



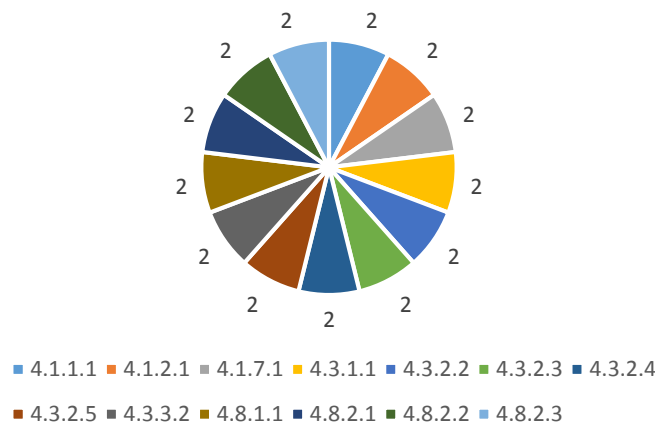
OUTCOMES REPORT EPEAT VERIFICATION ROUND TV-2013-03

1. Overview of Verification Round

This report provides the detailed results of EPEAT Verification Round TV-2013-03. This Round consisted of a total of 26 investigations of the IEEE 1680.3™ criteria listed below:

- 4.1.1.1 – Required – Compliance with provisions of European Union RoHS Directive
- 4.1.2.1 – Optional – Further reduction of the use of EU RoHS Directive hazardous substances (cadmium)
- 4.1.7.1 – Optional – Reducing BFR/CFR/PVC content of external plastic casings
- 4.3.1.1 – Required – Ease of disassembly of product
- 4.3.2.2 – Required – Plastic Markings
- 4.3.2.3 – Optional – Manual separation of plastics for recycling
- 4.3.2.4 – Optional – Molded/glued-in metal eliminated or removable
- 4.3.2.5 – Required – Restriction on materials not compatible with reuse and recycling
- 4.3.3.2 – Optional – Marking provided on the product identifying items containing materials with special handling needs
- 4.8.1.1 – Required – Elimination of intentionally added heavy metals in packaging
- 4.8.2.1 – Required – Separable packing materials
- 4.8.2.2 – Optional – Packaging 90% compostable/recyclable
- 4.8.2.3 – Required – Plastics marked in packaging materials

Figure 1: Number of Investigations by Criterion
Planned and Completed



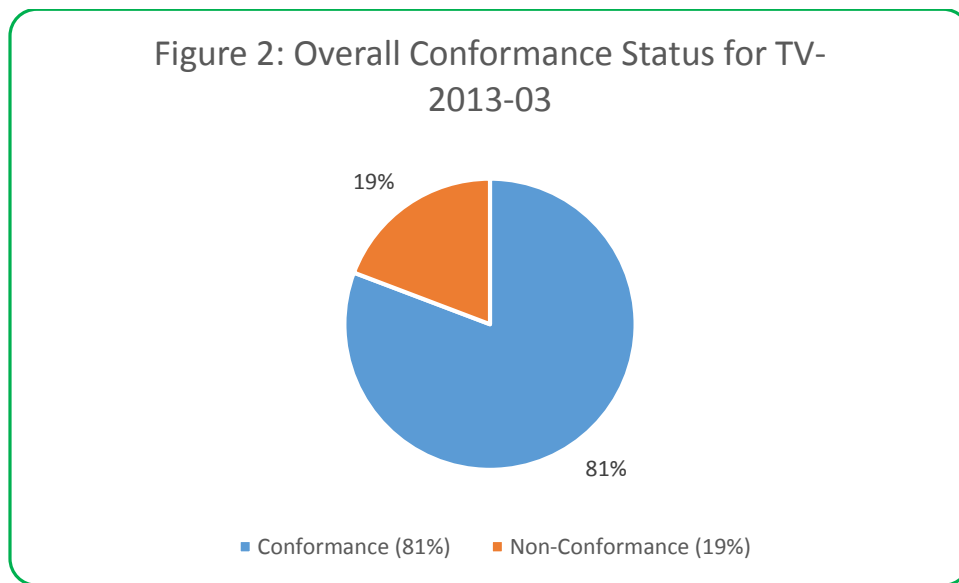
This Round was intended to assure baseline conformance for televisions. Using a list of products that claimed all six optional criteria, one product from each Subscriber was randomly chosen. This Round involved laboratory investigation of 2 televisions. 26 Level 2 and 3 investigations were planned and completed. For these Level 2 and 3 investigations EPEAT acquired products without the Subscriber's

knowledge, disassembled them, and conducted analytical testing if needed to demonstrate conformance to the criteria. In some cases, the Level 2 and 3 investigations were augmented with Level 1 investigations, which involved a review of Subscriber submissions. All Subscribers were involved in the Round. The lab testing for both products was managed by the PRE with the majority of television products.

2. Summary of Outcomes

Highlights from this Verification Round are:

- **26** Investigations Planned
- **26** Investigations Completed
- **21** Decisions of Conformance
- **5** Decisions of Non-Conformance
- **1** product archived by Subscriber
- **1** criterion un-declared (4.8.2.2)



3. Investigations Table

TABLE 1: Summary of Non-Conformance Findings					
Criterion	Required or Optional	Description	Total Investigations	Completed Investigations	Non-Conformances
4.1.1.1	Required	Compliance with provisions of European Union RoHS Directive	2	2	1
4.1.2.1	Optional	Further reduction of the use of EU RoHS Directive hazardous substances (cadmium)	2	2	0

TABLE 1: Summary of Non-Conformance Findings					
Criterion	Required or Optional	Description	Total Investigations	Completed Investigations	Non-Conformances
4.1.7.1	Optional	Reducing BFR/CFR/PVC content of external plastic casings	2	2	0
4.3.1.1	Required	Ease of disassembly of product	2	2	0
4.3.2.2	Required	Plastic Markings	2	2	1
4.3.2.3	Optional	Manual separation of plastics for recycling	2	2	0
4.3.2.4	Optional	Molded/glued-in metal eliminated or removable	2	2	0
4.3.2.5	Required	Restriction on materials not compatible with reuse and recycling	2	2	0
4.3.3.2	Optional	Marking provided on the product identifying items containing materials with special handling needs	2	2	1
4.8.1.1	Required	Elimination of intentionally added heavy metals in packaging	2	2	0
4.8.2.1	Required	Separable packing materials	2	2	0
4.8.2.2	Optional	Packaging 90% compostable/recyclable	2	2	2
4.8.2.3	Required	Plastics marked in packaging materials	2	2	0
		Totals	26	26	5

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
Samsung Electronics	UN55F6400AF	United States	TV	4.1.1.1	Required	Compliance with provisions of European Union RoHS Directive	Demonstrated non-conformance	Subscriber archived product.
Samsung Electronics	UN55F6400AF	United States	TV	4.3.2.2	Required	Plastic Markings	Demonstrated non-conformance	Subscriber archived product.
Samsung Electronics	UN55F6400AF	United States	TV	4.3.3.2	Optional	Marking provided on the product identifying items containing materials with special handling needs	Demonstrated non-conformance	Subscriber archived product.
Samsung Electronics	UN55F6400AF	United States	TV	4.8.2.2	Optional	Packaging 90% compostable / recyclable	Demonstrated non-conformance	Subscriber archived product.
LG Electronics Inc.	55LA6900-UD	United States	TV	4.8.2.2	Optional	Packaging 90% compostable / recyclable	Demonstrated non-conformance	Subscriber undeclared criterion.

4. Key Lessons

1680.3: 4.1.1.1: This criterion requires compliance with the requirements of the European Union (EU) RoHS Directive. A robust Conformance Assurance System is required to ensure that all parts of a product meet the EU RoHS Directive Requirements. Products sold worldwide must meet this requirement even though the directive itself is from the EU. With respect to this investigation, products sold in the United States must be compliant with the requirements of the EU RoHS Directive.

1680.3: 4.3.2.2: This required criterion requires all plastic parts over 25 grams to be marked with materials codes in accordance with requirements in the Television standard. 1680.3: 4.3.3.2: This optional criterion requires that information be provided on the product itself about the presence and location of all materials and components with special handling needs. Per the criterion text, this information cannot reference an external source.

1680.3: 4.8.2.2: 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 compostable, fiber based or recyclable materials. For more information pertaining to what evidence is acceptable to prove recyclability, see [EPEAT Clarification #27](#).

5. General Message to Subscribers

Provision of information for Verification Rounds: The IEEE 1680 standard and the EPEAT subscriber agreements require that Subscribers provide the information identified in Verification Requirements to prove the accuracy of their declarations within 30 days of EPEAT's request. Failure to provide that 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 also helps the Qualified Verifier know that s/he has a valid email address.

6. Looking Forward

Plans for Future Verification Activities: There are two Verification Rounds planned for 2014 for televisions. Investigations 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.

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 strictly according to policies and procedures described in the IEEE 1680 Standard and 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 database at the time the round begins.

In Level 1 verification investigations, Subscribers are required to provide detailed and accurate information to demonstrate their conformance to each criterion of the standard in a timely manner that demonstrates Conformance, such as supply chain management records. In Levels 2 and 3 investigations, EPEAT buys or borrows products without the Subscriber's knowledge, disassembles them, and conducts detailed analytical testing if needed.

Investigations are performed by expert technical contractors who 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. Verification activities conducted by the Product Verification Committee are done blind to the identity of the products and companies they are judging. The Committee makes a Conformance/Non-Conformance decision on each investigation, based 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.

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 recommends that Subscribers also examine their other registered products to determine if these 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 rating tier. If it is a required criterion, they must archive the product. If it is a required corporate criterion, all their products must be archived.