IPC Comments on Proposed Standard - NSF 426 Environmental Leadership Standard for Servers


All comments submitted can be found at: http://standards.nsf.org/apps/group_public/document.php?document_id=27674

General comment
1. It is disingenuous for the NSF to ballot, and subsequently publish, this draft standard given the on-going negotiations regarding duplicative standards. The NSF draft standard is clearly a duplicative effort to the IEEE 1680.4 process and is being run in violation of ANSI principles. The NSF is fully aware of the IEEE effort as both organizations have been involved in mediation discussions with ANSI. Therefore, ballot and subsequent publication of this standard would be a blatant disregard for ANSI principles.

   IPC is concerned that NSF does not have the experience, expertise and understanding of the target products necessary to develop a standard of this type. It appears that the criteria in the NSF draft standard do not contain verification requirements. We believe that the standard cannot be adequately and fairly reviewed in the absence of verification requirements that have been vetted by all stakeholders to assure consistency for manufacturers and auditors. In particular, it is not clear how criteria related to conformity with a law or directive, or for substance content (such as RoHS compliance) will be validated. We believe that IEEE, having experience with technical and sustainability standards for the electronics industry, is the preferred SDO for this type of effort.

2. Although the committee is balanced per NSF definitions, there has been very little industry participation in the development of this standard. I am concerned that only one large server manufacturer is represented and very few component manufacturers are represented. On the other side, NGOs and green consulting groups are over represented. Thus, the standard does not truly reflect consensus among all interested parties.

Section 3.45 definition of Printed Circuit Board
Suggested changes underlined/strikethrough:
A thin board made of fiberglass, composite epoxy, or other laminate material with conductive pathways etched or "printed" onto the board, with the purpose of or to be used for the connection of connecting different components on the board, such as transistors, resistors, and integrated circuits.

The added language clarifies that the printed circuit board does not include components.

Section 6 Management of Substances
Prior to restricting or banning a substance, an alternatives assessment should be conducted in order to ensure the replacement substance is, in fact, better for the environment. Electronics manufacturers use
specific materials because of their unique energy efficiency, safety or performance characteristics. The decision to prohibit a substance should not be undertaken lightly. Commitment of scarce societal resources should instead be guided by the best available science. Otherwise resources will be wasted and the environment and human health will suffer as resources are squandered pursuing goals that do not provide an environmental or health improvement over the status quo. Elimination of specific substances requires a great deal of research and development of alternative substances, requiring the investment of time and resources by electronics manufacturers. A voluntary standard should not encourage regrettable substitution by requiring the removal of certain substances without first requiring an alternatives assessment.

Section 6.1.1 Conformance with EU RoHS Directive
1. Delete this criteria or require an alternatives assessment (AA) for the six substances restricted under the RoHS Directive to ensure environmental benefit. As a prerequisite criteria, if it is met it should show a proven increase in environment. The environmental benefit of the RoHS Directive is questionable, specifically regarding the restriction of lead in electronics. The U.S. EPA conducted a lead-free solder study (http://www2.epa.gov/saferchoice/life-cycle-assessment-lead-free-solder-electronics) that evaluated the environmental impacts of tin-lead solder versus lead-free alternative solders. The study found that the increased energy use associated with the higher operating temperatures required for manufacturing lead-free soldered electronics would cause higher air pollution, acid rain, stream eutrophication and global warming impacts than tin-lead soldered electronics. EPA’s study serves as an important reminder that there are environmental trade-offs when substituting one substance for another. This criteria takes for granted that following the RoHS Directive equates an environmental benefit.

2. Including language that states the standard will be automatically updated when the regulation is updated removes all control over criteria tied to that regulation. This text should be deleted.

6.1.3 Inventory of declarable substances
1. This criteria should be deleted as it does not provide an environmental benefit. As a prerequisite criteria, if this criteria is met it should show a proven increase in environment benefit. Keeping an inventory of substances in a product is not correlated with an environmental benefit.

2. The criteria contains an additional requirement to have an “effective supply chain management process” to maintain and manage the data and requires the manufacturer to provide document on the processes used to collect, manage and keep data current. According the scope in Section 1.2 the “[s]tandard establishes measurable criteria for multiple levels of environmental leadership achievement and performance throughout the lifecycle of the product” (emphasis added). The criteria does not specify what an “effective supply chain management process” is nor does it specify how such a process is measured and evaluated. If this criteria remains, this additional requirement should be deleted from the criteria as it is not measureable and therefore conflicts with the standard’s scope.

6.1.4 Reduction of bromine and chlorine content of plastic parts > 25 grams
1. Plastic is not predominately used in servers. Therefore, this criteria is arbitrary, unnecessary and should be removed or included as optional. If the rationale for including this criteria is due to end-of-life concerns, the draft standard adequately addresses those concerns by including criteria for proper handling of waste servers. If the criteria is maintained, either as a prerequisite or an optional criteria, the language should clarify that printed circuit boards and wire and cable are excluded, consistent with Section 9.2.
2. If this criteria remains in the standard then an optional credit in Section 6.3.4 should be allowed for conducting an alternatives assessment.

3. This criterion references “EN 14582.” We assume this means BS EN 14582, Characterization of waste. Halogen and sulfur content. This standard is for characterization of wastes. There is no evidence to suggest applying this test method to products would be useful.

6.2.1 Reduction of substances on the European Union REACH Regulation Candidate List of Substances of Very High Concern

1. This criteria should be deleted. The EU REACH Regulation does not require manufacturers to remove all SVHCs from their product if that SVHC is present above the 0.1% threshold. The EU REACH Regulation requires manufacturers notify the EU Commission of the presence of an SVHC if above the 0.1% threshold and provide safe use information.

2. Although we believe this criteria should be deleted, if it is maintained, the standard should not require the elimination of substances without first conducting an alternatives assessment to ensure the substance used as a replacement are in fact better for the environment.

3. The criteria contains an additional requirement to have a “supply chain management system, which may include supplier management and grading procedures, material declaration and disclosure, as well as analytical testing, is used to ensure that the product does not contain these substances.” According the scope in Section 1.2 the “[s]tandard establishes measurable criteria for multiple levels of environmental leadership achievement and performance throughout the lifecycle of the product” (emphasis added). The criteria does not specify what a “supply chain management system” is nor does it specify how such a system is measured and evaluated and therefore conflicts with the standard’s scope. Although we believe this criteria should be deleted, if it is maintained, this additional requirement should be deleted.

6.3.1-6.3.3 Criteria requiring public disclosure of declarable substance inventory, FMD, and disclosure of FMD

1. Criteria should be deleted. The collection of a full substance inventory is cumbersome and counter-productive to a focus on substances of interest.

2. Keeping an inventory of substances in a product is not correlated with an environmental benefit.

3. Publically disclosing an inventory of substances in a product has zero environmental benefit.

6.3.4 Alternatives Assessment

1. The draft standard should not specify AA test methods. This criteria only lists 2 AA methods that can be used. There is no justification for why these methods were chosen. The standard should not limit the allowable frameworks to those developed by the Interstate Chemicals Clearinghouse and the National Research Council. Add “or equivalent” or identify a set of criteria for the framework to be used. As the footnote in the draft standard states, new AA methods are likely to be developed in the future and this standard, an environmental leadership standard, should not preclude them.

2. Alternatives assessment criteria should outline criteria that an AA must include rather than listing specific methods. The standard could then reference specific AA methods as examples that meet the specified criteria. Outlining criteria for an AA would alleviate the need to revise the standard in order to update a list of acceptable AA methods.

3. This criteria, as an optional criteria, under values the importance of an AA. All substances required or suggested to be replaced in this standard should undergo and AA. Performing an AA could lead to discovering a substance that is better for the environment. An AA could also reveal
that the substance being evaluated is the best option for the environment. An AA could provide real, concrete information on the environmental benefit of substances in products.

4. This criteria gives credit for doing an AA for substances listed in Annex C of the standard, yet it fails to address the possibility of a product or manufacturing process not containing any of the substances identified in Annex C of the standard. Manufacturers should be able to receive credit for not having any substances identified in Annex C of the standard in their product or manufacturing process because they would not be able to conduct an AA on substances that are not present.

Section 11.2.1 Conduct life cycle assessment
1. Criteria should be worth more points - life cycle assessment is an important, but intensive, endeavor. Awarding more points will encourage companies to pursue LCAs and help to make the information more generally available.
2. Impact assessment methodologies should not be limited to TRACI 2.1, CML 2001, and ILCD 2011. Other methodologies may exist that provide comparable results. Add “or equivalent” or identify the criteria to be included in the methodology.
3. Provide optional points for the implementation of actions to reduce impacts in any of the assessment categories evaluated in the LCA.

13 Corporate Social Responsibility
The purpose of the standard states, “The purpose of this standard for servers is to establish product environmental performance criteria and corporate performance metrics that exemplify environmental leadership in the market” (emphasis added). Corporate Social Responsibility (CSR) is a very broad topic area and not all aspects of CSR are within the scope of an environmental leadership standard. CSR, as a general topic area, goes beyond a company’s environmental performance. If CSR is included as a section in this draft standard, then only criteria pertaining to environmental leadership should be included. Specifically, conflict minerals, occupational health and safety and labor, and societal issues are outside the scope of environmental leadership and should be deleted.

13.1.2 Public disclosure of use of conflict minerals in products (Corporate)
1. This criteria is outside the scope of this environmental leadership standard and should be deleted. Further, this criteria should not be a prerequisite.
2. The atrocities occurring in the DRC and adjacent countries are deplorable. Section 1502 of the Dodd-Frank Act and SEC conflict minerals regulations are comprehensive and extensive requirements that attempt to address the atrocities. The conflict minerals issue is largely complex and therefore deserves its own standard. It should not be truncated into a few criteria within a standard whose scope is on environmental leadership.

13.2.2 Environmental and social responsibility on supply chain – nine suppliers (corporate)
1. This criteria is outside the scope of this environmental leadership standard and should be deleted.
2. Table 13.1 contains indicators that are not indicative of environmental leadership and therefore should be deleted. These indicators are HR4 Freedom of association and collective bargaining, HR6 Operations with risk for forced or compulsory labor, and HR5 Operations with risk for incidents of child labor.

13.2.3 Environmental and social responsibility reporting on tier 1 suppliers (corporate)
1. This criteria is outside the scope of this environmental leadership standard and should be deleted.

2. Table 13.2 contains indicators that are not indicative of environmental leadership and therefore should be deleted. These indicators are LA14 Percentage of new suppliers screened with labor practice criteria, LA15 Significant impacts for labor practices in supply chain, SO9 Percentage of new suppliers screened using criteria for impacts on society, and SO10, Significant negative impacts on society in supply chain.

13.3 Reporting Toxics Release Data (optional)
This criteria should be deleted as there is no environmental benefit to reporting Toxic Release inventory (TRI) data from suppliers. The TRI data is already publically available and can be accessed should that information be needed.

13.4 Conflict mineral sourcing (optional)
1. This criteria is outside the scope of this environmental leadership standard and should be deleted.

2. The atrocities occurring in the DRC and adjacent countries are deplorable. Section 1502 of the Dodd-Frank Act and SEC conflict minerals regulations are comprehensive and extensive requirements that attempt to address the atrocities. The conflict minerals issue is largely complex and therefore deserves its own standard. It should not be truncated into a few criteria within a standard whose scope is on environmental leadership.

3. Although we believe conflict minerals criteria is out of scope of this standard, should the criteria be included, CFSI should not be the only program referenced. There are other programs that validate smelters that should be included. The programs include: the London Bullion Market (LBMA) good gold delivery system, the Responsible Jewelers Council (RJC), the World Gold Council’s (WGC) Conflict-Free Gold Standard, the Dubai Multi Commodities Centre (DMCC) and the International Conference on the Great Lakes Region (ICGLR).

4. Although we believe conflict minerals criteria is out of scope of this standard, should the criteria be included, the criteria should not include a requirement for a third party audit. It is an unnecessary, overly burdensome requirement that is not a requirement for conflict minerals disclosures and reports to the US SEC.

13.5.1 Supply chain certification to occupational health and safety performance standards
This criteria is outside the scope of this environmental leadership standard and should be deleted.

13.5.2 Certification to social responsibility performance standard (corporate)
1. This criteria is outside the scope of this environmental leadership standard and should be deleted.
2. The second bullet under #2 of this criteria states that closure of VAP audit report findings must be confirmed. Generally, closure of VAP audit findings is at the discretion of the requesting customer, which can be subjective. Therefore this stipulation within the criteria should be deleted.