



OUTCOMES REPORT

EPEAT VERIFICATION ROUND PC-2015-01

1. Overview of Verification Round

This report provides the detailed results of EPEAT Verification Round PC-2015-01. This Round investigated randomly chosen products and criteria. All products currently active in the EPEAT Registry at the start of the Round and all criteria were eligible for investigation. First, products were selected randomly. Criteria were then selected randomly and assigned with consideration of the following:

- If a criterion was randomly selected and the product had been investigated against that criterion in the previous six months, that criterion was skipped and a new criterion randomly selected.
- If a criterion was randomly selected and the Participating Manufacturer had been investigated in the previous 12 months against that criterion and found to be conformant, that criterion was skipped and a new criterion selected for the product.
- No more than four investigations were performed for any one Manufacturer.

In total, 74 investigations (all Level 1) were completed, of which approximately 47% were for required criteria and 53% for optional criteria. These criteria are listed below, and the numbers of investigations performed per criterion are provided in Table 1 starting on page three of this report.

Required Criteria

- **4.1.1.1** – Compliance with provisions of European RoHS Directive
- **4.1.3.1** – Reporting on amount of mercury used in light sources
- **4.1.6.1** – Elimination of intentionally added SCCP flame retardants and plasticizers in certain applications
- **4.2.1.1** – Declaration of postconsumer recycled plastic content
- **4.2.2.1** – Declaration of renewable/biobased plastic materials content
- **4.2.3.1** – Declaration of product weight
- **4.3.1.1** – Identification of materials with special handling needs
- **4.3.1.2** – Elimination of paints or coatings that are not compatible with recycling or reuse
- **4.3.1.4** – Marking of plastic components
- **4.3.1.5** – Identification and removal of components containing hazardous materials
- **4.3.1.8** – Minimum 65% reusable/recyclable
- **4.4.1.1** – Availability of additional 3 year warranty or service agreement
- **4.6.1.1** – Provision of a product take-back service
- **4.7.2.1** – Self-certified environmental management system for design and manufacturing organizations
- **4.7.3.1** – Corporate report consistent with Performance Track or GRI
- **4.8.1.1** – Reduction/elimination of intentionally added toxics in packaging
- **4.8.3.1** – Declaration of recycled content

Optional Criteria

- **4.1.2.1** – Elimination of intentionally added cadmium
- **4.1.3.3** – Elimination of intentionally added mercury used in light sources
- **4.1.4.1** – Elimination of intentionally added lead in certain applications
- **4.1.5.1** – Elimination of intentionally added hexavalent chromium
- **4.1.6.2** – Large plastic parts free of certain flame retardants classified under European Council Directive 67/548/EEC
- **4.1.7.1** – Batteries free of lead, cadmium, and mercury
- **4.1.8.1** – Large plastic parts free of PVC
- **4.2.1.2** – Minimum content of postconsumer recycled plastic
- **4.3.1.6** – Reduced number of plastic material types
- **4.3.1.7** – Molded/glued in metal eliminated or removable
- **4.3.1.9** – Minimum 90% reusable/recyclable
- **4.3.2.1** – Manual separation of plastics
- **4.3.2.2** – Marking of plastics
- **4.4.2.2** – Modular design
- **4.4.3.1** – Availability of replacement parts
- **4.5.1.2** – Early adoption of new ENERGY STAR specification
- **4.5.2.1** – Renewable energy accessory available
- **4.6.1.2** – Auditing of recycling vendors
- **4.7.2.2** – Third-party certified environmental management system for design and manufacturing organizations
- **4.8.2.2** – Packaging 90% recyclable and plastics labeled
- **4.8.3.2** – Minimum postconsumer content guidelines

Using a random selection process encourages unbiased representation of the Registry to be examined in a single Verification Round, without partiality or preference in the selection process. In this regard, Round PC-2015-01 touched the following areas of the EPEAT Registry:

- 59% of the 44 Manufacturers that had products active in the Registry at the beginning of the Round (26 Manufacturers investigated);
- 73% of the 51 criteria in IEEE 1680.1-2009 (37 criteria investigated); and
- 53% of the 43 countries in the Registry (23 countries investigated).

Countries Investigated in PC-2015-01

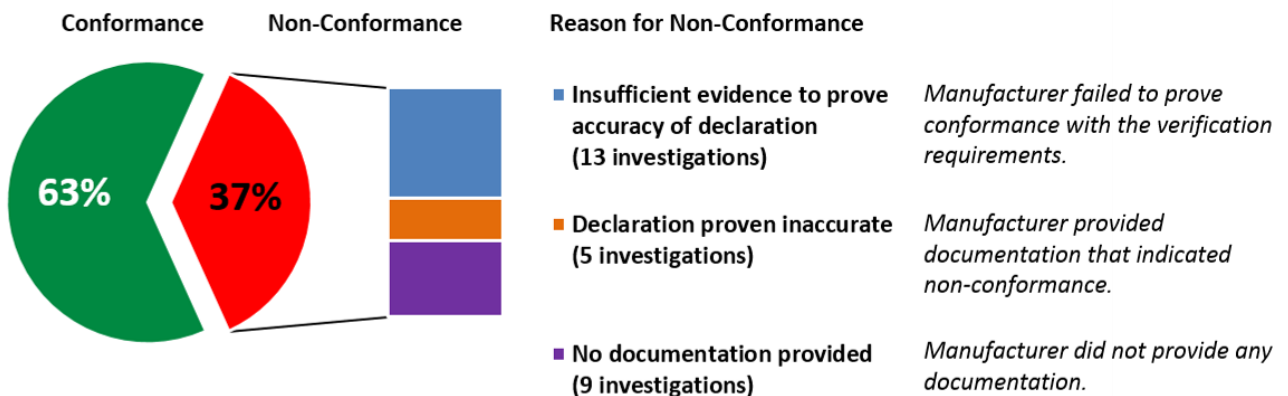
Austria	Japan
Brazil	Mexico
Bulgaria	Netherlands
Canada	Norway
China	Poland
Finland	Romania
France	Spain
Germany	Sweden
Hungary	Switzerland
India	Taiwan
Italy	United Kingdom
	United States

2. Summary of Outcomes

Highlights from this Verification Round are:

- **74** investigations completed
- **47** decisions of Conformance
- **27** decisions of Non-Conformance *Reasons identified in Figure 1 below*
- **1** investigation cancelled *An investigation for criterion 4.1.6.2 was cancelled due to difficulty in defining acceptable evidence for conformance to the criterion as written.*

FIGURE 1: Overall Conformance Status for PC-2015-01
(as percentages of 74 total investigations completed)



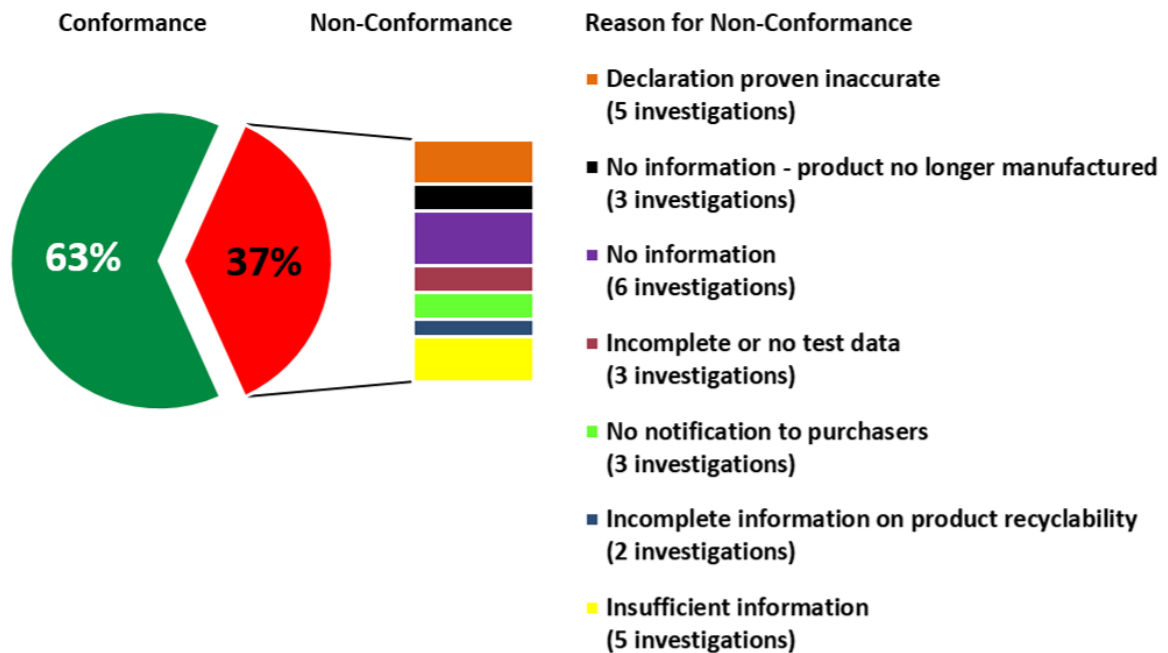
Below, Table 1 summarizes the number of investigations performed and Non-Conformances by criterion. Due to the low number of investigations performed per criterion, the Non-Conformance rates per criterion are not provided. Twenty-three of the 37 criteria investigated had at least one finding of Non-Conformance.

TABLE 1: Summary of Non-Conformance Findings				
Criterion	Description		Completed Investigations	Non-Conformances
4.1.1.1	Required	Compliance with provisions of European RoHS Directive	2	1
4.1.2.1	Optional	Elimination of intentionally added cadmium	2	1
4.1.3.1	Required	Reporting on amount of mercury used in light sources	1	0
4.1.3.3	Optional	Elimination of intentionally added mercury used in light sources	1	0
4.1.4.1	Optional	Elimination of intentionally added lead in certain applications	2	1
4.1.5.1	Optional	Elimination of intentionally added hexavalent chromium	3	1
4.1.6.1	Required	Elimination of intentionally added SCCP flame retardants and plasticizers in certain applications	3	0
4.1.6.2	Optional	Large plastic parts free of certain flame retardants classified under European Council Directive 67/548/EEC	Cancelled (explanation in Section 2, page 2)	
4.1.7.1	Optional	Optional – Batteries free of lead, cadmium, and mercury	1	1
4.1.8.1	Optional	Large plastic parts free of PVC	3	1
4.2.1.1	Required	Declaration of postconsumer recycled plastic content	2	1
4.2.1.2	Optional	Minimum content of postconsumer recycled plastic	1	0
4.2.2.1	Required	Declaration of renewable/biobased plastic materials content	3	0
4.2.3.1	Required	Declaration of product weight	3	0
4.3.1.1	Required	Identification of materials with special handling needs	1	0
4.3.1.2	Required	Elimination of paints or coatings that are not compatible with recycling or reuse	2	1
4.3.1.4	Required	Marking of plastic components	2	0
4.3.1.5	Required	Identification and removal of components containing hazardous materials	1	1
4.3.1.6	Optional	Reduced number of plastic material types	2	0
4.3.1.7	Optional	Molded/glued in metal eliminated or removable	1	1
4.3.1.8	Required	Minimum 65% reusable/recyclable	2	1
4.3.1.9	Optional	Minimum 90% reusable/recyclable	4	2
4.3.2.1	Optional	Manual separation of plastics	2	1
4.3.2.2	Optional	Marking of plastics	4	2
4.4.1.1	Required	Availability of additional 3 year warranty or service agreement	1	0
4.4.2.2	Optional	Modular design	1	0
4.4.3.1	Optional	Availability of replacement parts	5	2
4.5.1.2	Optional	Early adoption of new ENERGY STAR specification	1	1
4.5.2.1	Optional	Renewable energy accessory available	1	1
4.6.1.1	Required	Provision of a product take-back service	2	1

TABLE 1: Summary of Non-Conformance Findings				
Criterion	Description		Completed Investigations	Non-Conformances
4.6.1.2	Optional	Auditing of recycling vendors	1	1
4.7.2.1	Required	Self-certified environmental management system for design and manufacturing organizations	3	0
4.7.2.2	Optional	Third-party certified environmental management system for design and manufacturing organizations	1	1
4.7.3.1	Optional	Corporate consistent with Performance Track or GRI	2	0
4.8.1.1	Required	Reduction/elimination of intentionally added toxics in packaging	3	0
4.8.2.2	Optional	Packaging 90% recyclable and plastics labeled	1	1
4.8.3.1	Required	Declaration of recycled content	2	2
4.8.3.2	Optional	Minimum postconsumer content guidelines	2	1

Looking at the Non-Conformances through a different lens reveals the following breakdown (see Figure 2).

FIGURE 2: Further Breakdown of Non-Conformances for PC-2015-01
(as percentages of 74 total investigations completed)



- Approximately 18.5% of the total Non-Conformances (five of the 27 investigations) resulted from the declaration in the Registry being proven inaccurate. These investigations addressed four criteria – one for 4.2.1.1, one for 4.3.2.2, one for 4.5.2.1, and two for 4.8.3.1. Two of these criteria require a declaration of recycled content in either the product or the packaging (4.2.1.1 and 4.8.3.1).

- For approximately 11% of the Non-Conformances (three investigations), the Manufacturer indicated the product was no longer being manufactured and did not provide any information.
- For approximately 22.5% of the Non-Conformances (six investigations), Manufacturers did not provide any information.
- Approximately 48% of the total Non-Conformances (13 investigations) resulted from insufficient information being provided during the investigative phase. (For further insights, see Section 3 on Key Lessons.)
 - Three Non-Conformances (approximately 11% of all Non-Conformances) were a result of either no test data or incomplete test data being provided. These investigations addressed criteria 4.1.4.1, 4.1.5.1 and 4.1.7.1.
 - Three Non-Conformances (approximately 11% of all Non-Conformances) were a result of no notification being provided to purchasers. Two of these investigations were for criterion 4.4.3.1, and one was for criterion 4.6.1.1.
 - Two Non-Conformances (approximately 7.5% of all Non-Conformances) were a result of incomplete information being provided to support the percentage recyclable/reusable and demonstrated recycling technologies for criteria 4.3.1.8 and 4.3.1.9.
 - For the remaining five Non-Conformances, Manufacturers provided documentation related to the criterion but further information was needed to assess conformance, thereby resulting in Non-Conformances.
- Of note is that for almost 30% of the Non-Conformances (8 investigations), Manufacturers were able to provide additional information during the Corrective Action Phase, bringing the products into conformance with the criteria as originally declared.

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:

- **8 products** Additional data provided by Manufacturers, bringing the products into Conformance with the criterion as originally declared.
- **1 product** Non-conformant declaration corrected by Manufacturer.
- **5 products** Non-conformant declarations unselected by Manufacturers.
- **6 products** Products archived by Manufacturer, three of which were archived before the end of the 30-day investigative period.
- **7 products** Products archived by EPEAT.

3. Key Lessons

Listed below are key lessons from this Verification Round that may be useful for future Rounds. Additionally, Manufacturers 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.

Declarations of recycled content (criteria 4.2.1.1 and 4.8.3.1):

Criteria 4.2.1.1 and 4.8.3.1 require specific declarations be made in the Registry – the percentage of post-consumer recycled content in the product for 4.2.1.1, and the percentage of recycled content in packaging materials for 4.8.3.1. Calculations and material supplier letters must support the percentages declared. Manufacturers are encouraged not to over-estimate these percentages, and to be prepared with supporting calculations and letters.

Provision of analytical or empirical test data (criteria 4.1.4.1, 4.1.5.1 and 4.1.7.1):

The verification requirements for criteria in Section 4.1 of IEEE 1680.1-2009 call for “*Evidence of certification from component manufacturers that is based on either empirical data demonstrating compliance or analytical test data demonstrating compliance.*”

Interpretation 1-6 indicates: “*Empirical data may include supplier assurance of conformance, and must include component sampling or data collection that is evaluated within a quality control system that demonstrates conformance.*” Therefore, whether empirical or analytical, results from laboratory testing are required for these criteria. Manufacturers are encouraged to be prepared with this information for Verification Rounds.

Declarations regarding the percentage recyclable/reusable (criteria 4.3.1.8 and 4.3.1.9):

Criteria 4.3.1.8 and 4.3.1.9 require manufacturers to provide information documenting and supporting the percentage recyclable/reusable for the product. While this information does not necessarily have to be the actual calculations used to determine the percentage, Manufacturers should ensure they are prepared to support:

- The inclusion of external power cords, external power adapters and input cables for displays;
- The percentage being based on the total product weight (including the items above); and
- The recycling technologies used for all components and materials, and how these are “demonstrated”.

Manufacturers are also encouraged to revisit the Conformity Assurance Protocols to understand the type of information sought by the Product Verification Committee to determine conformance.

Criteria requiring a notification to purchasers/users (criteria 4.4.3.1 and 4.6.1.1):

Several criteria in the 1680.1 standard oblige Manufacturers to notify purchasers/users about the availability of specific services. For criterion 4.4.3.1, purchasers must be notified that replacement parts are available for five years after end of production of the product. For criterion 4.6.1.1, purchasers must be notified of the existence and participation method for product take-back and recycling. Notification to purchasers can take many forms, including but not limited to information on a Manufacturer’s website or in a user’s manual. Whatever the format, Manufacturers are encouraged to ensure the appropriate notifications are being provided to purchasers/users for these criteria.

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 Manufacturer is no longer actively working with suppliers on maintaining information related to conformance, the Manufacturer is strongly encouraged to archive this product. Please note that archived products still appear in the Registry (listed under archived products for each Manufacturer) should purchasers or other stakeholders want to access details regarding the product's previously active registration.

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 1680.1 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 Qualified Verifiers:

When contacted regarding participation in a Verification Round, Manufacturers should 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.

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 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

Participating Manufacturer	Product	Country	Product Type	Criterion	Required or Optional	Criterion Description	NC Finding Description	Corrective Action Taken
Ace Computers	Vision XH97SS	United States	Desktops	4.3.1.9	O	Minimum 90% reusable/recyclable	No documentation provided	Manufacturer undeclared the Non-Conformant criterion
Acer Inc.	B193L AJObmdh	United States	Displays	4.6.1.2	O	Auditing of recycling vendors	Insufficient evidence to prove accuracy of declaration	Manufacturer archived the product (prior to end of Round)
ASUSTeK Computer Inc.	P45V	Taiwan	Notebooks	4.3.1.2	R	Elimination of paints or coatings that are not compatible with recycling or reuse	No documentation provided	Manufacturer provided evidence demonstrating Conformance
CIARA-TECH	DISCOVERY Q77M-DA	Canada	Desktops	4.1.5.1	O	Elimination of intentionally added hexavalent chromium	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
Corporativo Lanix, S.A. de C.V	LX900T	Mexico	Displays	4.3.2.2	O	Marking of plastics	Insufficient evidence to prove accuracy of declaration	Manufacturer undeclared the Non-Conformant criterion
CTL Corporation	IP2362	United States	Displays	4.8.3.1	R	Declaration of recycled content	Declaration proven inaccurate	Manufacturer archived the product
Dell, Inc.	Dell Precision T5610	China	Workstations	4.8.2.2	O	Packaging 90% recyclable and plastics labeled	No documentation provided	Manufacturer archived the product
Iiyama corporation	ProLite B2480HS	France	Displays	4.4.3.1	O	Availability of replacement parts	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
Lenovo	ThinkCentre M83 Tower, Lenovo 10AG, Lenovo 10BE, Lenovo 10AK, Lenovo 10AL	Taiwan	Desktops	4.8.3.1	R	Declaration of recycled content	Declaration proven inaccurate	Manufacturer corrected declaration in EPEAT Registry
	ThinkCentre M93z	Austria	Integrated Desktop Computers	4.5.2.1	O	Renewable energy accessory available	Declaration proven inaccurate	Manufacturer undeclared the Non-Conformant criterion
	ThinkPad E455	Finland	Notebooks	4.3.2.2	O	Marking of plastics	Declaration proven inaccurate	Manufacturer provided evidence demonstrating Conformance

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
MMD-Monitors & Displays Taiwan Ltd.	166V3L	Switzerland	Displays	4.7.2.2	O	Third-party certified environmental management system for design and manufacturing organizations	Insufficient evidence to prove accuracy of declaration	Manufacturer undeclared the Non-Conformant criterion
	273P3Q	Hungary	Displays	4.2.1.1	R	Declaration of postconsumer recycled plastic content	Declaration proven inaccurate	EPEAT archived the product
	229C4Q	Italy	Displays	4.3.1.9	O	Minimum 90% reusable/recyclable	Insufficient evidence to prove accuracy of declaration	EPEAT archived the product
NEC Display Solutions, Inc.	MultiSync EX231W	Switzerland	Displays	4.1.2.1	O	Elimination of intentionally added cadmium	No documentation provided	EPEAT archived the product
	EA232WMI - White	Sweden	Displays	4.3.1.5	R	Identification and removal of components containing hazardous materials	No documentation provided	EPEAT archived the product
	EA224WMI	Finland	Displays	4.3.1.7	O	Molded/glued in metal eliminated or removable	No documentation provided	EPEAT archived the product
	EA234WMI-WH	Romania	Displays	4.3.1.8	R	Minimum 65% reusable/recyclable	Insufficient evidence to prove accuracy of declaration	EPEAT archived the product
Panasonic	Toughbook 19	United States	Notebooks	4.3.2.1	O	Manual separation of plastics	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
Samsung Electronics	S24C300HL	Norway	Displays	4.8.3.2	O	Minimum postconsumer content guidelines	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
Toshiba	Portege R830 PR321S	Brazil	Notebooks	4.5.1.2	O	Early adoption of new ENERGY STAR specification	No documentation provided	Manufacturer archived the product
	Satellite C70-A PSCE2C	Canada	Notebooks	4.4.3.1	O	Availability of replacement parts	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
	Portege R30-A PT341E	Spain	Notebooks	4.1.7.1	O	Batteries free of lead, cadmium, and mercury	Insufficient evidence to prove accuracy of declaration	Manufacturer undeclared the Non-Conformant criterion
TPV Technology Limited	E2450SWD	Germany	Displays	4.6.1.1	R	Provision of product take-back service	Insufficient evidence to prove accuracy of declaration	Manufacturer provided evidence demonstrating Conformance
	E2260SD	United States	Displays	4.1.4.1	O	Elimination of intentionally added lead in certain applications	Insufficient evidence to prove accuracy of declaration	EPEAT archived the product

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
ViewSonic Corporation	VA2248m-LED;VA2248-LED/VS13818	Canada	Displays	4.1.8.1	O	Large plastic parts free of PVC	No documentation provided	Manufacturer archived the product (prior to end of Round)
	VA1912m-LED/VS14758	United States	Displays	4.1.1.1	R	Compliance with provisions of European RoHS Directive	No documentation provided	Manufacturer archived the product (prior to end of Round)

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 “Qualified Verifiers” working for an EPEAT approved Product Verification Entity. 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 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 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 Manufacturer. The Manufacturer is required to provide detailed and accurate information in a timely manner.
- In Level 2 investigations, EPEAT 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, EPEAT 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. EPEAT 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.