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August 29, 2005

VIA ELECTRONIC AND U.S. MAIL

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

Dear Mr. Ferhut:

Hewlett-Packard Company ("HP") has received Mr. Jerry Hart's letters, dated July 21, 2005 and August 8, 2005, which continue our exchange and offer revised provision with respect to the establishment of an environmentally preferable product ("EPP") standard for printer and duplication cartridges. We appreciate your responsiveness to our comments and suggestions. In this letter, we will offer additional comments in subject areas where we have already exchanged views, as well as propose several approaches for establishing clear and effective performance criteria.

#### General Approach

We enthusiastically support the two tiered approach that CIWMB has outlined, which allows manufacturers some flexibility in qualifying their products as EPP. As you know, California State and local Agencies, under current state policies, are not able to recognize manufacturer responsibility when making procurement decisions. The State Agency Buy Recycled Campaign (SABRC), the joint effort between the California Integrated Waste Management Board (CIWMB) and the Department of General Services (DGS), does not contemplate a state vendor taking back its product and recycling it.

HP supports the goals of SABRC, but also believes the State of California must broaden its environmental procurement practices so that California State and local agencies can do business with environmentally responsible vendors who have invested millions of dollars to collect and recycle their products. The establishment of an environmentally preferable product standard for printer and duplication cartridges can provide that opportunity. We view the two tiered approach CIWMB has outlined in its letter of August 8, which allows a vendor to qualify as EPP a cartridge meeting any one of the three Tier 2 benchmarks, as an important step in that direction. We hope the EPP standard continues to afford this flexibility as it is further developed through the current process.

We will focus the majority of our remaining comments on the definition of Tier 2 benchmarks, which are labeled 2, 3, and 4, but also recommend an added provision to Tier 1.

### Scope

We wish to comment briefly on the proposed scope of the standard. We continue to believe that limiting the scope of the standard to monochrome toner cartridges is a sound approach. We note with interest that among other interested parties who commented, all but one either recommended the scope of the standard be limited to toner cartridges, or apparently presumed that was the case. Our own belief is based on a number of factors, including the desire to keep the standard development process as simple as possible and the much greater proportion of monochrome toner cartridges purchased under contract. Most importantly, the technologies themselves are vastly different, making regulating them under the same standard inappropriate.

Inkjet and electro-photographic, commonly known as laser, print cartridges are fundamentally different in their design, materials of construction, and product specifications. HP's inkjet cartridges apply thousands of picoliter size drops of fast-drying ink per second. Ink application is accomplished through highly engineered printheads with hundreds of nozzles in an area smaller than a US dime. In contrast, laser printing entails six steps to charge an organic photoconductor drum, "write" an image with a laser, develop and transfer the image using microscopic electrically-charged particles, fuse the image to paper and then clean the drum to repeat the process. Laser cartridges are generally wide enough to accommodate standard office papers in a single pass (i.e., greater than 8.5 inches), while inkjet cartridges generally move across the printed media and are therefore much smaller. Although HP does not remanufacture cartridges due to the performance degradation involved, we understand that methods of remanufacturing and refilling also vary greatly both within and between the two types of technologies.

Regulating both types of cartridges under the same standard without differentiation could unfairly favor certain types of products, without benefit to the procuring agency or the environment. We would be happy to meet with interested members of CIWMB to provide details about each type of printing system, and their inherent differences. We encourage CIWMB to reconsider the scope of the standard, limiting it to monochrome toner cartridges.

### Cartridge Collection

We recommend that, as a Tier 1 requirement, cartridge vendors be required to provide an established system of post-use collection for the cartridges that they sell under contract to State or local agencies in California, in order for those cartridges to qualify as EPP. Such a system could be implemented by the vendor, or through an agent under contract. This requirement would establish responsibility for the entity selling the cartridge to provide an option for managing the collection and disposition after use of the cartridges being sold to California's State or local agencies. We will address proposed standards for collection programs, later in this letter.

### Equitable Standards for All Cartridges

HP supports customer choice and believes that cartridge remanufacturers and refillers have the right to compete fairly in the marketplace. Consistent with that philosophy, we believe that EPP qualification of cartridges on the basis of benchmarks 2 and 3 should be dependent upon meeting reasonable standards of sound environmental management. For example, vendors seeking to qualify reused or remanufactured cartridges as EPP should demonstrate that they responsibly manage the disposition of cartridges they or their supply chains collect, but do not remanufacture due to defect or other reason. Similarly, replaced parts should be managed in an environmentally responsible manner. We look to members of the cartridge remanufacturing and refilling industry to forward reasonable standards in these areas, and will reserve further comment.

#### Benchmark 4

We understand that the intent of your revisions to Benchmark 4 is to ensure that cartridges designated as EPP are covered by an established and bona fide collection and recycling program that results in material recovery for the manufacture of new products or cartridge remanufacture. HP supports these objectives and appreciates your efforts to establish standards that differentiate such programs from others. It is critical that the standards are in alignment with the intent, without creating unintended consequences in the marketplace.

With respect to material recovery, that is adequately addressed by the previously existing provision in Benchmark 4, "... returned for the manufacture of new products or the remanufacture of used cartridges." It is clear that contemplated by that provision are recycling programs which have as their primary function the recovery of materials.

We urge CIWMB to consider carefully the fairness and potential impacts of proposed standards applicable to cartridge collection activities. We agree with the apparent intent of your proposed language in Benchmark 4 with respect to the standard being cartridge-specific, rather than brand specific. Cartridge models not covered by an effective collection program should not be eligible for EPP, regardless of whether other cartridge models offered by the same vendor are covered. However, we strongly recommend alternate standards be applied to the attributes of a collection program that is eligible for EPP status.

Specifying a threshold rate for collections will have significant and deleterious impacts on an effectively functioning marketplace that is already achieving positive environmental outcomes. Such a collection rate threshold should not be included as part of this standard. Within the present market, and consistent with the current provisions of the proposed standard, cartridge users have various options they can pursue for management of their cartridges after use, including:

- Returning cartridges to the manufacturer through an established collection and recycling program,
- Offering cartridges to third parties that typically broker cartridges to the remanufacturing industry or remanufacture cartridges themselves, and
- Discarding cartridges as solid waste.

Industry data suggest that for some cartridges, a relatively small portion of used cartridges is discarded, and there is a substantial degree of competition for these used cartridges among brokers and remanufacturers. Under such circumstances, it is easy to envision a situation where a vendor seeking to qualify a cartridge through recycling could only collect a quantity of its own used cartridges in excess of the threshold by implementing measures that place restrictions on the recycling or remanufacturing of that cartridge by other persons, violating Benchmark 1. Cartridges that have met the intent of the standard through being covered by an established, bona fide recycling program could thus be unfairly excluded from designation as EPP.

HP is also concerned that there would be a disproportionately large administrative burden associated with documenting a cartridge collection rate. It is not possible to comment on this aspect specifically at this time, as only an example rate is given. However, as administrative efficiency is an important dimension of the EPP standard, HP will assess and provide input on this aspect as appropriate later in the development process for this standard.

HP supports a "shared responsibility" approach to electronics recycling, which seeks to achieve a fair allocation of responsibilities among stakeholders. In the case of cartridges, both manufacturers and end users must play a role. For California-based purchasers of original HP

cartridges, HP provides a free and convenient return and recycling program, readily available to public sector, as well as private sector customers. Customers can make returns via bulk (i.e., multi-cartridge) shipments or individual mailings. We rely on our customers to decide whether to utilize these services. Our customers are free to choose between HP's program, and other means of managing their used cartridges. Having sellers constrain their customers to a particular means of managing cartridges after use would be contrary to Benchmark 1. EPP instead should seek to assure that environmentally responsible options for post use cartridge return and disposition are offered to State and local agency purchasers.

Consistent with this philosophy, HP believes that the appropriate measure of an established collections program is the provision of a convenient and readily available method of return, free of charge to California agency purchasers. Such a standard will ensure that state and local agencies that purchase cartridges designated as EPP will have environmentally sound alternatives for management of their cartridges after use. Achievement of the standard can be easily determined at the time of EPP certification, and will not unduly disrupt the function of the cartridge aftermarket. The standard also fairly allocates to the vendor responsibility for collection and processing, and to the end user responsibility for utilization of available return and recycling services.

Based on the foregoing discussion, we recommend revision of the proposed language in Benchmark 4 to the following:

4) a cartridge that would otherwise become solid waste, but which has undergone a process of collecting, sorting, cleansing, treating, or reconstituting, and which has been returned for the manufacture of new products or the remanufacture of used cartridges (Public Contract Code section 12156). *Furthermore, for those vendors that have a "take back and recycling" program, an EPP designation will be awarded to the actual printer cartridge models for which a convenient and readily available means of return is provided, free of charge, to the state and local agency purchasers of the vendor's cartridges under contract.*

We urge CIWMB to carefully reconsider the impacts of a performance standard based on collection rate, and adopt instead the shared responsibility approach discussed above.

In closing, HP wishes to reiterate its support of the two tiered, flexible structure of the draft standard. We appreciate the opportunity to comment, and look forward to further discussions on this important topic.

Sincerely,



J. Scott Canonico  
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Imaging and Printing Supplies

