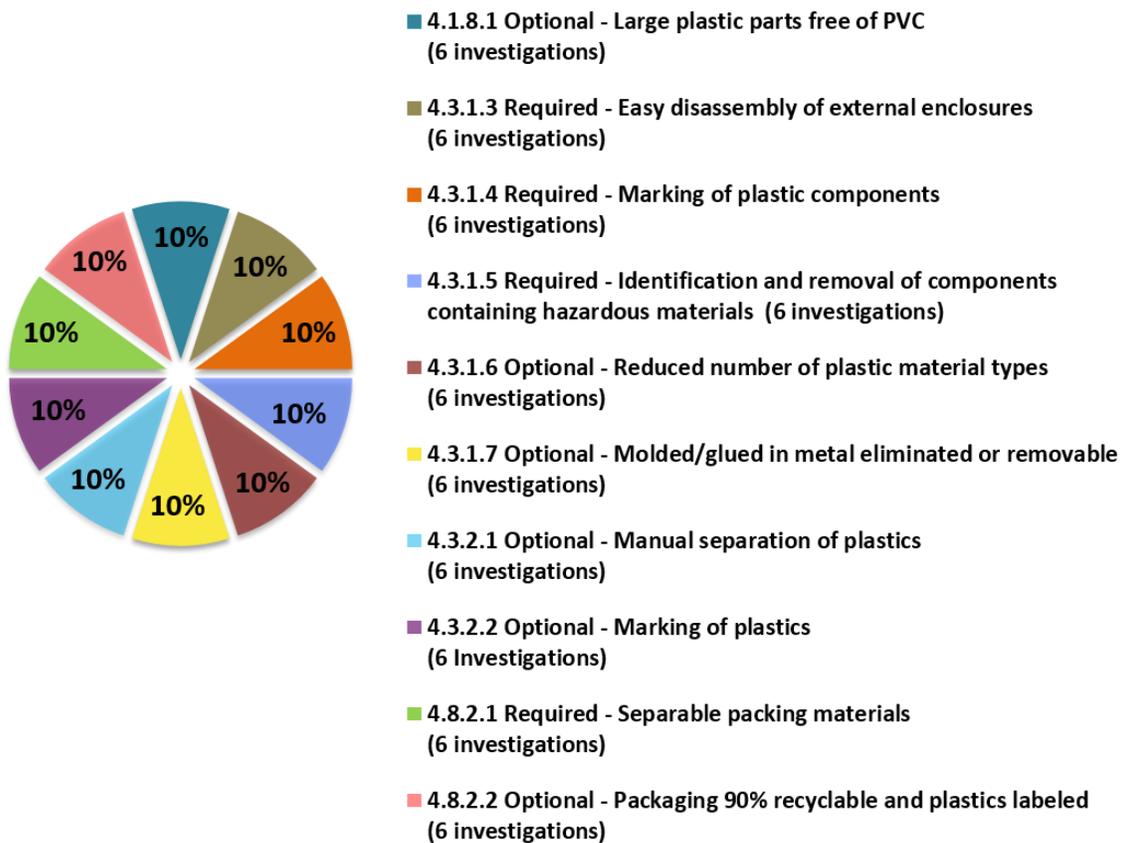
EPEAT VERIFICATION ROUND PC-2014-01

1. Overview of Verification Round

This report provides the detailed results of EPEAT Verification Round PC-2014-01. This Round focused on ten criteria from IEEE 1680.1-2009™ for which Level 2 or Level 3 investigations could be performed. Six products registered in Europe or Asia were purchased without the knowledge or participation of the Subscriber, and disassembled, inspected and tested to verify conformance with the selected criteria. The geographic focus of this Round was only on Europe and Asia because Verification Round PC-2013-05 performed similar Level 2 investigations for products registered in North America.

Verification Round PC-2014-01 consisted of 60 completed investigations, of which 40% were for required criteria and 60% for optional criteria (see Figure 1).

FIGURE 1: Criteria Investigated in PC-2014-01
(as percentages of total investigations completed)



Prior to the beginning of Verification Round PC-2014-01, EPEAT staff examined the number of investigations performed against these criteria in the six months prior to the start of the Round and the number of products registered in Europe and Asia. Products were then selected as follows:

- All Subscribers and products registered in Europe and Asia were considered for inclusion, with one exception. Products investigated in the six months prior to the start of the Round for one or more of the targeted criteria were excluded from selection.
- After this initial filtering, EPEAT staff reviewed the Registry to determine which products were claiming all of the six optional criteria identified in Figure 1. Six products were then chosen for investigation from this list, with only one product chosen per Subscriber.
- A range of different product types were selected – one desktop, two notebooks and three displays. All products were available by online purchasing through consumer retail outlets located in Europe or Asia.

During the Verification Round, the laboratory disassembled and inspected each product (Level 2 investigations) to assess conformance with the ten targeted criteria. Additional activities included:

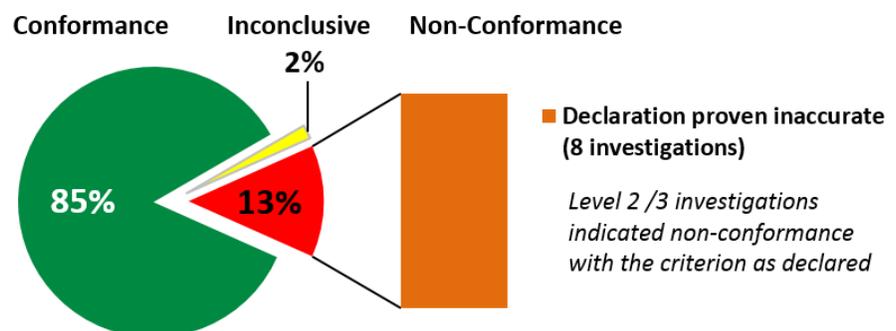
- For criterion 4.1.8.1, the laboratory performed analytical testing (Level 3 investigations) to evaluate whether plastic parts greater than 25 grams were free from PVC.
- For criteria 4.3.1.4 and 4.3.2.2, the laboratory made a recommendation based on whether the plastic parts had material marking codes, and whether the material marking codes were in accordance with ISO 11469. Plastic components were not tested to determine the material composition itself.
- For criterion 4.8.2.2, the laboratory only assessed whether plastic packaging materials (those not exempted by the criterion) were identified by material type, and made a recommendation based only on that portion of the criterion.

2. Summary of Outcomes

Highlights from this Verification Round are:

- **60** investigations completed
- **51** decisions of Conformance
- **8** decisions of Non-Conformance (*reasons identified in Figure 2*)
- **1** decision of Inconclusive

FIGURE 2: Overall Conformance Status for PC-2014-01
(as percentages of total investigations completed)



The Inconclusive decision was for criterion 4.1.8.1. In this investigation, laboratory testing detected chlorine in a plastic component greater than 25 grams. The level was low enough to indicate the component was not entirely made from PVC; however testing could not determine the exact source of the chlorine (e.g. flame retardant, plasticizer, other additive, some quantity of PVC, and/or recycled content from PVC). Therefore the testing could not entirely eliminate the possibility of PVC being present.

Table 1 illustrates the number of investigations performed and non-conformance rates by criterion.

TABLE 1: Summary of Non-Conformance Findings					
Criterion	Required or Optional	Description	Total Completed Investigations	Non-Conformances	Non-Conformance Rate by Criterion
4.1.8.1	Optional	Large plastic parts free of PVC	6	0	0%
4.3.1.3	Required	Easy disassembly of external enclosures	6	1	17%
4.3.1.4	Required	Marking of plastic components	6	2	33%
4.3.1.5	Required	Identification and removal of components containing hazardous materials	6	1	17%
4.3.1.6	Optional	Reduced number of plastic material types	6	0	0%
4.3.1.7	Optional	Molded/glued in metal eliminated or removable	6	0	0%
4.3.2.1	Optional	Manual separation of plastics	6	0	0%
4.3.2.2	Optional	Marking of plastics	6	4	67%
4.8.2.1	Required	Separable packing materials	6	0	0%
4.8.2.2	Optional	Packaging 90% recyclable and plastics labeled	6	0	0%

Of particular note are the Non-Conformance rates for those criteria that require the marking of plastic components in accordance with ISO 11469 – required criterion 4.3.1.4 (for plastic components greater than 100 grams) and optional criterion 4.3.2.2 (for plastic components greater than 25 grams).

- The non-conformance rate was 33% for criterion 4.3.1.4, and 67% for criterion 4.3.2.2. Together, these represent 75% of the total Non-Conformances in the Verification Round. This may indicate a misunderstanding of the criteria themselves or the criteria’s verification requirements.
- Four of the six products investigated in this Verification Round had Non-Conformance related to criteria 4.3.1.4 and/or 4.3.2.2. In all Non-Conformances against these criteria, the plastic components had material marking codes; however, the codes were not in accordance with ISO 11469.

In Section 6, Table 2 presents further details on Non-Conformances including the identification of Subscribers and products.

After the investigation phase, the following corrective actions were taken to resolve all identified Non-Conformances and restore the accuracy of the declarations:

- 7 investigations Product archived by Subscriber.
- 1 investigations Product archived by EPEAT.

3. Key Lessons

Listed below are key lessons from this Verification Round that may be useful for future Rounds. Additionally, Subscribers are encouraged to revisit the Conformity Assurance Protocols on their “My Account” page of the Registry to fully understand the information needed for the Product Verification Committee to determine conformance.

Marking of plastic components in accordance with ISO 11469 (criteria 4.3.1.4 and 4.3.2.2):

Criterion 4.3.1.4 requires the marking of plastic components greater than 100 grams in accordance with the provisions of ISO 11469, and criterion 4.3.2.2 requires the same for components greater than 25 grams. Subscribers are strongly encouraged to work closely with their suppliers to determine if plastic components are properly marked and if the verification requirements can be met. In particular, Subscribers should be aware of the following ISO 11469 requirements:

- Reverse angled brackets (the marks “>” and “<”) must be placed around the entire material marking code.
- The designated abbreviation for flame retardants must include the symbol “FR” followed by the code number for the flame retardant being used in parentheses.

Power adapters (criterion 4.3.2.2):

Clarification 7-1 (<http://www.epeat.net/documents/clarifications/clarification7-1.pdf>) indicates that a reference to parts greater than 25 grams applies to each component as shipped. Because the power adapter is a single component of the product as shipped and, specifically, because the plastic casing parts are ultrasonically welded together to create a single unit, all applicable weight limits should apply to the power adapter as shipped.

When applying the 25 gram threshold for criterion 4.3.2.2, the weight of the plastic casing parts for a power adapter must be combined together to determine if the power adapter casing, as a single unit, must be included. Subscribers are encouraged to work with their suppliers to ensure this component is properly marked and the verification requirements met.

Packaging materials 90% readily recyclable (criterion 4.8.2.2):

In this Verification Round, the laboratory’s recommendations for criterion 4.8.2.2 were only based on its assessment of whether plastic packaging materials (those not exempted by the criterion) were identified by material type. The criterion also requires that 90% by weight of packaging materials be readily recyclable. For future verification rounds, Subscribers should be prepared to present calculations showing this 90% threshold is being met.

4. General Message to Subscribers

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. Subscribers 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](#).

Provision of information during Verification Rounds:

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

Initial response to Qualified Verifiers:

When contacted regarding participation in a Verification Round, EPEAT staff continue to request that Subscribers respond to the Qualified Verifier as soon as possible to let them know they are communicating with the correct person or to inform them of the correct contact. This procedure also helps the Qualified Verifier know that s/he has a valid email address.

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

If a Non-Conformance is found for a particular criterion and product, Subscribers 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.

Archiving products that are no longer being manufactured:

All products active on the Registry are eligible for inclusion in a Verification Round at any time. If a product is no longer being manufactured and the Subscriber is no longer actively working with suppliers on maintaining information related to conformance, the Subscriber is strongly encouraged to archive this product. Please note that archived products still appear in the Registry (listed under archived products for each Subscriber) should purchasers or other stakeholders want to access details regarding the product's previously active registration.

5. Looking Forward

Plans for Future Verification Activities:

There are four Verification Rounds planned for 2015 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

Subscriber	Product	Country	Product Type	Criterion	Required or Optional	Criterion Description	NC Finding Description	Corrective Action Taken
Acer Inc.	Aspire S7-392	France	Notebooks	4.3.1.3	R	Easy disassembly of external enclosures	Demonstrated inaccurate declaration	Subscriber archived the product
				4.3.1.5	R	Identification and removal of components containing hazardous materials	Demonstrated inaccurate declaration	Subscriber archived the product
Fujitsu Limited	LIFEBOOK A544	Poland	Notebooks	4.3.1.4	R	Marking of plastic components	Demonstrated inaccurate declaration	Subscriber archived the product
				4.3.2.2	O	Marking of plastics	Demonstrated inaccurate declaration	Subscriber archived the product
Iiyama corporation	ProLite B2483HS	Germany	Displays	4.3.2.2	O	Marking of plastics	Demonstrated inaccurate declaration	Subscriber archived the product
MMD-Monitors & Displays Taiwan Ltd.	237E4L	Belgium	Displays	4.3.2.2	O	Marking of plastics	Demonstrated inaccurate declaration	EPEAT archived the product
TPV Technology Limited	e2752V	China	Displays	4.3.1.4	R	Marking of plastic components	Demonstrated inaccurate declaration	Subscriber archived the product
				4.3.2.2	O	Marking of plastics	Demonstrated inaccurate declaration	Subscriber archived the product

7. Background

To assure the credibility of the EPEAT Registry, verification of the claims by participating manufacturers (called “Subscribers”) are rigorous, independent and transparent. Verification is conducted according to policies and procedures described in documents provided on www.epeat.net. Subscribers 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 “Qualified Verifiers” working for an EPEAT approved Product Verification Entity (PRE). Qualified Verifiers 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 Product Verification Committee) who are also contractors free of conflicts of interest. Decisions of conformity by the Product Verification Committee are made blind to the identity of the products and companies they are judging, based only on evidence collected and analyzed by Qualified Verifiers. 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 a Level 0 investigation, a Qualified Verifier assesses Conformance to a criterion by examining publicly available information only – no products are obtained for inspection or testing, and the Subscriber 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 Qualified Verifier may be instructed to proceed with a Level 1 investigation.
- In a Level 1 investigation, a Qualified Verifier assess Conformance to a criterion by examining information submitted by a Subscriber. The Subscriber is required to provide detailed and accurate information in a timely manner.
- In Level 2 investigations, EPEAT buys or borrows a product without the Subscriber’s knowledge or involvement, and has the product disassembled and inspected to assess conformance with one or more criteria.
- In Level 3 investigations, EPEAT buys or borrows a product without the Subscriber’s knowledge or involvement, and has the product analytically tested to assess conformance with one or more criteria.

Subscribers must correct Non-Conformances, either by bringing the product into Conformance, by un-declaring the criterion until Conformance is achieved, or by removing the product from the Registry. EPEAT also requires that Subscribers examine other registered products to determine if their declarations should be corrected as well. If a Subscriber corrects the Non-Conformance by un-declaring 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.