

Local Governments' Looming Fiscal Crisis *Household Hazardous Products and the Need for Extended Producer Responsibility*

EXECUTIVE SUMMARY

Local government has borne the burden of managing solid waste for the past 100 years. This responsibility has become increasingly onerous and expensive as more products that are advertised as “disposable” are found to contain substances that pose threats to the environment when they are not properly managed. This growing group of products termed “household hazardous waste” (HHW) are becoming an even larger financial burden on local governments with new stricter mandates requiring the safe disposal of a subset of hazardous wastes known as “Universal Wastes” – common household products such as fluorescent lamps, alkaline batteries and a vast array of electronic products that are generated by both residential and business sectors.

Since 1989 local government in California has provided special services for HHW in order to divert these potentially dangerous materials from landfills. HHW programs also divert pollutants from stormwater, wastewater, and ultimately drinking water that citizens and wildlife rely upon. HHW programs are, however, very expensive to operate. Disposal costs, payroll for technically trained staff, and administration of regulatory and reporting requirements drain the funds needed to provide adequate operating hours and outreach. As a result, HHW programs are inconvenient to the very public that these programs are charged to serve. This is illustrated by the fact that less than ten percent of households in any jurisdiction use HHW programs.

The financial challenge of HHW programs was recently compounded. On February 9, 2006, Universal Waste (UW) was banned from all landfills in California. Aside from the challenge to local governments of notifying consumers about the new disposal restrictions, the volume of UW generated by households and small businesses in California is projected to far exceed the programs' current physical and financial capabilities. Santa Clara County's costs alone may increase 100%– \$3 million to \$6 million per year– to comply with the new regulations and still collect a fraction of the total waste being generated. It is evident that compliance under existing infrastructure and funding cannot be achieved. Even if HHW programs were able to collect all

The case for Extended Producer Responsibility

- Less than 10% of households throughout California use HHW programs because of inconvenient collection locations and hours.
- HHW Program Collection Costs are anticipated to increase by 100% from 2001 Collection costs
- Local government bears the burden of waste costs instead of the manufacturers who design the product.
- Two EPR programs to-date are proving successful – British Columbia and State of Washington
- Stormwater agencies are required to have a pollution prevention plan to comply with their NPDES discharge permit
- Waste water agencies are promoting disposal of pharmaceuticals from residents at HHW programs
- Responsible collection and recycling should be made part of the cost of a product

the hazardous products in the waste stream, these programs remain a reactive and incomplete solution because local government has no influence on reducing toxicity through better product design, and thus, HHW programs are not able to affect the source of the problem, nor work towards the ultimate goal of minimizing hazardous materials used in the production of a product.

The ineffective HHW system poses a fiscal and practical crisis which demands a long-term solution. That solution is to require producers of hazardous products to provide for the collection, recycling, and safe disposal of their products at end-of-life. This approach, known as Extended Producer Responsibility (EPR), is used in a growing number of jurisdictions across North America and the industrialized world. The State of Washington has embraced EPR in the recently passed e-waste legislation that requires industry to create and finance a system for the collection, transportation and processing of electronic products. In British Columbia, waste management is handled by the manufacturers where government monitors the process but does not collect the money or pay for the service. EPR programs can provide convenient service to consumers (retail take-back) and motivate manufacturers to design products that are less toxic and recyclable. With their expertise in supply chain management, producers are best suited to efficiently accomplish the reverse logistics necessary for product take-back. Steps to shift responsibility and costs for managing hazardous products to producers are described in this paper. Simply put: the very industries that profit from the sale of these hazardous products have not taken the responsibility for the risks to public health and the environment at the end of the product life cycle. Government, at the same time, can focus on their core strengths: setting standards to protect public health and the environment, monitoring compliance and enforcing the law.

INTRODUCTION

HHW service is already limited

Local government has historically borne responsibility for managing solid waste, including the growing number of hazardous products used in daily life. To prevent these products from entering landfills, local governments in California established HHW programs for residents and small businesses as a safe disposal alternative.

Agencies responsible for drinking water, wastewater, stormwater and solid waste also promote the disposal of a growing list of contaminants at HHW programs in order to prevent them from entering the environment and their processes. HHW programs provide essential support to wastewater treatment plants (pharmaceuticals, pesticides), and storm water (mercury) and solid waste (toxic metals) programs by providing the only legal means of HHW disposal for residents. POTWs and stormwater agencies educate residents to dispose mercury-containing products, pesticides and pharmaceuticals through the local HHW programs to reduce impacts to local creeks and the Bay.

Despite the service that HHW programs are looked upon to provide, HHW programs collect a small fraction of the products they are intended to target— **less than 10% of the households in any jurisdiction**. This is due largely to under funding and regulatory requirements that result in programs with limited operating days and hours, fixed venues that are not easily accessible to the public, and limited outreach. This system is about to be further stressed by new stricter disposal requirements for a subset of hazardous wastes known as Universal Wastes.

HHW programs will be further stressed by the addition of universal wastes

US EPA and the California Department of Toxic Substances Control (DTSC) have designated certain post-consumer hazardous wastes, ones that are generated by a wide variety of people and are deemed to have a lower risk than other hazardous wastes, as Universal Wastes (UW).

Universal Wastes include common household products such as fluorescent lamps, all household batteries, thermostats and thermometers and a vast array of electronic products that are generated by both residential and business sectors.

The DTSC regulations for UW were established in 2003 and included a temporary exemption for households and small businesses. The purpose of the exemption was to allow time to develop a collection infrastructure. However, on February 9, 2006, that exemption ended and aside from computer and TV monitors that are offset by a point of purchase consumer tax (SB 20/50), infrastructure to collect and process other UW products has not developed, in part because of the huge government costs.

Increases in the manufacture of products designated as UWs and potential increase of UW disposal compound the infrastructure dilemma. A recent California Integrated Waste Management Board Study (see Table 1 and 2¹) projects that it will cost an additional \$41.7 million to cover the costs of handling banned fluorescent lamps, household batteries and mercury-containing thermostats for 32 of California's 58 counties that it reviewed (Table 1). While sales and generation of hazardous products continue to rise (Table 2) the legislature has not introduced any legislation that would require industry responsibility for the products that become hazardous waste.

Table 1-2006 Projected Increased Cost to HHW Programs by UW Type

UW Type	FY 2000–01 Total Handling Cost	2006 Projected Additional Handling Cost	2006 Total Projected Handling Cost
Fluorescent Lamps	\$20,078	\$10,040,900	\$10,060,978
Batteries	\$172,560	\$30,900,200	\$31,072,760
Thermostats	\$11,030	\$700,710	\$711,740
Total Costs	\$203,668	\$41,695,210	\$41,898,878

* Projected volumes are based on manufacturer supplied sales data.

¹ CIWMB, Study Household Universal Waste Generation in California, by MGT of America; Publication Number: 520-02-004, June 2002. Available at <http://www.ciwmb.ca.gov/Publications/default.asp?pubid=965>

Table 2-Comparitive Increase of UW between 2001 and 2006

UW Type	2001 Sales Volume	FY 2000-01 Collected Volume	Estimated 2006 Generation	Estimated 2006 Collected Volume
# of Fluorescent Lamps	15,555,556	18,814 lamps	17,444,444	9,989,097
# of Batteries	507,259,000	162,509 lb	593,864,218	34,380,127 lb

THE CASE FOR EXTENDED PRODUCER RESPONSIBILITY (EPR)

EPR programs may take many forms, but all involve producers, retailers, and distributors, in the return and sound management of consumer products at the products' end-of-life. EPR extends the traditional environmental responsibilities that producers have previously been assigned (i.e., worker safety, prevention and treatment of environmental releases from production, and financial and legal responsibility for the sound management of production wastes) to include management of products at the post-consumer stage, instead of manufacturer dependence on local government for the safe disposal of their products.

The Organization for Economic Cooperation and Development defines EPR as an environmental policy approach in which a producer's responsibility, physical and/or financial, for a product is extended to the post-consumer stage of a product's life cycle. There are two key features of EPR policy: (1) the shifting of responsibility (physically and/or economically, fully or partially) upstream to the producer and away from municipalities, and (2) to provide incentives to producers to take environmental considerations into the design of the product.

Extended Producer Responsibility legislation requiring manufacturer/retailer take-back of Universal Waste is necessary to increase public participation in proper waste disposal and accomplish a comprehensive capture of UWs. Staff recommends developing a common position among solid waste, wastewater and stormwater agencies in support of EPR.

EPR is a principle for a new generation of pollution prevention policies that focus on developing product management systems instead of end-of-pipe management. Properly designed EPR legislation can:

- increase materials collection and program participation;
- allow HHW programs to focus on the most challenging and technical of HHW disposal problems in their jurisdiction (ie pesticides, solvents, etc.);
- reduce the burden on local government for the physical and/or financial requirements of waste collection and management;
- reduce or eliminate potentially hazardous chemicals in products, the number of landfills, incinerators and their accompanying environmental impacts;
- inspire cleaner, more efficient use of natural resources and promote integrated environmental management by emphasizing the product's life cycle;

Precedents for EPR

California state government has legal authority to promulgate regulations requiring businesses to provide product take-back if they do business within the jurisdiction. To date, two EPR programs are proving to be successful:

- Cell Phone Recycling Act of 2004 requires all entities that sell cell phones in the State of California to provide a recycling opportunity to all customers. This legislation is the first take-back legislation to occur in California and relieves local government from the burden of managing the waste at taxpayer expense.
- Rechargeable Battery Recycling Act of 2005 is the second piece of legislation signed by the Governor requiring some sellers (certain definitions apply) of rechargeable batteries to provide all customers with recycling opportunities for waste rechargeable batteries. The bill was approved in the Assembly as the Battery Recycling Act of 2005. It was unfortunately amended to address only rechargeable batteries, which represent less than five percent of waste batteries generated in the State. Addressing all batteries would have significantly addressed this huge Universal Waste stream.

An effective EPR program would require retailers and manufacturers to provide information and service to customers on proper end-of-life management through notices in product literature and on corporate websites. The consumer would have a simple solution to disposal of a product at the end of life: take it back where you bought it.

An effective EPR program would also require city and county procurement departments to support legislation using bid specifications for batteries, fluorescent lamps and other mercury containing products that require suppliers to take back the product when the product expires.

Advanced Disposal and Recycling Fees Are Not the Answer

Unlike EPR regulations in other jurisdictions, the California Electronic Waste Recycling Act of 2003 and amendment have proven to be costly and challenging to implement. The Act places a fee on certain electronic devices which funds the collection and recycling of these covered electronic devices. The fee, sometimes called an Advanced Disposal Fee (ADF) or Advanced Recycling Fee (ARF), is paid by the consumer at the point of sale. It is collected like sales tax through the State Board of Equalization and forwarded to the CIWMB for disbursement to approved collectors and recyclers.

In practice, ARF-based programs are difficult to implement and administer because of the complexity in setting charges by government that reflect waste management costs. ARF-based programs rely on significant government bureaucracy to establish fee levels, to determine how fees are collected, to manage and enforce collections, to certify recyclers, and to disburse funds. Significant parallel effort is required from companies who must track products and remit the appropriate fees, and from companies and local governments who must track recycling and claim payments.

ARF-based programs are not assured to provide consumers with convenient access to recycling and adequate incentives to recycle. They relieve producers from responsibility for wasteful products and packaging, failing to provide incentives to design for recycling. ARFs delegate responsibility for collection to local government. The program has resulted in increased

responsibilities for local and State governments, rather than increased responsibilities for the producers who profit from the products.

POSSIBLE NEXT STEPS TO SUPPORT EPR:

1. Draft and support Extended Producer Responsibility legislation on the local, state and federal level for all UW.
2. Develop and support position papers to explain the benefits of changing the traditional responsibility of UW collection from government to industry.
3. Explore whether local governments have legal authority to legislate Retail Take-back at the local level to initiate programs to collect and manage UW.
4. Study the nexus between stormwater pollution prevention, sanitary sewer pollution prevention, surface and groundwater pollution prevention and expected increases in demand for HHW program services. The objective of this study should be to identify cost-savings to wastewater and stormwater authorities, as well as solid waste authorities, from EPR for UW.
5. Provide more focus on small business generators, identifying cost-savings to them from EPR for UW.