

Sonoma County

Extended Producer Responsibility Implementation Plan



**Presented to
Sonoma County Waste Management Authority**

**Prepared by
R3 Consulting Group, Inc.**

January 26, 2007

Introduction

Extended Producer Responsibility (EPR) and Product Stewardship (PS) are terms used interchangeably to describe a long-term solution to manage waste products by shifting the responsibility for collection, transportation, and management for those products away from local governments to the manufacturers (Acronyms and Definitions in Attachment A). The Sonoma County Waste Management Agency (Agency) first documented its interest in supporting EPR policies when it passed Resolution No. 2001-021 (Attachment B) on June 20, 2001. The resolution states:

“The Agency hereby declares its support for Extended Producer Responsibility policies and supports governmental and non-governmental organizations in the effort to develop such policies.”

In keeping with this policy direction, the Agency staff presented a report on EPR dated April 16, 2006 to the Agency Board as a way to deal with the enactment of the State Universal Waste Rule which banned several materials, including household batteries and mercury containing lamps, from landfill disposal. Agency staff reported that batteries and mercury containing lamps were a good target for retail take-back policies. As a result, the Agency directed staff to develop an Implementation Plan to institute a retail take-back program for household batteries and mercury containing lamps in Sonoma County. R3 Consulting Group (R3) was contracted to develop the Implementation Plan and present it to the Agency Board.

Background

EPR as a policy approach refers to shifting responsibility away from general taxpayers to the manufacturers. There are many different levels of responsibility that manufacturers can assume for their products on the path to taking full responsibility for their products. Any movement on the path to manufacturers taking full responsibility is in keeping with EPR.

Since 1991, EPR policies have been broadly adopted in Europe and in other countries such as Japan, Australia, Taiwan, and Korea. Most recently EPR policies have been

R3

Sonoma County Extended Producer Responsibility Implementation Plan

adopted in the United States, some voluntarily by the manufacturers, and some mandated at the state and local level. At the Federal level, there has only been consideration of development of new EPR policies but to date, there has been no change in regulations to support EPR.

The following sections examine the international, national, and local EPR programs that have been developed as background for Agency decision makers.

International EPR Policies

Germany is widely credited for developing the first EPR program in 1991 with its packaging ordinance known as Green Dot. The law required that producers and retailers take back the packaging associated with products to ensure that specified recycling rates, between 60-70 percent, were met for each material.

The paper titled, "Extended Producer Responsibility in Europe: A Producer Case Study," by Kieren Mayers of Sony Entertainment, EPR policies are most prevalent in Europe, where they have been implemented or are in the process of being implemented in 29 different countries following the introduction of several European Union Directives. In fact, according to Mayers, product manufacturers have established over 200 different Producer Responsibility Organizations to organize take-back programs for materials such as batteries, packaging, old vehicles, and Waste Electrical and Electronic Equipment (WEEE).

Canada has also been a leader in adopting EPR policies as is demonstrated by the proposed Manitoba HHW legislation, Nova Scotia policies for electronics and paint, Quebec policies on paint, pharmaceuticals, beverage containers and tires, and the British Columbia EPR policy covering the following materials: paint, solvents, pesticides, gasoline, pharmaceuticals, and lubricating oil and filters. Duncan Bury, the Head of Product Policy at Environment Canada's National Office of Pollution Prevention, has said, *"There is enough of a track record of these operating programs that there really isn't any question whether this is an appropriate kind of policy. We are now at the point of discussing how to make it more effective."*

In short, there is a 15 year trend of EPR policies being adopted by countries around the world to deal with a wide

R3

variety of products, including batteries and mercury containing products. Some EPR policies also promote green design which leads to waste reduction and fewer toxic materials in the products sold to the public. The benefit to having individual countries and large trading groups like the European Union passing EPR policies is that they are large enough to significantly affect product design changes for companies that sell on the international market. It is much harder for state and local governments to organize and set policies that can affect production by companies that are international conglomerates. However, local governments do have a role to play in developing and implementing their own EPR policies, especially when state and federal governments do not take action.

National EPR Policies

There is no EPR mandated policy at the national level in the United States, however, there has been considerable discussion at the EPA about designing such policies for electronics and agricultural pesticide containers. Attachment D is the EPA's fact sheet on the development of the Pesticide Container Recycling Rule which is expected to be published in the Federal Register by late summer of 2007. This is a result of the agricultural pesticide producers voluntarily joining together in 1992 to start a Third Party Organization (TPO) called the **Ag Container Recycling Council (ACRC)** with the goal of collecting and recycling pesticide containers. The ACRC is now asking the EPA to adopt regulations and make participation mandatory for all producers of agricultural pesticides. ACRC was formed by 40 of 80 producers which resulted in half of the manufacturers paying to recycle the containers produced from all the manufacturers. This is called the "free-rider" problem and is a risk to all voluntary participation programs because of the inequity in having a few manufacturers pay to recycle all manufactures products. What makes the ACRC situation interesting is that it is the only instance we are aware of where the manufacturers of a product are requesting EPA to make their recycling program mandatory. In general, manufacturers favor national policies and not state-by-state regulatory approaches. In the summer of 2006 there was draft Federal legislative language circulating for mercury controls that contained a pre-emption for any state or local efforts to require product manufacturers to finance retail take-back and recycling

R3

Sonoma County Extended Producer Responsibility Implementation Plan

programs. The language was dropped and HR 6261 was introduced in the fall of 2006, without the pre-emption. Nevertheless, the original pre-emption language came to the attention of elected officials of the **National Association of Counties Environment and Land Use Steering Committee** which passed two resolutions titled as follows:

- Paint Reuse and Recycling (Attachment E)
- Mercury Fluorescent Lamp Recycling (Attachment F)

The resolutions dated August 8, 2006 make policy statements supporting EPR solutions. The resolution on fluorescent lamps included a paragraph in opposition to any Congressional proposal to pre-empt states from developing their own financing mechanism for lamp recycling.

Another national voluntary EPR program was started by the battery manufacturers in 1996 and was titled the **Rechargeable Battery Recycling Corporation (RBRC)**. RBRC operates in the US and Canada and started collecting only rechargeable batteries and over time has expanded the program to also collect cell phones. Currently, RBRC has 90% of the manufacturers participating in both countries and have battery collection centers at 30,000 retailers and businesses. So far, RBRC seems to be maintaining manufacturer participation and has seen significant increases in the pounds of batteries collected, increasing from less than 1 million to 5.6 million pounds from 2005 to 2006. However, the actual effectiveness of the system is unknown since it is only measured by increases in pounds collected and is not adjusted for increases in sales. In addition, there are far fewer battery collection points than sale points for batteries, so convenience to the consumer is still questionable. For more details, see the RBRC Fact Sheet in Attachment G.

Another voluntary EPR program was announced in June of 2006 by **Dell Computer** that promotes a voluntary take-back and recycling program for all Dell branded products if the consumer purchases a replacement product. Approximately 55 million pounds of computer material has been collected in North and South America to date. This demonstrates a manufacturer taking direct and voluntary responsibility for its own products.

R3

The most recent voluntary effort is the **National Vehicle Mercury Switch Recovery Program**, which became effective in August of 2006 and is promoted by EPA, to remove mercury-containing switches from scrap vehicles. The vehicle manufacturers are paying into a \$4 million dollar implementation fund that will encourage the return of the switches by vehicle dismantlers. This program is in its infancy so no conclusions can be drawn on its effectiveness.

Another voluntary national EPR organization is the **Thermostat Recycling Corporation (TRC)** which started in 1998 and actively promotes the collection and recycling of mercury thermostats from older Heating Ventilation and Air Conditioning (HVAC) systems. Collections occur at the HVAC wholesalers where HVAC contractors return them after replacing older units. For a one-time charge to the wholesalers of \$25 (was \$15 prior to January 1, 2007), the wholesalers receive a pre-paid shipping box to return the mercury thermostats collected from the contractors. When a box is returned to TRC, another one is automatically sent to the wholesaler. In addition, the TRC board recently voted to add HHW collection centers to its program in 2007.

Statewide EPR Policies

Several states have chosen to mandate EPR programs for various products:

- * CA Auto Lead-Acid Batteries Take-Back (1989)
- * CA Cell Phone Take-Back (2004)
- * CA Rechargeable Battery Take-Back (2005)
- * MD Computer Recycling Producer Take-Back (2005)
- * ME E-waste Recycling Act -Producer Pays (2005)
- * MA Mercury Containing Products - Producer Pays (2006)
- * ME Mercury Products Law – Producer Take-Back (2006)
- * WA E-waste Recycling Bill – Producer Take-Back (2006)

In addition, in the 2006/07 State of California Budget language addresses take-back programs with the following language:

“Manufacturer “Take-Back” Program.
The Board (meaning CIWMB), in conjunction with the Department of General Services, shall evaluate the feasibility of implementing a manufacturer responsibility

R3

Sonoma County Extended Producer Responsibility Implementation Plan

or take-back program for those goods purchased by California state government. This study should focus on those materials that are, or could be, most conducive to reuse or recycling by the manufacturer together with materials that make up a substantial portion of state government waste stream. Further, it should assess the effectiveness of current take-back provisions in state contracts.

This evaluation shall result in a report to the Legislature by January 1, 2008, and shall include an overview of similar activities that are occurring across the country or around the world that may serve as a model for California in the future.”

The State of California is considering how, through its own procurement, it can encourage take-back policies for companies that sell to the State government. This can also be done at the local government level.

In addition, at the CIWMB February 13, 2007 board meeting the CIWMB is considering EPR language as part of the Board’s “Strategic Directives”:

“In order to assure environmental sustainability, it is a core value of the CIWMB that producers assume the responsibility for the safe stewardship of their materials.

Specifically, the CIWMB will:

- *Assure appropriate legislation is introduced to foster “cradle-to-cradle” producer responsibility.*
- *Analyze the feasibility of various approaches to increasing producer responsibility and make recommendations to the CIWMB Board by December 2007.*
- *Build capacity and knowledge in CIWMB on EPR issues and solutions.*
- *Develop and maintain relationships with stakeholders that result in producer-financed and producer-managed systems for product discards.”*

R3

Local EPR Policies

Some local governments across California and in Wisconsin have already passed EPR policies relating to Universal Wastes, or more specifically, batteries and mercury containing lamps. Below is a listing of those policies (Attachments H through N) with a brief description:

- Dane County, Wisconsin: Ordinance passed in January 1990 prohibiting any retailer from selling tires, lead acid batteries, mercury thermostats or fluorescent lamps without also informing the public that they are banned from landfill disposal and offering to accept these products back for reuse and recycling.
- City of Madison, Wisconsin: Ordinance passed December 2003 requiring any retailer that sells fluorescent bulbs or other lamps containing mercury to notify the public that they cannot be disposed of in landfills and requiring retailers to offer to accept those items for a reasonable fee.
- Central Contra Costa County Solid Waste Authority: Resolution adopted in March 2002 urging the state to require e-waste take-back legislation that encourages green design.
- City of Morgan Hill, California: Resolution passed September 20, 2006 supporting statewide EPR policies and stating that if the state does not pass effective legislation within the next 18 months, or if the industry does not implement take-back, the City will consider requiring local retailers to take-back universal wastes.
- San Luis Obispo County, CA: Ordinance passed in May 2006 requiring local retailer take-back of batteries and fluorescent lamps. (The ordinance does not become effective until four other jurisdictions within the county adopt similar ordinances.)
- San Francisco, CA: Ordinance passed February 2006 urging statewide EPR legislation targeted at U-waste and other hazardous products and packaging and directing City staff to develop producer responsibility policies for City procurement.
- Suffolk County, NY: Resolution 1545 passed unanimously September 5, 2006 creating a purchasing policy that will require County agencies to seek out and do business only with vendors that take-back

R3

Sonoma County Extended Producer Responsibility Implementation Plan

used electronics and recycle them in an environmentally sound manner.

In addition to the ordinances and resolutions being adopted by local governments to encourage EPR, the University of Wisconsin received a \$30,000 grant from the Solid Waste Research Council in the fall of 2006 to conduct a social marketing study on how to increase collection rates of batteries and mercury lamps in Dane County, WI. Dane County has required retailers to offer low cost or free drop-off of batteries and mercury lamps for over 16 years yet the recycling rate is estimated to be in the low 20 percent of material generated. This is much lower than expected and supports the premise that providing a convenient method for the consumer to return materials is a critical component of a successful take-back program.

On February 8, 2006, the Department of Toxic Substances Control (DTSC) allowed the residential exemption to the disposal ban to expire for common household batteries, mercury containing lamps, other mercury containing devices, electronic products, and non-empty aerosol cans that contain hazardous products as outlined in Frequently Asked Questions document in Attachment C. By no longer allowing residents in California to dispose of these items, often called Universal Wastes, in the trash, they created an immediate need for local government to collect and manage these materials since AB 939 placed responsibility onto local government to manage its waste stream.

In addition, the CIWMB Strategic Plan states that:

*“Goal 1—Increase participation in resource conservation, integrated waste management, waste prevention, and **product stewardship to reduce waste and create a sustainable infrastructure.***

...through partnerships with businesses, associations, and State and Federal agencies, we will strengthen our commitment toward product stewardship. This principle ensures that all actors along the product chain share responsibility for life-cycle environmental impacts and the financial viability of the whole product system.”

In short, California Environmental Protection Agencies such as CIWMB can be encouraged to pursue the goals of existing strategic plans by developing EPR policies. To

R3

that end, DTSC and CIWMB are working together to start the “Take It Back Partnership (TIBP)”. TIBP is a voluntary approach to encourage manufacturers and retailers to take-back these products. To date it there has been significant effort made to get the large retailers to start collection of materials in-stores. One challenge with the TIBP is that even when corporate offices “sign-on” to the program, the individual stores may not participate, especially if they are a franchise chain store.

As a way to address the problem of toxic materials being illegally disposed of in the residential waste stream and to encourage manufacturers to redesign their products to be less toxic, some local governments are passing EPR policies. Local EPR policies often encourage the state and federal governments to address these issues because the manufacturers sell products in many jurisdictions, not just one city or one state. Also, as is exemplified with the Ag Container Recycling Program (ACRC), there is a risk in promoting voluntary programs because they may fail and leave local governments paying to recycle the products.

The ACRC example has demonstrated that a national voluntary program supported by local organizations can be problematic. A local example is the Napa County Ag Commissioner held a collection event in November of 2006 and collected 27,940 pounds of plastic from 95 different growers, pest control businesses, golf courses and government agencies. Because ACRC had no money left that late in the year to pay for recycling the containers, the Napa Valley Vintners Association and Napa County Farm Bureau agreed to split the cost of \$9,356 to recycle the containers.

Recommended EPR Policy Direction for Sonoma County

After reviewing and analyzing the trends of EPR policy, the effectiveness of various EPR programs and whether national, state, or local EPR policies are necessary or optimal, it was concluded there are several reasons that adopting an EPR policy approach makes sense at the local level:

1. California is increasing the number of products being banned from landfills without having an EPR system ready to support the ban. The latest is treated wood waste landfill ban which

R3

Sonoma County Extended Producer Responsibility Implementation Plan

became effective January 1, 2007. This is essentially an unfunded mandate on local government to manage these difficult materials;

2. High costs to collect and manage materials cannot be borne by local government alone;
3. EPR is necessary to meet the State goal of zero-waste; and
4. Creates a political ground-swell of support for EPR policies at the State and Federal level.

R3 Consulting Group and Agency staff has spent a significant amount of time discussing the possible options for encouraging EPR and is recommending a phased approach. Because there must be a fundamental shift in thinking by parties at every level in the chain of custody of these products, time must be provided to allow for change in thinking to occur in order to develop a collaborative solution.

Agency staff has indicated a preference to initially try to manage the wastes through a voluntary and collaborative approach instead of a mandatory policy. However, due to the significant volume, toxicity, and cost to collect and manage Universal Wastes, there is limited time for a voluntary solution to be developed that will prevent many of these materials from continuing to be landfilled, or the cost of collection for the Agency in becoming unsustainable. In 2005 the Agency and local businesses paid nearly \$20,000, and more than \$22,000 in 2006, just to manage household batteries and fluorescent lamps. The amount of material managed is a fraction of what is generated. According to a CIWMB report titled *Household Universal Waste Generation in California*, in 2000-01, 0.21% and 0.55% of fluorescent lamps and batteries respectively were collected as a percentage of sales. The cost to manage these materials is expected to increase significantly as more materials are collected.

After thorough consideration of the options by R3 Consulting Group and Agency staff, a two-phase Implementation Plan for EPR is recommended as follows:

R3

Phase 1 – Encourage Manufacturer Responsibility

Encourage EPR Policies at the Federal and State Level

Build on the existing Agency EPR Resolution by having local elected officials and organizations, such as California Association of Counties, League of California Cities, and Association of Bay Area Governments, communicate with State and Federal elected representatives referencing Resolution 2001-021 and encouraging them develop and implement statewide and/or national EPR solutions for all waste materials, not just batteries and mercury containing lamps.

Encourage EPR Policies at the Local Level

Build on the existing Agency EPR Resolution by working with the Agency and Agency member procurement staff to develop or add language to the existing Environmentally Preferable Purchasing policies that the Agency prefers vendors who take-back products at the end of their useful life for recycling. For example, it could become standard practice to ensure that all copiers and electronic equipment purchased by the Agency and its members have a preference for vendors with a take-back policy.

Encourage EPR Policies at Local Businesses

The Agency could encourage local planning departments to use the Conditional Use Permit to require any new retailer of batteries and/or mercury containing lamps to take-back those items from the public for free.

Participate in California Product Stewardship Council (CPSC)

Actively participate in the CPSC to develop coordinated efforts with other California local governments to promote EPR legislation for batteries and lamps and other wastes of concern.

R3

Sonoma County Extended Producer Responsibility Implementation Plan

Promote the Thermostat Recycling Corporation (TRC)

Work with local wholesalers and contractors to encourage their participation in the TRC program to collect mercury thermostats in conjunction with the support and guidance of the Thermostat Recycling Corporation. Also work with TRC to participate in the new program for thermostat collection and recycling at HHW facilities. (See Attachment O for an example of the contractor and wholesaler notification forms.)

Promote Rechargeable Battery Recycling Corporation (RBRC)

Continue to work with local retailers to encourage their participation in the RBRC program to collect rechargeable batteries and cell-phones in conjunction with the support and guidance of the Rechargeable Battery Recycling Corporation. Also work with RBRC to customize existing promotional and outreach materials for Sonoma County and utilize them in Agency outreach efforts. See Attachment P for an example of the RBRC advertising campaign.

Work with the California Take-It Back Partnership (TIBP)

Continue to attend meetings and participate in the TIBP encouraging those selling and promoting the sale of batteries, mercury lamps, and thermostats to help manage them at the end of life. PG&E recently has joined the TIBP effort and offered to work with the Agency to educate public about proper end-of-life management for fluorescent lamps in Sonoma County. Staff will continue with that effort.

Phase 2 – Implement Local Mandatory Take-Back Ordinance

If Phase 1 efforts do not result in significant improvements in household battery, mercury lamp, and mercury thermostat collection and management, funded by parties

R3

Sonoma County Extended Producer Responsibility Implementation Plan

other than the Agency by **January 1, 2008**, then the Agency should consider implementation of a mandatory take-back ordinance for local sellers of these products. The staff will make the presentation at the January 2008 Agency Board meeting summarizing the efforts made and any changes in the collection and management systems and will, if necessary, recommend adoption of a local ordinance to mandate that sellers of these products (of a certain quantity to be determined) be required to take them back from the public. If the lack of progress warrants, Agency staff will also present a model ordinance at the January 2008 board meeting for Board consideration.

The EPR Implementation Plan monitoring process should include reports at the September 2007 and January 2008 Agency Board meetings. Staff will report on the following items, at a minimum:

- a. Actions taken by manufacturers and retailers to increase collection and management of household batteries, mercury lamps, and mercury thermostats.
- b. Actions taken by manufacturers, retailers and others involved in the promotion of such products (like PG&E) to increase public education of proper end-of-life management of household batteries, mercury lamps, and mercury thermostats.
- c. Actions taken by the State of California and the Federal Government to encourage or require EPR for batteries, mercury lamps, and mercury thermostats.
- d. Change in volumes of household batteries, mercury lamps, and mercury thermostats collected by the Agency.
- e. Change in cost to collect and manage household batteries, mercury lamps, and mercury thermostats by the Agency.
- f. Any change in the number of collection points (convenience) for the consumers to return household batteries and mercury lamps to manufacturers and retailers.

If, at the first update in September 2007, staff believe that the first nine months were not successful in demonstrating improvements in collection and management of batteries, mercury lamps and mercury thermostats, staff will present their recommendations on whether or not to proceed in contacting local stakeholders to start discussions about local EPR efforts. The stakeholders to be contacted in regards to collection and management of the batteries,

R3

Sonoma County Extended Producer Responsibility Implementation Plan

mercury thermostats, and fluorescent lamps include the following:

- AB939 Local Task Force
- Local Retailers
- Local and State Government Representatives
- Recyclers
- Chamber of Commerce
- Economic Development Board

Outreach Plan for TRC and RBRC

Staff will identify existing recycling opportunities in Sonoma County for mercury thermostats including lists of participating retailers engaged in take-back. The first task in working to maximize the TRC program is to provide registration forms to every HVAC wholesaler in Sonoma County and get them signed-up to participate in the take-back program and then to do the same with the contractors. Staff will also work with the businesses to identify ways that the Agency can support them in the effort, including promotions and listing them in green business programs and the Recycling Guide and Agency's website (www.recyclenow.org).

Similar efforts will be made with RBRC to continue to identify existing sellers of batteries that participate in the RBRC program and support them while trying to interest additional retailers in collecting rechargeable batteries in their place of business.

Summary

The Sonoma County Waste Management Agency will move forward with promoting EPR through a two-phased approach:

1. Support existing EPR programs and encourage new EPR policies at all levels of government and business, and;
2. Develop a mandatory EPR ordinance if the Phase 1 efforts do not result in significant improvements in shifting responsibility to pay for and manage

R3

Sonoma County Extended Producer Responsibility Implementation Plan

batteries, mercury lamps and thermostats to the manufacturers and others in the supply chain.

Through this two-phased approach, the Agency intends to provide consumers with increased opportunities to recycle these materials and remove the burden of payment from taxpayers.

Attachments

- A. Acronym Definitions
- B. SCWMA Resolution No. 2001-021 Supporting Extended Producer Responsibility
- C. DTSC Frequently Asked Questions on the Universal Waste Rule
- D. EPA Pesticide Container Recycling Rule (December 2006)
- E. NACo Resolution on Paint Reuse and Recycling
- F. NACo Resolution on Mercury Fluorescent Lamp Recycling
- G. RBRC Fact Sheet
- H. Dane County, Wisconsin, EPR Ordinance
- I. City of Madison, Wisconsin EPR Ordinance
- J. Central Contra Costa Waste Authority, CA EPR Resolution
- K. City of Morgan Hill, CA EPR Resolution
- L. San Luis Obispo County, CA EPR Ordinance
- M. San Francisco, CA EPR Ordinance
- N. Suffolk County, NY EPR Resolution
- O. Thermostat Recycling Corporation Contractor and Wholesaler Notification Forms
- P. RBRC Promotional Material

R3

Sonoma
County
Extended
Producer
Responsibility
Implementation
Plan

This page intentionally left blank.

R3

Attachment A – Acronym Definitions

- **ABAG – Association of Bay Area Governments.**
The official comprehensive planning agency for the San Francisco Bay region. ABAG's mission is to strengthen cooperation and coordination among local governments. In doing so, ABAG addresses social, environmental, and economic issues that transcend local borders.
- **ACRC – Ag Container Recycling Council.**
Voluntary third party organization of Agricultural Pesticide Producers to collect and recycle pesticide containers.
- **Agency – Sonoma County Waste Management Agency.**
A joint powers authority of the nine cities and the County of Sonoma. The specific focus of the Agency's efforts is the implementation of regional waste diversion programs as required by AB939 in the following categories: Wood Waste, Yard Debris, Household Hazardous Waste, Education and Planning.
- **CalEPA – California Environmental Protection Agency.**
Comprised of six Boards, Departments and Office to create a cabinet level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources.
- **CIWMB – California Integrated Waste Management Board.**
The Board promotes a Zero Waste California in partnership with local government, industry, and the public. This means managing the estimated 88 million tons of waste generated each year by reducing waste whenever possible, promoting the management of all materials to their highest and best use, regulating the handling, processing and disposal of solid waste, and protecting public health and safety and the environment.
- **CPSC – California Product Stewardship Council.** Newly formed organization of California local governments which has a mission to shift California's product waste management system from one focused on government funded and ratepayer financed

R3

Sonoma County Extended Producer Responsibility Implementation Plan

waste diversion to one that relies on producer responsibility to reduce public costs and drive improvements to product design.

- **DTSC – Department of Toxic Substances Control.**
California department that regulates materials designated as toxic including universal waste.
- **EPA – Environmental Protection Agency.**
The Federal Agency responsible to protect the environment through regulation.
- **EPR - Extended Producer Responsibility.**
Used interchangeably with Product Stewardship to describe a long-term solution to manage waste products by shifting responsibility for collection, transportation, and management for those products away from local governments to the manufacturers and others in the product supply chain.
- **E-waste – Electronic Waste.**
Unwanted electrical or electronic appliance.
- **HHW – Household Hazardous Waste.**
Flammable or combustible products like paint and solvents, reactive products such as pool chemicals, corrosive products like cleaners, toxic products like pesticides, products with heavy metals in them and pharmaceutical products.
- **HVAC – Heating, Ventilation and Air Conditioning.**
- **NACo – National Association of Counties.**
The only national organization that represents county governments in the United States. NACo advances issues with a unified voice before the federal government, improves the public's understanding of county government, assists counties in finding and sharing innovative solutions through education and research, and provides value-added services to save counties and taxpayers money.
- **PG&E – Pacific Gas and Electric Company.**
One of the largest combination natural gas and electric utilities in the United States.
- **PS - Product Stewardship.**
Used interchangeably with Extended Producer Responsibility to describe a long-term solution to manage waste products by

R3

Sonoma County Extended Producer Responsibility Implementation Plan

shifting responsibility for collection, transportation, and management for those products away from local governments to the manufacturers and others in the product supply chain.

- **R3 – R3 Consulting Group.**
Solid waste consulting firm contracted to develop the Implementation Plan.
- **RBRC – Rechargeable Battery Recycling Corporation.**
Voluntary third party organization of battery manufacturers to collect and recycle rechargeable batteries and cell phones.
- **SCWMA - Sonoma County Waste Management Agency.**
A joint powers authority of the nine cities and the County of Sonoma. The specific focus of the Agency's efforts is the implementation of regional waste diversion programs as required by AB939 in the following categories: Wood Waste, Yard Debris, Household Hazardous Waste, Education and Planning.
- **TIBP – Take It Back Partnership.**
Voluntary approach started by the CIWMB and DTSC to encourage manufacturers and retailers to take-back products.
- **TPO - Third Party Organization.**
Private, not for profit organization established to implement and administer programs to recover and manage particular used consumer products for reuse and recycling. A TPO may be formed voluntarily by interested parties or in response to legislation.
- **TRC – Thermostat Recycling Corporation.**
Voluntary third party organization established by Honeywell, General Electric and White Rodgers to promote collection and recycling of mercury thermostats from HVAC systems.
- **U-waste – Universal Waste.**
Hazardous materials that contain harmful chemicals. Materials include common batteries, fluorescent tubes and bulbs and other mercury containing lamps, electronic devices, mercury devices, and non-empty aerosol cans that contain hazardous materials.
- **WEEE – Waste Electrical and Electronic Equipment.**
Acronym for European EPR policy regarding electrical and electronic equipment.

R3