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October 19, 2005

Comment on Draft EPP Printer and Duplication Standards

Via Electronic Mail  
Mr. Fareed Ferhut  
Integrated Waste Management Specialist  
Buy Recycled Section  
CIWMB  
P.O. Box 4025, MS-12  
Sacramento, CA 95812

Re: Comments on Draft EPP Printer and Duplication Standards

Dear Mr. Ferhut,

I am writing on behalf of Canon U.S.A., Inc. ("Canon") regarding comments to the current Draft EPP Printer and Duplication Cartridge Standards. Canon appreciates the continued opportunity to comment on the Draft EPP voluntary standard, and looks forward to continuing to work on the draft standard until all stakeholders reach consensus. Please consider the following comments:

**1. Scope of Standard**

Canon agrees with the CIWMB's September 19<sup>th</sup> letter indicating that the EPP standard should currently be developed for toner cartridges. However, we want to reiterate Canon's prior comment that the current EPP standard should be applied to monochrome toner cartridges only and not include color cartridges. Although we agree that both color and monochrome cartridges may appear similar, they are in fact quite different. Color cartridges contain a higher number of complex components that allows them to reproduce photo prints, half tones and graphics that are higher in resolution and quality versus monochrome cartridges usually used for simple black and white text. The components in a color cartridge must also meet very tight tolerance levels in order to be capable of producing these higher quality images. It is often very difficult to obtain used color cartridge parts that are of sufficient quality to reuse in the production of new color cartridges due to parts wear and other factors. In addition, non-uniformity of tolerances of reused parts will result in seriously degraded color image quality.

Because of the varying factors that apply to the materials, manufacturing, distribution, product performance, volume, and reuse issues when examining color versus monochrome cartridges, we believe that a direct comparison between the two technologies is not

appropriate for application of the Draft EPP standard. We feel that focusing on monochrome cartridges captures the majority of cartridges purchased by state agencies and most readily satisfies the EPP environmental objectives at this time.

## **2. Comments on the Benchmarks**

We have several questions regarding the Benchmarks in Tier 2 as follows:

a. We do not understand the point system that has been proposed for Tier 2. Is it CIWMB's intention to require 100 points in Tier 2 to obtain an EPP designation? If not, how will the point system be used?<sup>1</sup> Does the point system apply on a per cartridge model basis? How would new models that come out every year be treated? If CIWMB intends to evaluate cartridges based on total points out of the three Benchmarks, the points system appears to unintentionally put "new cartridges" into a rather disadvantageous situation as explained in the Benchmark 2 & 3 comments below.

### **c. General Comment on Benchmarks 2 and 3**

It appears that Benchmarks 2 and 3 apply only to "remanufactured cartridges" as defined in the proposed standard rather than "new cartridges," so that these two benchmarks are extremely difficult or impossible for "new cartridge" manufacturers to meet. Benchmark 2 is an extremely difficult requirement to be met for "new cartridges" due to limitations on availability of suitable recycled raw materials and design/ functionality requirements. Benchmark 3 seems to apply exclusively to remanufactured products and would not be applicable for the "new cartridge" category. Benchmark 4 is the only possible area where "new cartridges" can be "awarded" points, but only in a very limited area of qualification.

The Benchmarks do not lend themselves to the fair inclusion of "new cartridges" in any way. Therefore, it would be very difficult for new cartridge manufacturers to obtain award points from a combination of the Tier 2 Benchmarks.

### **d. Specific Benchmark Concerns:**

(i) Under Benchmark 2, if the original used-empty cartridge housing or chassis is used for "remanufactured cartridges," these large parts would be regarded under the standard as post-consumer material. If so, the requirements in Benchmark 2 may be relatively easy for this type of operation. Conversely, although a new cartridge manufacturer is making significant effort to incorporate "post-consumer material and reused parts" for new cartridges as far as possible, the lack of a suitable and consistent large supply of post consumer plastic makes it extremely difficult or almost impossible to satisfy volume requirements for "new cartridges" at this time. Also, in order to incorporate "reused parts or components" into "new cartridges", each reused component must be strictly inspected to maintain the same quality level as "new components". Further, if "recycled material (i.e. post-consumer material)" is used for "new cartridges", the material has to be completely reprocessed to guarantee the same quality level as virgin materials before it can be used.

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(ii) Regarding usage of “secondary materials”, the proposed benchmark standard sets a higher point award for using higher percentages of “secondary materials (i.e. using fragments of finished products or finished product in the manufacturing process)”. This is counter to the efforts to improve resource utilization that drives most manufacturers to design processes that minimize waste and rework, while maximizing production yield. The ultimate goal is input equaling output. Manufacturers strive to eliminate material rework and unnecessary rejected production to the greatest extent possible in order to improve process efficiency. Higher points should not be excessively awarded for using these “secondary materials” at an increased rate, and that manufacturers’ efforts for resource utilization ( and consequential environmental benefits) and maximization of the manufacturing process should be evaluated more equitably.

(iii) Regarding Benchmark 3, in addition to our comments above, we feel that the definitions of the four terms (i.e. Remanufactured, Restored, Renovated and Repaired) are unclear and we do not understand the differences between them. Also, we believe that the “repaired” category is not applicable to this effort and is more suitable to end of life management since no cartridge is ever returned for repair.

(iv) We would like to suggest combining Benchmarks 2 and 3 into a single, simplified Benchmark as the criteria for “remanufactured cartridges”, and redefining this Benchmark to include the following:

- 1) Total rates for parts reused and material recycling out of cartridges collected to make “Remanufactured cartridges,” or
- 2) Total material recycling rates for unusable parts and materials out of cartridges collected to make “Remanufactured cartridges”

e. Specific Comments on *Benchmark 4*

Canon would like to continue to suggest the use of “recycling percentage” rather than “collection percentage” in awarding “points” for approved cartridge collection programs. We suggest to redefine Benchmark 4 as follows:

1) The cartridge collection system is available to the user, is easily accessible and free of charge and is adequately promoted by the manufacturer. For example, the cartridge acquires points if the information leaflet about the cartridge collection is included with all cartridge packages, and

2) To set forth certain recycling percentage in the following formula;

$$\text{Recycling Percentage} = (X/Y) \times 100$$

Where X is the total weight of “parts reused” and “material recycling” for the creation of new products and/or cartridges

Where Y is the total weight of cartridges that were returned to the manufacturer (applies for only self-manufactured cartridges)

Canon suggests that the products containing greater than 50% recycling percentage receives 100 points.

The reasons for using recycling percentage are:

**A. The number of cartridges returned by the end-user is highly dependent on the end-user's behavior.** As one of first in the industry, for the past fifteen years, Canon has offered a free of charge return program for Canon toner cartridges. Canon cannot require end users to return empty cartridges because this program is not legally mandated and is voluntary. Therefore, it is extremely difficult for a manufacturer or service provider that operates a toner cartridge return program to control the number of used cartridges returned.

**B. The collection percentage cannot be calculated.** Toner cartridge usage varies and depends not only on customer requirements and the size of the establishment, but also cartridge types, machine types, copying / printing loads and applications which all are factors contributing to when the end user will return used cartridges.

For example: CIWMB may assume to use the following simple formula.

Collection ratio (%) = (A/B) x 100, where

A=Total cartridges quantity returned in certain calendar year (e.g. 2005)

B=Total cartridges quantity sold in the same certain calendar year (e.g. 2005)

However, the returned-quantity "A" during the 2005 calendar year includes cartridges that were sold in 2003, 2004, and 2005. In the other words, the number of the cartridges collected (A) against the number of the cartridges sold (B) cannot be readily determined. Therefore, the "Collection ratio" cannot be calculated. Even though CIWMB may have intended to use a relatively simple formula and assumption to calculate the collection ratio, we believe that this formula is based on unrealistic and ambiguous assumptions and should not be used to ultimately set the threshold level (i.e., points).

Since 1990, Canon has being making increasing efforts to maximize the reuse, recycling and recovery of the large volume of toner cartridges returned by our customers, and we have diverted a significant number of used cartridges from the solid waste stream. We would like CIWMB to understand that this "free-of-charge collection system" is free to the customer only, and does carry significant administrative burdens and costs to operate in relation to the large quantities of materials collected and recycled by manufacturers. As such, Canon believes that those manufacturer's efforts should be given due credit and suitably evaluated under the criteria for the EPP Standard.

### **3. Certification**

Canon has no further comments on the voluntary certification aspects of the standard at this time.

We welcome the opportunity to continue to participate in your program. Please do not hesitate to contact me should you have any questions about our comments to date.

Sincerely,  
Canon U.S.A., Inc.

A handwritten signature in black ink, appearing to read "Mario J. Rufino". The signature is written in a cursive, flowing style.

Mario J. Rufino, CHMM  
Assistant Manager,  
Environmental Management & Product Safety Dept.