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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 additional comments on the CIWMB's effort to develop Environmentally Preferable Product (EPP) standards for printer and duplication cartridges. Sharp has reviewed your most recent letter to interested parties dated November 17 2005, seeking comments on your efforts to establish the EPP standard. Based on our experience in this area, Sharp would like to offer some suggestions to your proposal.

Definition of "toner cartridge"

Sharp appreciates that new draft adopted our proposal. Although the definition included in the new draft is technically correct, to clarify the definition we would like to suggest to change the word, "photo sensor" to "photo conductor".

Tier 1 Benchmark1: no restriction on the recycling or remanufacturing of cartridge

In recent toner cartridge design, many companies include an IC chip. The purpose of this chip is to ensure the quality of print and the operation of the copier. The main function of this chip is to indicate toner quantity remaining in the cartridge. It also tracks the control the life of the cartridge parts, and ensures the copy quality.. To reuse the cartridge, we have to replace the currently purchased IC chip with new one. With this possibility in mind, Sharp is planning to re-design the IC chip interface with the cartridge for easy removal. This would ensure that authorized remanufacturers could remanufacture the toner cartridge, utilizing the new IC chip supplied by the original manufacturer. Under the Japanese "Eco mark" program, the governing organization (Japan Environment Association) determined that if the IC chip is easily removable, it is not a detriment to the remanufacturing of the cartridge .

Sharp would like confirmation that designing the IC chip to be easily removable would satisfy the requirement of benchmark1.

Tier 2 Benchmark 2 "minimum of 10 percent by weight of postconsumer materials"

We agree that it is possible to include 10% of post consumer materials in toner cartridge. But based on the recent demand of post consumer plastics in the global market and the supply of this material, it is difficult to reserve the certain amount of post consumer plastics for toner cartridges. Further, the supply of post consumer plastic fluctuates in the market. Even in the same toner cartridge model, it is difficult to ensure a minimum percentage of post consumer material.

As Sharp mentioned in the comments we submitted on October 11th, the criteria for recycled content material in existing programs such as "Eco mark (Japan)" and "Nordic Swan" (Northern Europe) is applicable to components that weigh "over 25 grams". It is not calculated as recycled content a percentage of the cartridge as a whole. The Blue Angel Program (Germany) does require a "5% by weight" but this is as guidance, not a mandated criteria. Sharp believes that these programs represent more realistic targets and would recommend the California requirement be made consistent with them.

Sharp would like to propose that the criteria of Benchmark 2 be modified to "include post consumer material (no less than 5% by weight)".

Tier 2 Benchmark 4 collection rate

In new proposal, "cumulative collection rate will be considered i.e. collection of a cartridge model by all collection efforts, including but not limited to original equipment manufacturer(OEMs), remanufacturers, and cartridge broker.

Based on Sharp's toner cartridge collection activities in Japan and Europe, it is difficult for a manufacturer to accurately determine the collection rate of remanufacturers and cartridge brokers because they are independent companies. Manufacturers do not always have a business relationship with these independents that would allow them to obtain the information or even verify who collected and recycled the cartridge. Therefore it is virtually impossible to monitor and calculate an accurate collection rate for cartridges that are collected outside of the manufacturers control. A manufacturer can only verify the collection rate for his own collection program where he is actually performing the collection

Sharp would like to propose that the criteria of benchmark4 should be "the company must have implemented a take back program" and require submission of the program plan for the whole system, but only be required to report the collection amount of its own take back program within the specified time period.

Sharp appreciates 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