



OUTCOMES REPORT

EPEAT VERIFICATION ROUND FOUR

1. Summary of Verification Round Four

This report provides the detailed results of the fourth full round of EPEAT verifications.

Background – To assure the credibility of the EPEAT registry, verification of the claims of the participating manufacturers (called “Subscribers”) must be 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 have no forewarning that their products will be verified and verification proceeds against the declarations as they are in the database at the time the round begins.

In level one verification investigations, subscribers are required to provide detailed and accurate information in a timely manner that demonstrates conformance, such as supply chain management records. In level two and three investigations EPEAT buys products without the manufacturer’s knowledge and disassembles them, and possibly conducts detailed analytical testing if needed. Investigations are performed by technical expert contractors who are free of conflicts of interest, and their recommended decisions are reviewed and finalized by a 3-person panel of independent technical experts (called the Product Verification Committee or PVC) who are also contractors free of conflicts of interest and are blind to the identity of the products and companies they are judging. This panel makes a conformance/non-conformance decision on each investigation. A serious consequence of receiving a non-conformance is that it is published publicly in this report, for purchasers, competitors, and others to see.

Subscribers must correct findings of non-conformance, either by bringing the product into conformance or by un-declaring the criterion until conformance is recovered, and they must do so for all products that are similarly incorrectly declared, not only the product(s) that were investigated. If they correct the non-conformance by un-declaring the criterion and the criterion is an optional criterion, they lose a 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, all their products must be archived.

1.1. Round Four Details

Round Four was the first round to rely strongly on the Conformity Assessment Protocols, which had been finalized and posted on the web well in advance of the initiation of the round.

Due to the rapid growth on the EPEAT Registry of the number of subscribers, and the fact that several of those subscribers had not been previously verified, Round Four focused on the following:

- Products registered by subscribers who had not been subject to verification previously, or had not been subject to as many investigations as other subscribers.
- Certain difficult-to-meet criteria. Specifically selected for level one investigations were:
 - Optional criterion 4.2.1.2 – minimum content of post-consumer recycled plastic. There has been expressed concern about how subscribers are calculating the recycled content of products.

- Optional criterion 4.4.3.1 – availability of replacement parts. This is in essence a corporate service and conformance/non-conformance to this criterion for one product would indicate conformance/non-conformance for many other products. Many products are declared to this criterion.
- Some other aspects of manufacturers’ declarations that had been problematic, specifically the use of the exceptions field. The exceptions field is used to: “report such special configurations that do not conform to the Standard” (IEEE standard 1680 clause 1.3). When subscribers declare an exception, it is critical that it definitively describe the characteristics of conforming (or non-conforming) product configurations, that the subscriber’s product promotions conform with that declaration, and that the representation of the product in the market is consistent. These were level two investigations because the investigation compares the declaration to available information in the market.

As a consequence, like previous rounds, Round Four involves focused investigation based on PVC priorities, and are not statistically representative of a random sampling of the full Registry. In future rounds the PVC may chose to conduct a statistical random sampling of the products and subscribers on the Registry.

1.2. Round Four Outcomes

Following are the highlights of Round Four.

- 40 investigations were launched
 - One investigation was dropped because the subscriber had gone out of business.
 - One investigation was dropped due to a staff error that resulted in a miscommunication with the subscriber and a compromised investigation.
- Of 38 completed investigations:
 - 9 investigations addressed the use of the exceptions field
 - 9 investigations addressed optional criterion 4.2.1.2 – Minimum content of postconsumer recycled plastic
 - 19 investigations addressed optional criterion 4.4.3.1 – Availability of replacement parts
 - One special investigation was conducted of 4.5.1.1 – Energy Star, as a response to the identification of a potential problem by a stakeholder.
- 31 investigations resulted in findings of conformance.
- There were 7 Initial Decisions of Non-conformance, all of optional criteria. See the list of criteria for which Non-conformances were identified in Table 1 and the details and identification of subscribers and products in Table 2.
 - Three initial decisions of Non-conformance determined that it was an administrative error, specifically an unintended declaration to a criterion. That error was quickly corrected by un-declaring that criterion. This resulted in a Final Decision of Conformance.
 - Three initial decisions of Non-conformance resulted in the subscriber altering their program to bring it into conformance. In these cases the investigation found that a spare parts supply program did not meet the standard, and the program was modified

to meet the standard, bringing the products into conformance.

- One initial decision of Non-conformance was not corrected by the subscriber, resulting in a Final Decision of Non-Conformance. This affected the subscriber's spare parts supply program mentioned above. In this case the subscriber was required to undeclare the criterion. Since the subscriber's parts supply program likely relates to all their products that are declared to this criterion, a total of 4 products were affected.
- The investigations of 4.2.1.2 regarding the calculation of the percentage of recycled content had broad implications that are not directly represented in these numbers. Due to the nature of the investigations only two Non-conformances were found, which were administrative errors. However, manufacturers were directed to recalculate the recycled content for all their products, and several other products lost points, including some that dropped a tier. This has also resulted in increased surveillance of declarations to the recycled content criteria. See the discussion of this criterion in the next section.
- The overall impact on the Registry was:
 - 6 products lost points
 - 2 criteria were undeclared by the subscriber
 - One investigation resulted in 4 products of that subscriber having a criterion undeclared
 - 1 product dropped from Silver to Bronze.

1.3. Key Lessons of Round Four

1. **Exceptions field** The use of the exceptions field was found to be sound in 10 investigations. No discrepancies were found between how exceptions are declared and the representation of the product to the market.
2. **Recycled content** Significant problems were found in the way that subscribers are declaring to the recycled content criteria: 4.2.1.2 – 10% post-consumer recycled plastic and 4.2.1.3 – 25% post-consumer recycled plastic. All subscribers who declared to these criteria were verified. The 10% criterion was verified, and only two administrative Non-conformances were found. However, the method of calculation was checked in all cases and all the subscribers who had also declared to the 25% criterion ended up undeclaring their products to that criterion. (Others have declared to it since, and may be subject to future verification.)

The cause of the problem was that subscribers were not counting, as is clearly required in the standard, all plastics in the product, with the exception of PCBs. In other words, they did not add the full weight of all plastics (except PCBs) into the denominator. This resulted in a higher overall percentage of recycled plastic. The problem especially evidences in displays, including notebooks.

One subscriber remains skeptical that even 10% is practically achievable for displays, but the calculations have been checked and seem to be in order. However, further verification to refine these calculations may be advisable.

It has been proposed that the criteria be changed in the 1680.1 standard update to exclude parts that are truly impractical to make with recycled content, either due to their engineering performance characteristics or the availability of recycled resins.

Subscribers were very cooperative in making the corrections and in undeclaring to the criterion when necessary.

Prior to the start of the round a spreadsheet for calculation of recycled (and bio-based) content had been added to the Conformity Assessment Protocols. The fact that this criterion was selected for verification and the communications associated with this round should help prevent such future errors. The spreadsheet lists the parts likely to be found in display products and provides the applicable calculation formulas.

Messages to Subscribers

1. For all products that declare to contain post-consumer recycled plastic, or bio-based materials, utilize the spreadsheet in the conformity assessment protocols to determine the percentage.
 2. Be especially cautious when declaring to 4.2.1.3 – 25% content, because this is very difficult to achieve for display devices, when considering all plastics, and will raise questions for verification.
 3. Attend to the 1680.1 standard update and the revision of this criterion.
3. **Replacement parts** The 4.4.3.1 criterion requires two separate things:
1. Spare parts and/or compatible replacement parts shall be available five years after end of production of the registered product.
 2. Information on how to obtain replacement parts shall be provided to users.

Most subscribers in these verifications delivered the information about spare parts availability through their notification of product warranty. A result was that in some cases the part availability was not clearly distinguished from whether the user purchased an extended warranty. The requirement is that purchasers must be notified of the availability of spare parts, and the spare parts must in fact be available, regardless of the purchase of a warranty.

In some cases the purchaser was not clearly notified of the spare parts availability.

In some cases the subscriber either did not have a spare parts management system, or they did not adequately assure that a supply of “replacement parts shall be available five years after end of production”.

Messages to Subscribers

- Spare parts availability and warranty must be separate in that it must not be necessary to purchase an extended warranty in order to be notified of or provided spare parts.
- It is essential that the commitment to, and establishment of a system for, providing spare parts according to the criterion be documented.
- 4.4.3.1 is somewhat of a unique criterion in that it is not a corporate criterion, however it is a requirement for a corporate program or service that will apply to many or all products. When verified, the other products of the subscriber that declare to this criterion will be, in essence, verified at the same time. Corrective actions will therefore be requested for all products declared to this criterion by the Subscriber..

Some potential improvements of the standard:

1. The criterion should specify that ‘user notification’ should notify the users of 5-year spare parts availability.
2. The criterion should direct subscribers to project the parts most likely to fail and assure an adequate supply based on failure-rate estimation.

1.4. Looking Forward

1. ***Plans for Future Verification Activities:*** In 2010 the goal is to conduct 6 rounds. Essentially one round will begin as the previous ends.
2. ***Future Verification Objectives Based on Findings of Round 4***
 - 4.2.1.2 – 10% recycled content and 4.2.1.3 – 25% recycled content must be watched carefully due to the complexity of calculating the percentage in a product. Achieving 4.2.1.3 for display products is questionable and any declarations to this criterion should be considered for verification.
3. ***Conformity Assessment Protocols:*** This and all future rounds will be conducted according the Conformity Assessment Protocols posted on www.epeat.net.
4. ***Conformance and Verification Training Workshop:*** EPEAT staff has developed and intends to deliver a training workshop on EPEAT/IEEE 1680 Conformance and Verification throughout 2010 and beyond. This workshop, based on Conformity Assessment Protocols, will cover questions of conformance assurance for declaration and demonstration of conformance for verification. The intended audiences are subscribers, potential future Verifiers, individuals who wish to provide conformity consulting services to subscribers, and others. This will be an in depth examination of how to assure conformance for all criteria and how verification is performed.

1.5. Investigation Tables

**TABLE 1
Criteria Involving Non-Conformance Findings**

Criterion		# of Initial NCs	Total # of Invstgs
	Exceptions Field	0	9
4.2.1.2	Optional–Minimum content of postconsumer recycled plastic	2	9
4.4.3.1	Optional–Availability of replacement parts	4	19
4.5.1.1	Required–Energy Star	1	1
Total		7	38

TABLE 2
Initial Non-Conformance Findings
Showing Corrective Actions Taken and Outcomes

Subscriber	Product	Criterion		Description of Initial NC Finding	Corrective Actions Taken and Outcomes	Final Decision
Sony	VGNBZ560N24	4.2.1.2	10% recycled content	Administrative error	Undeclared criterion.	C
NCS	RNM300	4.2.1.2	10% recycled content	Administrative error	Undeclared criterion & checked others.	C
Howard Technology	HowGreen B945MLB-E	4.4.3.1	Spare parts availability	Spare parts program did not meet the terms of the criterion	Evidence provided, but found inadequate. Spare parts program did not apply to all sales regardless of purchase of warranty.	NC
NCS	Atlas 5200A	4.4.3.1	Spare parts availability	Spare parts program did not meet the terms of the criterion	Archived product. Corrected same problem for all products through revision of website.	C
TPV	AOC 2436Vw	4.4.3.1	Spare parts availability	Spare parts program did not meet the terms of the criterion	Evidence was provided of changes to the service and, once the web site had been modified, found adequate to recommend final Conformance,	C
Arquimedes	B N01	4.4.3.1	Spare parts availability	Spare parts program did not meet the terms of the criterion	Evidence was provided of changes to the service and found adequate to recommend final Conformance.	C
Dell	OptiPlex 360, Optiplex 360n Desktop	4.5.1.1	Energy Star	Administrative error	Product removed from Registry.	C

Explanation of table 2 – The findings are based on the product declaration on the Registry when the round is begun. Nothing prevents subscribers from changing their declaration or even removing the product during the round, but verification decisions reference the declaration as it stood when the round began. When a declaration is found to be in Non-conformance the subscriber is required to take corrective action to return their declaration to conformance. They may un-declare the non-conforming criterion or may change the product to bring it into conformance with the declaration. A Final Decision of Conformance is rendered in that case, however, the Initial Non-conformance Finding is still recorded.

Product archiving – If the Non-conformance is not corrected by a given date, the product is archived by EPEAT staff. If the declaration or product is later changed to resolve the Non-conformance, the product can be reactivated.

EPEAT policy is that the subscriber, not EPEAT staff, performs edits on product declarations by changing a criterion declaration, even when non-conformances must be corrected. If such edits are not performed by the deadline, EPEAT staff archive the product.