



SHARP Electronics Corporation  
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August 26, 2005

Mr. Fareed Ferhut

Integrated Waste Management Specialist  
Buy Recycled Section  
CIWMB  
P.O. Box 4025, MS-12  
Sacramento, CA 95812

Re: Sharp's comments on EPP for printing cartridge

Dear Mr. Ferhut:

Sharp Electronics Corporation (Sharp) is pleased to have an opportunity to provide you with our comments on developing Environmentally Preferable Product (EPP) standards for printer and duplication cartridges. Sharp is a leading manufacturer of copiers, printers, fax machines and multi-function devices for both home and office use as well as a leader in efforts to develop products that minimize their impact on the environment while maintaining the high quality, reliability, security, and ease-of-use our customers have come to expect. Many of the toners for these products are manufactured in the US at our facility in Memphis, TN.

Sharp has reviewed your 2<sup>nd</sup> letter to interested parties dated August 8 2005, seeking comments on your efforts to establish the EPP standard. Based on our experience in this area, we would like to offer some suggestions to your proposal.

#### General

Currently, the activities outlined in the program including collection, recycling and use of recycled plastic content of cartridge are implemented nationally on a voluntary basis by each manufacturers, based on the needs of their individual customers and market principles. If this proposal mandates these efforts without taking into account these market principles, it will negatively impact market-competitiveness by creating de-facto requirements that ignore such factors as technological ability, cost, overall product function, and reliability. The Program also appears to ignore the fact that design restrictions in one area impact other areas of the products, including function and ease of manufacture (and disassembly) to the point that it may be impossible to achieve all of the environmental goals without sacrificing product quality and reliability. Therefore, we believe that in general, these design requirements should not be mandated by regulation. If the concept is to promote these activities, we believe that voluntary initiatives implemented by industry should be used as the standard.

#### Definition of "Printer and duplication cartridge"

Sharp's product line includes Copier (duplication), Multifunction Device (MFD), fax, and printers. These products have a printing function and utilize a "cartridge". Judging from the wording "Printer and duplication cartridge" in your proposal, our understanding is that the covered products of EPP for printing cartridge are "printer", "copier(duplicator)" and MFD.

The size, shape, chemical contents, function (Color/Monochrome), and structures of each of these product categories are different. Due to above differences, the recycling methods and cost vary by product category. We believe that clearer definition of "Printer and duplication" and the classification of each cartridge, such as "printers", "personal duplicator", "commercial duplicator" and "MFD", or classified by weight or size is required. We would be happy to work with you to better define the different categories of cartridges.

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Tier 1

Sharp's operation manual for copier and printer products includes the following statement: "For best copying results, be sure to use only SHARP genuine supplies which are designed, engineered, and tested to maximize the life and performance of Sharp copiers." While we can agree the concept of 3rd parties who are licensed by a manufacturer be permitted to refill, repair and remanufacture the toner, we believe that there are significant liability and warranty problems allowing any provider to repair or refurbish a cartridge, refill it with a generic toner mixture, and resell that product without manufacturers authorization. As such Sharp would suggest that the state eliminate or significantly modify the proposal to address these concerns.

Tier 2 2) "recycled content material" and "post consumer material"

We believe that the definitions for these 2 terms need clarification. For example, does post-consumer recycled content refer to plastic from toner cartridges only, or from any source? Is the calculation based on the sales of a single type of cartridge or is it based on all cartridge models sold?

We are also concerned about the amount of recycled content, especially if it is sourced from cartridges alone. We note that the California Rigid Container Law only mandates 25% post-consumer content and believe that this is a much more realistic number, considering the tight tolerances required for the proper docking of the cartridge and machine. The higher the recycled content, the more difficult it is to meet these tolerances resulting in improper operation and increased maintenance for the equipment. Meeting the proposed requirements would result in both higher costs for the cartridge as well as higher maintenance costs for the machine. We urge California to re-evaluate this proposal and return to the standards of the Rigid Container law.

Tier 2 3) refurbish

We believe that clarification is needed on the definitions of "recycling" and "remanufacturing". Especially for "Remanufacturing", we would like to propose that you include a minimum percentage of used-parts in "remanufacturing" parts.

We appreciate having the opportunity to contribute to the EPP project and will continue to work with you to ensure it is a success.

Sincerely,



Itaru Sato

Manager, Corporate Environmental Affairs  
Sharp Electronics Corporation