

**Green Electronics Council** 

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

# PLAN FOR VERIFICATION ROUND IE-2016-02

Imaging Equipment – IEEE 1680.2

June 2016

## I. PURPOSE AND CONTENTS OF THIS DOCUMENT

This document outlines the plan for a Verification Round of Investigations to be performed in accordance P15 Verification Procedure, this Verification Plan, and EPEAT scheme rules.

#### II. SELECTION OF CRITERIA AND PRODUCTS FOR VERIFICATION

Verification Round IE-2016-02 for the IEEE 1680.2<sup>™</sup> Standard for the Environment Assessment of Imaging Equipment will focus on investigation of 13 criteria. The Verification Round will investigate all verification requirements for the following 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/CDP 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 is intended to assure conformance for imaging equipment. This Round will involve lab evaluation of 2 randomly chosen imaging equipment products<sup>\*</sup>. The Round will include a maximum of 26 Level 2 and 3 investigations. In the event that a chosen product doesn't claim one or more of the optional criteria, the total number of investigations completed may be fewer than planned. In Level 2 and 3 investigations a lab chosen by the Conformity Assurance Body (CAB) acquires products without the Manufacturer's knowledge, disassembles them, and conducts detailed analytical testing, as needed.

CABs with active imaging equipment products and with Manufacturers whose products have not yet been involved in Level 2 and 3 investigations to date will be eligible in this Round. Each CAB will have lab testing completed on no more than 2 products. Each Manufacturer will have lab testing completed for no more

than 1 product. Products will be chosen from a list of active products from those Manufacturers claiming all 4 optional criteria targeted in this Round. If there are no products claiming all 4 optional criteria, then products will be selected from a list of products claiming the greatest number of optional criteria from the criteria subject to investigation in this Round.

The Investigations will be chosen as follows:

- The nine required criteria will be investigated for the chosen products.
- For the four optional criteria, each chosen product will be investigated for each optional criterion declared.

\* Note: In the event that a randomly chosen product costs more than \$1,500, the REGISTRY SERVICES will work with the CAB to determine how to verify the product. This may involve purchasing a subset of parts, a factory visit and / or choosing a different product.

## III. VERIFICATION PROCESSS

The Verification Round will proceed in accordance with current procedures, as outlined below.

A snapshot will be taken of the Registry. The registration status of the planned products will be confirmed. Products will be selected as per the Verification Round Plan.

- 1. This plan will be published on epeat.net.
- 2. The Green Electronics Council Registry Services Staff will instruct CABs to proceed with the purchase of the products to be evaluated.
- 3. After purchasing the products, each CAB will notify their Manufacturer that their product is being evaluated.
- 4. The CABs will have 60 days to acquire products and have all testing completed.
- 5. The CABs will provide an Investigation Report for each product to the Green Electronics Council Registry Services Staff. For each assigned investigation, the CAB / testing lab will recommend Conformance or Non-Conformance. In some instances a recommendation of Inconclusive may be made with appropriate evidence.
- 6. The Conformity Decision Panel will review the reports and determine conformity. The products and Manufacturers verified will not be disclosed to the Conformity Decision Panel, but will be known to the Registry Services / CAB staff and the testing labs. The intention is for the Conformity Decision Panel to be blind to the specific product and Manufacturer for which they are making conformity decisions. This information will only be provided to the Conformity Decision Panel after completion of the decision where Non-Conformance findings are published in the Outcomes Report. In the event of an appeal, a Manufacturer may CAB sent specific information to the Committee regarding a decision, and in that case, the Manufacturer and product may be revealed in order to resolve any issues.
- 7. The Manufacturers of the investigated products will be informed of the decision. For decisions of Non-Conformance, the Manufacturers are required to take corrective action within 14 calendar days to restore the accuracy of the Registry.

8. The Green Electronics Council Registry Services Staff will publish a "Verification Round Outcomes Report" identifying the Non-Conforming products and Manufacturers, as well as the action taken to restore the accuracy of the Registry.

## IV. CONFORMITY DECISION PANEL

The following individuals are the members of the Conformity Decision Panel:

- Libby Chaplin, CEO, Arcadian Solutions
- Patty Dillon, Dillon Environmental Associates
- Jack Geibig, President, Ecoform
- Robert Pfahl, Pfahl Consulting L.L.C.
- Annette Roesler, Ph.D., Independent Professional Chemist

#### V. CONFORMITY ASSURANCE BODIES AND AUDITORS

All investigations will be conducted through Conformity Assurance Bodies approved by the Green Electronics Council. The following Conformity Assurance Body may be involved in Investigations for this Verification Round:

• UL Environment

#### VI. VERIFICATION ROUND PLAN APPROVAL

The Conformity Decision Panel approved this Verification Round Plan by discussion and/or email on June 22, 2016.



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## VII. SUMMARY OF IE-2016-02 PLANNED INVESTIGATIONS

	Criterion		Verification Selection and Process	# Planned Investigations
1	4.1.1.1	Required – Compliance with provisions of European Union RoHS Directive	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 3 investigation.</li> </ul>	2
2	4.1.2.1	Optional – Further reduction of the use of EU RoHS Directive hazardous substances (cadmium)	<ul> <li>Products claiming this optional criterion will be investigated.</li> <li>Criterion verified using Level 3 investigation.</li> </ul>	Up to 2
3	4.1.4.1	Optional – Reduction of substances on the EU REACH Candidate List of SVHCs	<ul> <li>Products claiming this optional criterion will be investigated.</li> <li>Criterion verified using 3 investigation.</li> </ul>	Up to 2
4	4.1.6.1	Required – Reducing BFR/CFR/PVC content of external plastic casings	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 3 investigation.</li> </ul>	2
5	4.3.1.1	Required – Ease of disassembly of product	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
6	4.3.1.2	Optional – Ease of disassembly of consumer products	<ul> <li>Products claiming this optional criterion will be investigated.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	Up to 2

	Criterion		Verification Selection and Process	# Planned Investigations
7	4.3.2.1	Required – Use of single recyclable plastic type per plastic part	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
8	4.3.2.2	Required – Restriction on materials not compatible with reuse and recycling	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> <li>May also include Level 1 investigation if paint or coatings are found.</li> </ul>	2
9	4.3.2.3	Required – Manual separation and marking of plastics	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
10	4.8.1.1	Required – Elimination of intentionally added heavy metals in packaging	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
11	4.8.2.1	Required – Separable packing materials	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
12	4.8.2.2	Optional – Packaging 90% compostable/recyclable	<ul> <li>Products claiming this optional criterion will be investigated.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	Up to 2
13	4.8.2.3	Required – Plastics marked in packaging materials	<ul> <li>Each product chosen will be investigated for this required criterion.</li> <li>Criterion verified using Level 2 and 3 investigations.</li> </ul>	2
			Total	Up to 26