

# Memorandum

**TO:** TRANSPORTATION AND  
ENVIRONMENT COMMITTEE

**FROM:** John Stufflebean

**SUBJECT: EXTENDED PRODUCER  
RESPONSIBILITY**

**DATE:** 09-22-08

Approved

Date

9/29/08

## RECOMMENDATION

Accept this report and provide feedback regarding the proposed work plan to establish Extended Producer Responsibility as a legislative, procurement, and regulatory priority.

## OUTCOME

The City of San José would join other California cities and counties in supporting Extended Producer Responsibility (EPR) through legislative initiatives and the efforts of the Product Stewardship Institute and the California Product Stewardship Council. EPR legislation would ultimately reduce the City's financial burden for ensuring proper disposal of Household Hazardous Waste, Universal Waste, and other products at the end of their useful life. These outcomes are consistent with the Council approved Green Vision, Zero Waste, and Urban Environmental Accords goals.

## BACKGROUND

In February 2006, the State of California banned residential Universal Waste from landfills. The more common Universal Wastes include electronics, mercury thermometers and thermostats, fluorescent lights, disposable batteries, and microwave ovens. Most consumer electronics contain lead, cadmium, and other toxic heavy metals, and pose a threat to public health and the environment. Fluorescent lamps and thermostats contain mercury, a potent neurotoxin. Millions of household alkaline batteries leak hazardous corrosive chemicals into the landfills. Local governments pay for the high cost of meeting Universal Waste ban requirements to separately handle and properly dispose of the wastes. Since 2006, manufacturers, retailers, and local governments have strived to come to a reasonable compromise regarding the collection and recycling of these products. In addition to Universal Waste, local governments in California also pay for proper disposal of other household hazardous waste, and the increasing costs for the collection and processing of disposable non-hazardous waste; all of which can be mitigated by EPR.

The Santa Clara County Household Hazardous Waste (HHW) program provides services county-wide to divert potentially dangerous materials from landfills and prevent contaminants from entering the wastewater treatment plant, storm water, and ultimately drinking water. Currently, the HHW program only serves between 5 to 10% of eligible households in San José and costs approximately \$670,000 annually. In 2007, San José spent an additional \$50,000 for the HHW program to manage just Universal Wastes.

Non-hazardous solid waste also negatively impacts the environment. A century ago, when local governments assumed responsibility for solid waste, the solid waste mostly consisted of coal ash and small amounts of food, paper, and glass. Today, manufactured products and packaging make up 75% of the forty million tons of waste California throws away annually. Consequently, residents are paying higher disposal costs for the increased tonnage for items that could be returned to industry for recycling. Increased packaging also uses a considerable amount of natural resources, and the production and transportation of packaging and packaged products adds significantly to greenhouse gas emissions statewide.

There is widespread support in California for EPR. The California Integrated Waste Management Board has adopted EPR framework legislation as a strategic goal and as a policy approach. The League of California Cities and the National Association of Counties have signed EPR resolutions. Between 2006 and 2008, 14 California cities have passed EPR resolutions: San Francisco, Oakland, Fresno, El Cerrito, Union City, Elk Grove, Morgan Hill, Saratoga, Los Gatos, Cupertino, Campbell, Monte Sereno, Sunnyvale, and Santa Cruz. In addition, there are six counties within the State that have passed EPR Resolutions since 2001, including: San Francisco, Santa Clara, Solano, Sonoma, Santa Cruz, and San Bernardino.

## ANALYSIS

The City can more effectively address the community cost of disposable products and excessive packaging by reducing their initial production rather than managing the waste generated downstream. The goal of EPR is to shift the responsibility of disposing or recycling products and minimizing their environmental impacts from local government to private industry, consumers, and the market. By integrating the full environmental costs of products throughout their life cycle into the market price of these products, EPR encourages companies to change their business models, through initiatives like producer take-back programs and product design. EPR could reverse the current trend of creating disposable single-use products to goods that last longer and can be returned for refurbishing and re-use.

### *Water Quality and Solid Waste Issues*

Implementing EPR is important to protect and improve water quality. Universal Wastes contain toxic elements such as mercury, which is known to cause environmental and human health problems. A fish advisory has been issued for San Francisco Bay due to mercury. When disposed of improperly in a landfill or through illegal dumping, such toxic elements can leach

into the water table and waterways, or turn into a gas and disperse through the air. Safe and convenient disposal and recycling of items such as fluorescent bulbs, thermostats, and thermometers can keep mercury out of the environment. In general,, EPR can reduce chemical compounds from entering the environment with the safe collection and recycling of products containing toxic compounds such as pharmaceuticals and left-over paint. If producers are responsible for the end of life disposal of toxic products, they would have an incentive to minimize the toxicity of their products and provide consumers a convenient disposal system.

EPR can also help address a persistent and growing worldwide problem of litter in the waterways. In July 2008, the Ocean Protection Council (OPC), created by the California Ocean Protection Act, cites litter as the primary component of land-based sources of litter accumulating in the ocean. The biggest component of litter is packaging waste. The OPC lists EPR for Packaging Waste as the first of three priority actions to successfully reduce or prevent packaging waste. Locally, the draft Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit requires reducing the impact of trash in waterways by enhancing maintenance practices, such as increased street sweeping, and the installation of permanent storm drain screens to capture trash. The preliminary estimate to meet this requirement over the five-year permit term is approximately 11 million dollars.

#### *EPR Legislation*

Making EPR a legislative priority would assist the advocacy organizations that the City supports in furthering initiatives at the State and national level. There is currently a number of EPR related bills being considered in the State legislature. Two bills from the 2007-2008 Legislative Session, AB 1860 and AB 2347, are awaiting signature from the Governor. AB 1860 requires manufacturers who have sold recalled products to provide for retrofit or return at no cost to the consumer or retailer. AB 2347 requires manufacturers to establish and maintain a recycling program for mercury-added thermostats, and prohibits sales in California if manufacturers do not comply. These bills establish model policy for extended producer responsibility requiring the companies that profit from products to address end-of-life disposition.

An alternative to product-by-product legislation to address EPR issues is for the State to pass "framework legislation." Framework legislation would allow manufacturers to create their own systems for the collection of products. The "framework" establishes consistent principles and procedures to achieve producer-led responsibility for sustainable product design and management. Staff anticipates that such framework legislation will be introduced in this upcoming legislative cycle.

#### *Supporting EPR Organizations*

To aid in the implementation of EPR locally and nation-wide, organizations have formed to effectively represent local governments on these issues. The Product Stewardship Institute (PSI) is a national non-profit membership-based organization that works with state and local governments and environmental groups to reduce the health and environmental impacts of consumer products. Their membership consists of forty-five state and fifty-seven local governments including the cities of Oakland, San Francisco, Palo Alto, Santa Cruz, Santa

Monica, and the Southern California Association of Governments. PSI takes a unique product stewardship approach to solving waste management problems by encouraging product design changes and mediating stakeholder dialogues. The City's Environmental Services Department first became a member of PSI in 2006-2007.

The California Product Stewardship Council (CPSC) is a coalition of local governments formed in 2006 in response to the State ban on Universal Waste. Twenty-seven cities, twenty-three counties, thirteen local government associations, and the Rural Counties Environmental Services Joint Powers Authority (representing twenty-three counties located in Northern California) have joined CPSC. These include the counties of Santa Clara, Santa Barbara and Sacramento, the cities of Cupertino, Oakland, and Fresno, and the Association of Bay Area Governments (ABAG), Bay Area Clean Water Agencies, Bay Area Stormwater Management Agencies, and the California Stormwater Quality Association. The overwhelming cost for collection and disposal of Universal Wastes galvanized local environmental managers to unite in order to pursue statewide solutions for EPR. The City first provided CPSC membership fees in 2007-2008 and has a staff member on its Board of Directors.

Staff will continue to support these organizations and return to Council, as appropriate, for actions such as resolutions and financial support for both the CPSC and PSI at a level commensurate with other local government members. In turn, the City will benefit from State and national efforts to shift product management systems from government-funded and ratepayer financed, to ones that rely on manufacturer responsibility. ESD will ensure that any CPSC legislative or policy initiatives related to Extended Producer Responsibility are coordinated with Intergovernmental Relations and the City's Sacramento office.

#### *Engaging and Partnering with Businesses to Implement EPR*

In addition to making EPR a legislative priority, the City can also encourage businesses to use EPR concepts, including sharing in the responsibility for the total life-cycle costs of the products used and manufactured by businesses. Staff can support private sector initiatives through the following efforts:

- Partnering with local businesses to implement more product take-back and related programs.
- Collaborating with the County of Santa Clara's Green Business Program, a cooperative effort between governmental agencies and utilities, to support local businesses efforts to conserve resources, prevent pollution, and minimize waste.
- Working in conjunction with the City's Office of Economic Development and business organizations to recognize businesses for implementing EPR and to provide incentives for organizations that incorporate EPR principals into their operations.
- Implementing educational efforts targeted to consumers highlighting EPR successes such as product design and packaging changes and how consumers can incorporate EPR in purchasing and disposal decisions.

### *Take-Back Program for Pharmaceuticals*

Another priority EPR initiative is addressing the problem of prescription and non-prescription drugs in our waterways, by creating a take-back program for pharmaceuticals. The harmful practice of flushing drugs down sinks and toilets has resulted in detectable levels of pharmaceuticals in water locally and nation-wide. In a recent U.S. Geological survey, eighty-percent of streams sampled contained prescription and non-prescription drugs. The wastewater treatment plant cannot screen out or neutralize all medicinal ingredients. Even low levels of drugs can have a negative effect on the health and reproduction cycles of stream and marine life. To mitigate these harmful practices, the City currently implements take-back events, which are intermittent and expensive to administer. Staff proposes to develop an implementation plan for a pharmaceutical take-back program, which would partner with hospitals and/or pharmacies. Staff will return to Council with a proposed program within a year.

### *Environmental Preferable Procurement*

One vehicle that the City uses to implement Green Vision goals is through the City's own purchasing decisions including its Environmentally Preferable Procurement Policy (EP<sup>3</sup>). It was revised in March 2007, adding requirements that the City consider several aspects of EPR when making procurement decisions for City operations, such as:

- Purchasing products which contain, whenever practicable, the highest percentage of post-consumer recovered material, the highest percentage of total recovered material available in the marketplace, and purchasing products which reduce waste in manufacturing, packaging, and use;
- The life cycle economics of the product - the difficulty or ease of disposal of the item at the end of its useful life;
- Impacts and threats of harm to human health or the environment. The City may choose to purchase alternative products, such as soap without Triclosan, that contain less toxic chemicals; and
- Requires all City contractors and grantees to conform to the EP<sup>3</sup> Policy.

In 2006, San José became the first California municipality to utilize the Electronic Product Environmental Assessment Tool (EPEAT) silver standard for procurement of computers. The EPEAT standard, developed by industry, the US Environmental Protection Agency, and other stakeholders, is a tiered standard that addresses criteria such as packaging, toxics, hazardous materials, and end-of-life management. The cumulative environmental savings to the City are significant, with 1.5 million kilowatts in energy, 52,000 lbs. of carbon equivalents, 2.7 million lbs. of air emissions, and 2,100 lbs. of hazardous waste. The cost savings in 2006 was nearly \$126,000. The EPA recognized San José as a "Green Electronics Champion" for its early adoption of EPEAT. The City can further this initial EPR success by expanding the use of EPR policies to more products it purchases.

As part of the Fiscal Year 2008-2009 work plan for the EP<sup>3</sup> effort, staff will evaluate possible incorporation of Extended Producer Responsibility into the City's product procurement practices and report back to Committee in fall 2009.

### **EVALUATION AND FOLLOW-UP**

In legislative updates to Council, staff will include progress related specifically to EPR legislation. With the Fiscal Year 2008-2009 annual EP<sup>3</sup> report, scheduled to be presented to Committee in Fall 2009, staff will present recommendations to incorporate EPR in the City's procurement processes. Opportunities for EPR partnerships with businesses will be included in the Zero Waste Master Plan scheduled to be considered by Council in December 2008.

Staff will return to Council within a year with an implementation plan for pharmaceutical take-back programs, including hospitals and/or pharmacies.

### **PUBLIC OUTREACH/INTEREST**

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

As part of a planned EPR stakeholder outreach and engagement effort, staff will reach out to businesses to explain the benefits of EPR and other green business practices. In addition, this memorandum will be posted on the City's website for the October 6, 2008 Transportation and Environment Committee Agenda.

### **COORDINATION**

This memorandum has been coordinated with the Department of Finance, the Offices of Economic Development, Intergovernmental Relations, City Attorney, and the City Manager's Budget Office.

### **FISCAL/POLICY ALIGNMENT**

These recommendations are in alignment with the Council approved Green Vision, Zero Waste, and Urban Environmental Accords goals.

09-22-08

**Subject: Extended Producer Responsibility**

Page 7

**COST SUMMARY/IMPLICATIONS**

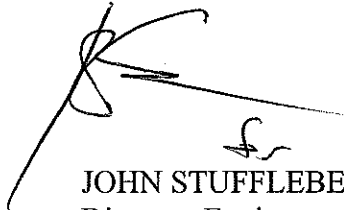
Initial costs associated with the support of Extended Producer Responsibility efforts would be funded from the Environmental Services Department's existing non-personal services base budget. Any cost implications of additional actions, including incorporating EPR into the City's procurement processes and the proposed pharmaceutical take-back program, will be provided when staff returns with recommendations for these activities.

**BUDGET REFERENCE**

Not applicable.

**CEQA**

Exempt: File No. PP08-204.

A handwritten signature in black ink, appearing to read 'John Stufflebean', is written over a horizontal line. The signature is stylized and somewhat cursive.

JOHN STUFFLEBEAN  
Director, Environmental Services

For questions please contact Jo Zientek, Deputy Director, Integrated Waste Management Division, at (408) 535-8557.