



**EPEAT Clarification #28**

**Demonstration of conformance to Criteria 4.1.4.1, 4.1.6.1, 4.1.6.2, 4.1.6.3 (IE) & 4.1.5.1, 4.1.7.1, 4.1.7.2, 4.1.7.3 (TV)**

**This Clarification applies to the following IEEE Standards and criteria:**

**Applicable Standards:**

- IEEE 1680.1 – Computers and Displays
- IEEE 1680.2 – Imaging Equipment
- IEEE 1680.3 – Televisions

**Applicable Criteria:**

- 4.1.4.1, 4.1.6.1, 4.1.6.2, 4.1.6.3
- 4.1.5.1, 4.1.7.1, 4.1.7.2, 4.1.7.3

**CDP Determination:**

It is the responsibility of Manufacturers to develop and deploy an effective CAS to ensure that the product and its components conform to the requirements specified in criteria 4.1.4.1, 4.1.6.1, 4.1.6.2, and 4.1.6.3 for 1680.2 and 4.1.5.1, 4.1.7.1, 4.1.7.2, and 4.1.7.3 for 1680.3.

Regarding criteria 4.1.4.1 from 1680.2 and 4.1.5.1 from 1680.3, the CDP already determined these criteria are optional and require that “the manufacturer shall demonstrate absence (less than 0.1% by weight in the product) of substances on the Candidate List of SVHC,” the CAS must be accompanied by analytical test evidence to demonstrate conformance to these criteria. The information provided must cover all product-related materials and include evidence of whether, or not, REACH SVHC substances are present.

Additionally, criteria 4.1.6.1, 4.1.6.2 and 4.1.6.3 from 1680.2 and 4.1.7.1, 4.1.7.2, and 4.1.7.3 from 1680.3 require that “all [applicable components] shall contain no more than 0.1% by weight bromine and 0.1% by weight of chlorine attributable to BFRs and CFRs”. The CDP has determined that this requirement is similar to the requirements for the other criteria and therefore, the CAS must also be accompanied by analytical test evidence to demonstrate conformance to these criteria. The information provided must cover all product-related materials and include evidence of whether, or not, bromine and chlorine attributable to BFRs and CFRs are present.

Analytical testing means: performing risk-based screening procedures (e. g. by XRF, ICP, Headspace GC/MS and liquid extraction GC/MS) in order to exclude the presence of the restricted materials. If these substances are found to be present they have to be quantified. Analytical testing may target materials or components; for example, materials or components at higher risk of containing any restricted materials or that comprise a larger percentage by weight of the product. This testing should be done by chemists who are competent to test REACH SVHC or bromine and chlorine or by an accredited lab.

**Background information:**

Subscribers requested clarification on whether analytical testing for REACH SVHCs is required to demonstrate conformance to this criteria, and if testing is required, must all SVHCs be analyzed?

This criterion specifically states that “the manufacturer shall demonstrate absence (less than 0.1% by weight in the product) of substances on the Candidate List of SVHC.” Further, the verification requirements include “documentation of a conformance assurance system that demonstrates conformity to this criterion through effective control of the supply chain.” A CAS, as defined in the standard, is a process to ensure conformity through control of the supply chain, and includes a “check” to demonstrate how conformance is assured.

This document was revised in September 2016 because during regular verification the CDP determined that 4.1.6.1, 4.1.6.2, and 4.1.6.3 for 1680.2 and 4.1.7.1, 4.1.7.2, and 4.1.7.3 for 1680.3 used similar language to the REACH related criteria for Imaging Equipment and TVs. Therefore, in order to be consistent, the above criteria were added to the clarification to require analytical testing as part of the CAS for those criteria.

**Change History:**

Original approved by the CDP, published, and effective on 12/16/13.
Version 2 approved by the CDP, published and effective on 11/11/16