Green Electronics Council

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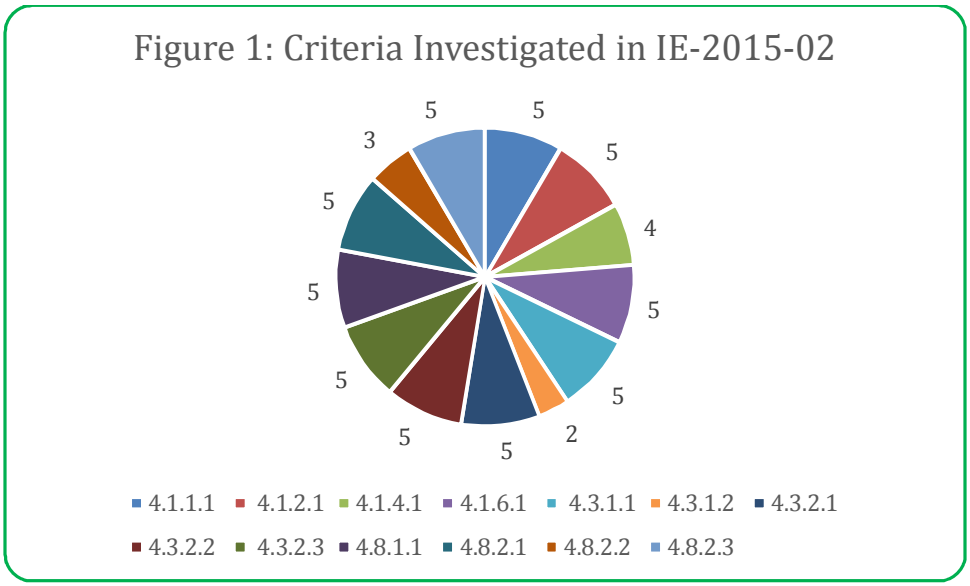
OUTCOMES REPORT
EPEAT VERIFICATION ROUND IE-2015-02

1. Overview of Verification Round

Verification Round IE-2015-02 for the IEEE 1680.2™ Standard for the Environment Assessment of Imaging Equipment focused on investigation of the following 13 criteria:

1. 4.1.1.1 Required – Compliance with provisions of European Union RoHS Directive
2. 4.1.2.1 Optional – Further reduction of the use of EU RoHS Directive hazardous substances (cadmium)
3. 4.1.4.1 Optional – Reduction of substances on the EU REACH Candidate List of SVHCs
4. 4.1.6.1 Required – Reducing BFR/CFR/PVC content of external plastic casings
5. 4.3.1.1 Required – Ease of disassembly of product
6. 4.3.1.2 Optional – Ease of disassembly of consumer products
7. 4.3.2.1 Required – Use of single recyclable plastic type per plastic part
8. 4.3.2.2 Required – Restriction on materials not compatible with reuse and recycling
9. 4.3.2.3 Required – Manual separation and marking of plastics
10. 4.8.1.1 Required – Elimination of intentionally added heavy metals in packaging
11. 4.8.2.1 Required – Separable packing materials
12. 4.8.2.2 Optional – Packaging 90% compostable/recyclable
13. 4.8.2.3 Required – Plastics marked in packaging materials

This Round involved laboratory (lab) evaluation of 5 randomly chosen imaging equipment products. It included a maximum of 65 Level 1, 2 and 3 investigations. In some cases a chosen product didn't claim one or more of the optional criteria, and therefore the total number of investigations completed was fewer than planned. A Level 1 investigation involves a review of Subscriber submissions. In Level 2 and 3 investigations a lab chosen by the PRE acquires products without the Subscriber's knowledge, disassembles them, and conducts detailed analytical testing, as appropriate.



In total, 59 Level 2 and Level 3 investigations were completed. PREs with active imaging equipment products and with Subscribers whose products were not involved in this type of verification round in 2014 were eligible in this Round. Each PRE had lab testing completed on no more than 2 products. Each Subscriber had lab testing completed for no more than 1 product. Products were selected from a list of products claiming the greatest number of optional criteria subject to investigation in this Round.

2. Summary of Outcomes

Highlights from this Verification Round are:

- *59 investigations completed*
- *56 decisions of Conformance*
- *2 decisions of Non-Conformance*
- *1 criterion (which the Manufacturer did not claim) was mistakenly investigated due to a clerical error*

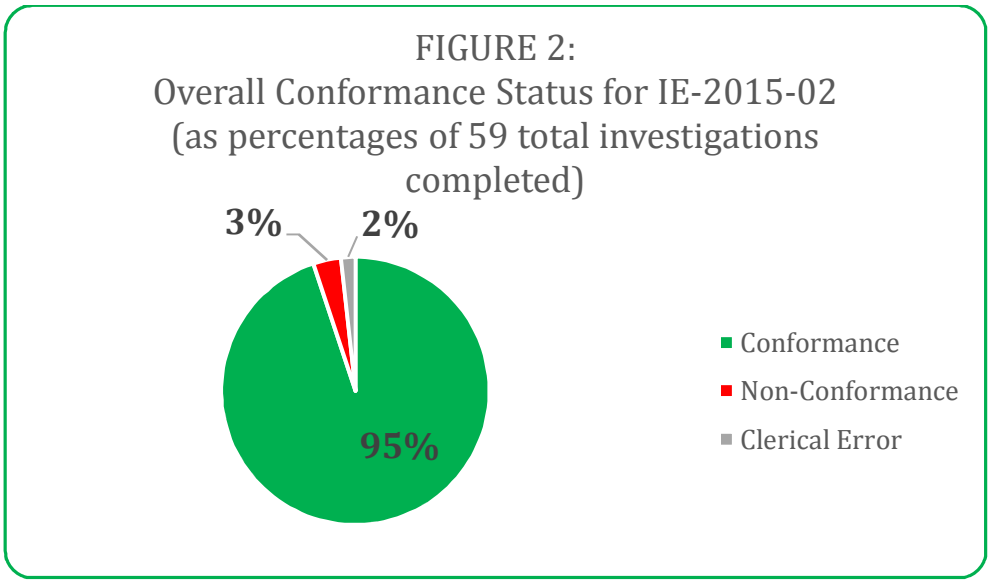


Table 1 summarizes the number of investigations performed and Non-Conformance by criterion.

TABLE 1: Summary of Non-Conformance Findings

Criterion	Description		Completed Investigations	Non-Conformances	Non-Conformance Rate
4.1.1.1	Required	Compliance with provisions of European Union RoHS Directive	5	0	0%
4.1.2.1	Optional	Further reduction of the use of EU RoHS Directive hazardous substances (cadmium)	5	0	0%
4.1.4.1	Optional	Reduction of substances on the EU REACH Candidate List of SVHCs	4	0	0%
4.1.6.1	Required	Reducing BFR/CFR/PVC content of external plastic casings	5	0	0%
4.3.1.1	Required	Ease of disassembly of product	5	0	0%
4.3.1.2	Optional	Ease of disassembly of consumer products	2	0	0%
4.3.2.1	Required	Use of single recyclable plastic type per plastic part	5	0	0%
4.3.2.2	Required	Restriction on materials not compatible with reuse and recycling	5	0	0%
4.3.2.3	Required	Manual separation and marking of plastics	5	0	0%
4.8.1.1	Required	Elimination of intentionally added heavy metals in packaging	5	0	0%
4.8.2.1	Required	Separable packing materials	5	0	0%
4.8.2.2	Optional	Packaging 90% compostable/recyclable	3	1	33%
4.8.2.3	Required	Plastics marked in packaging materials	5	1	20%

In Section 6, Table 2 presents further details on the Non-Conformances. This information includes the identification of Manufacturer and product. Following the investigation phase, corrective action was taken to resolve the identified Non-Conformance and restore the accuracy of the EPEAT Registry:

- 1 product — 2 Non-Conforming criteria un-declared for tested product. Manufacturer also identified several other products affected by this Non-Conformance and un-declared criteria for those products as well.

3. Key Lessons

Specific requirements for Criterion 4.8.1.1 - Elimination of intentionally added heavy metals in packaging:

Note: This required criterion includes all packaging components, which includes printing ink on the packaging.

Specific requirements for Criterion 4.8.2.2 - Packaging 90% compostable/recyclable:

This optional criterion requires all packaging to be 90% compostable or recyclable. To date, EPS (expanded polystyrene foam packaging) has not been found to meet the requirements of a recyclable material in the United States. Up to 10% of the packaging weight can come from materials that are not recyclable or compostable. However, the other 90% must be comprised of compostable, fiber based or recyclable materials. For more information pertaining to what evidence is acceptable to prove recyclability, see EPEAT Clarification #27.

Specific requirements for Criterion 4.8.2.3 - Plastics marked in packaging materials:

This optional criterion requires all plastics in packaging materials to be marked by material type. Unless a plastic part is covered by one of the exceptions, it must be marked. Foam packaging is considered a plastic part.

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.

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 1680.2 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 that the e-mail address is valid.

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.

5. Looking Forward

Plans for Future Verification Activities:

There are three Verification Rounds planned for 2016 for 1680.2 (Imaging Equipment). These Rounds may include Level 0, 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**
Kyocera	Ecosys P7035cdn	United States	Printer	4.8.2.2	Optional	Packaging 90% compostable / recyclable	Demonstrated Non-Conformance	Manufacturer undeclared criterion.
Kyocera	Ecosys P7035cdn	United States	Printer	4.8.2.3	Required	Plastics marked in packaging materials	Demonstrated Non-Conformance	Manufacturer undeclared criterion.

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 a Level 0 investigation, 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 a Level 1 investigation, an Auditor assess Conformance to a criterion by examining information submitted by a Manufacturer. The Manufacturer is required to provide detailed and accurate information in a timely manner.

- 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 un-declaring 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 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.