

Bay Area Hazardous Waste Management Facility Allocation Committee

administered by



Association of Bay Area Governments

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**Budget & Workplan FY 2012-13
Draft Revised 11/16/12**

Overview

This Budget and Workplan for the Hazardous Waste Management Facility Allocation Committee (Committee) includes proposed activities and allocation of funds for fiscal year 2012/2013. Activities are organized into two main categories, Hazardous Waste and the Green Business Program. Anticipated revenues of \$105,035 include \$10,559.50 from each of the 9 Bay Area counties, and \$10,000 from the Bay Area Air Quality Management District. The local contribution is the same amount billed in 2011/12. No increase is requested for the coming fiscal year.

Due to budget constraints, the Bay Area Air Quality Management District, which had provided annual grants for several years, did not provide funding for the 2011/12 fiscal year. A request has been submitted to the Air Pollution Control Officer asking the District to resume its annual contribution of \$10,000 for fiscal year 2012/13 was successful. If received, the funds would and will be used for the maintenance and enhancement of the statewide measurement database that calculates the environmental benefits achieved by our businesses. That would may reduce the contributions requested from Bay Area counties by the database administrator. Because it is uncertain whether the funds will be granted, they are not included in the proposed budget.

Appendix A provides a summary of work accomplished in fiscal year 2011/12.

Hazardous Waste

Universal Waste Processing Facilities: During the 2012/13 Fiscal Year, staff will work with the Technical Advisory Committee (TAC) and a consultant to implement the research project the Committee approved at its meeting on January 27, 2012. The project will examine the potential to site facilities that process universal wastes, such as batteries and used electronic devices, in the Bay Area, and recommend what additional efforts the Committee might pursue in the future to address the large volumes of wastes being shipped out of the region. Appendix B is a revised project memo that reflects Committee direction on the components of the project report.

This effort will be undertaken instead of analyzing the 2010 and 2011 hazardous waste manifest data. During the year, we will confer with Department of Toxic Substances Control and local TAC members on how to approach future analyses of the hazardous waste manifest data to ensure the process meets DTSC expectations and is useful to our members.

Sustainable Purchasing: In response to sustained interest, we will continue to promote Sustainable Purchasing. After organizing successful regional workshops in each of the past 3 years, staff proposes a different approach that is intended to help more agencies interested in sustainable purchasing initiate and implement programs. Instead of offering a workshop, staff will monitor and post on the Committee webpage information about the subregional initiatives currently underway in Alameda, Santa Clara and Napa counties and any other local efforts we identify. Staff will also research and update the information currently on the site about local government policies and programs. This effort will create a repository of information that any jurisdiction can use. An announcement with links to the updated site will be circulated to ABAG member jurisdictions. We will also work to strengthen our partnership with the Responsible Purchasing Network, and remind our members of the wealth of resources available at their website, many of which are available to non-members.

Extended Producer Responsibility: Staff will continue to monitor and report on Extended Producer Responsibility (EPR) and other relevant legislation, local EPR efforts and the Green Chemistry Initiative. We will inform the Committee and TAC members in a timely manner when there are opportunities to comment or take other actions.

Green Business Program

The success of AB 913, which established the California Certified Green Business Program, offers long term opportunities for the ongoing expansion of the Green Business Program throughout the state. These include forging a statewide identity that takes advantage of the Program's new official status, lending it greater visibility among businesses and consumers, and providing a solid foundation for supportive collaboration with state agencies interested in effective outreach to small businesses.

In the short term, local and state budget shortfalls and the general economic climate will constrain existing Programs from expanding and new Programs from launching. Some local Programs will initiate fees for Program participation in the coming year. Negotiations with local certification partners, such as PG & E, are anticipated to ensure their ongoing financial and in-kind support. Significant state funding for the ongoing maintenance of the database is anticipated, but not at a level that can fully fund needed enhancements, training for new programs, or other expenses.

As members of a statewide Program, the Bay Area and all other local Programs around the state will be challenged to more closely conform their standards and marketing efforts. Working with DTSC and other Green Business Programs around the state, we will participate in the development of a statewide logo and marketing campaign, and update our regional website and materials as needed to tie the Bay Area to the California Certified Green Business Program.

Considering both the opportunities and the challenges, staff will continue to focus considerable time on Green Business - related activities. During 2012/13, in addition to regular Bay Area coordination duties, we will work with county coordinators to increase

capacity locally, and with regional and state partners to advance orderly, consistent statewide expansion. Avenues to pursue include increasing efficiency in the local and regional programs, better coordination among state agencies with related missions, and identifying new funding sources.

In order to secure funding for the database and other needs, the Network has been advised that it must have a more formal organization and governance structure than the current informal association provides. Given that the Bay Area Green Business Program developed the original policy guidance and standards that are the foundation for the statewide program, that our 9 county programs constitute more than half of the currently active local programs, and that the use of the database is now central to our operations, we have a particularly keen interest in having this work completed expeditiously.

To advance that interest, ABAG Attorney Ken Moy will facilitate development of the governance structure. He has advised that the appropriate vehicle would be a Memorandum of Understanding among all active Programs, Regional Coordinators, and DTSC. He will work with staff, Bay Area local coordinators and Network members in the early part of 2013 to develop the MOU. To develop and reach consensus on the scope and content of the MOU, ABAG will host the Network for a daylong meeting in January 2013. A professional facilitator will be engaged to ensure that the retreat results in the desired outcomes.

PROPOSED 2012 / 2013 WORKPLAN

We are seeking Committee approval for the 2012 – 2013 Budget and Work Plan. Staff activities are broken down into two main categories: Hazardous Waste Management Planning/Source Reduction, and the Green Business Program. Approximately 45% of staff time is devoted to the former category, and 55% to the Green Business Program.

Hazardous Waste Management Planning/Source Reduction

Staff the Committee, Technical Advisory Committee (TAC).

Engage a consultant, organize a stakeholder group, research and write a report on the potential to attract innovative universal waste processors to the Bay Area in order to address the high volume of hazardous wastes being shipped outside the region, promote environmentally responsible processing, and contribute to a more resilient economy.

Confer with Department of Toxic Substances Control and local TAC members and report on how to approach future analyses of the hazardous waste manifest data DTSC compiles to ensure the process meets legal requirements and is useful to ABAG members.

Monitor and report on multi-agency sustainable purchasing efforts in Alameda, Santa Clara, Napa and other counties. Identify new/revised sustainable purchasing policies, resolutions, ordinances, and specifications.

Update committee website at <http://www.abag.ca.gov/hazwaste/> to provide additional sustainable purchasing tools, resources and links for local governments; consider other opportunities to promote sustainable purchasing, including presentation to ABAG Executive Board.

Confer with the sustainable purchasing work group to identify additional ways to motivate/assist local jurisdictions interested in implementing EPP programs.

Work with TAC, the California Product Stewardship Council, and others to track and apprise the Committee of state and local Extended Producer Responsibility and Sustainable Purchasing activities, including legislation. Report as directed to ABAG Legislation & Governmental Organizations Committee and/or Executive Board.

Follow the Department of Toxic Substances Control's Green Chemistry Initiative; apprise Committee and TAC of opportunities to comment and participate in related discussions.

Report on regulatory / other changes pertaining to universal and electronic wastes.

Green Business Program

Staff the Bay Area Green Business Program TAC.

Coordinate, expand and promote the Bay Area Green Business Program to ensure ongoing health of Bay Area county programs

Facilitate development of checklists for new sectors identified and deemed suitable for the Program by Bay Area coordinators.

Identify funding and other opportunities to increase local and regional Green Business Program capacity.

Assist local programs that intend to augment their budgets by charging a fee for participation to develop fee schedules that avoid disadvantaging businesses with limited resources; share information with all coordinators to encourage consistent fee structures across the Bay Area.

Facilitate conversations with regional partners, such as the Bay Area Air Quality Management District and Pacific Gas & Electric Company to ensure timely and thorough site audits, seek input to help update our standards, and pursue financial contributions.

Work with DTSC and local coordinators around the state to develop and implement strategies to increase financial support for local programs and statewide database, and to expand participation in the California Green Business Program.

Assist DTSC in conversations with state entities that have complementary missions, such as California Air Resources Board, CalRecycle, California Public Utilities Commission, and Department of Water Resources, to better align our efforts and seek support.

Participate in the development / adoption of a statewide logo for the Green Business Program; work with DTSC and local programs in the California Green Business Network to move in an orderly and strategic way towards a statewide identity that amplifies the impact of our local programs.

Update Bay Area website as needed; purchase window decals and other collateral.

Participate in development of a strategic plan for long term operations and governance of the statewide Network to ensure consistent operations consistent with Bay Area policies and standards, and secure funding for maintenance of the statewide database and other expenses

Lead the development of a Memorandum of Understanding or other governance structure and instrument for the Network.

Work plan staff assignment allocations and details follow in the section entitled Proposed 2012-2013 Budget.

Proposed 2012/2013 BUDGET

Anticipated Revenue

County Contributions:	\$95,035
BAAQMD Database Contribution:	\$10,000
Total:	\$105,035

On March 23, 2007, the Committee approved annual cost-of-living adjustments to the county fee based on the 12-month moving average of the Consumer Price Index calculated in the same month as the adjustment to the ABAG membership dues. Using that formula, for the 2011/12 Fiscal Year, the adjusted fee was \$10,559.50.

In recognition of the ongoing budget difficulties experienced by our members, we are not seeking an increase in the fee for Fiscal Year 2012/13.

The Bay Area Air Quality Management District approved a contribution of \$10,000 to support the Green Business Program database.

Budgeted Expenses:

Personnel and Overhead	\$71,596	\$68,512
Consultants	\$19,500	\$21,000
Materials, Conferences, Miscellaneous	\$3,939	15,523
Total:		\$105,035

PROPOSED STAFF ALLOCATIONS

Committee administration.

Staff time: 72 hours

Task Summary: Schedule meetings, develop agenda packets, write minutes, staff meetings, research legislation, report to ABAG Legislation and Governmental Organizations Committee and Executive Board, prepare annual budget and work plan.

(Krebs – 20 hours; Scandone –40 hours; accounting/support staff – 12 hours)

Recycling Facilities Project / EPR/ Sustainable Purchasing

Staff time: 180 hours

Consultants: 180 hours

Task Summary: Identify/contract with consultant; work with TAC to further scope and guide project; identify and convene stakeholders; manage stakeholder input process; review and comment on drafts; present draft final report to Committee for approval; present approved report to other ABAG bodies as directed by the Committee; monitor and report on Sustainable Purchasing initiatives and update web resources; monitor and report on Green Chemistry, EPR, and other source reduction opportunities; monitor legislation and report as directed to ABAG Legislation and Governmental Organizations Committee.

(Krebs – 100 hours; Scandone – 60 hours; Trigueros – 12 hours; Webmaster – 8 hours)

Bay Area Green Business Program Coordination.

Staff time: 428 hours

Consultants: 12 hours

Task Summary: Support county coordinators; identify resources/efficiencies to improve capacity; purchase materials/implement outreach; update website; ensure consistent application of standards; support expansion into new industries, including potential partnership with Air District on fleets; participate in efforts to improve coordination/partnerships with state agencies; **lead development to define scope and develop network organizational and governance structure.**

(Scandone – 400 hours; Moy –16 hours; support staff 8 hours; Webmaster – 4 hours)

Appendix A

2011/12 ACCOMPLISHMENTS:

The following section, which describes 2011/12 accomplishments, is intended to update the Committee on the status of current efforts and provide context for ongoing activities.

Hazardous Waste Management Planning / Source Reduction

Since inception, the Committee has had two objectives:

- 1) ensure adequate understanding of hazardous waste generation and treatment trends, and capacity for managing hazardous wastes generated within the Bay Area; and
- 2) promote source reduction activities to prevent pollution and avoid the need to site new hazardous waste management facilities.

While the means and methods to address them have evolved over the years, meeting these two objectives continues to define the Committee's work.

During 2011/12, staff has worked to accomplish the following:

Monitored and reported on Green Chemistry-related activity in Sacramento, in consultation with Department of Toxic Substances Control staff.

Worked with TAC, the California Product Stewardship Council, and others to stay apprised of Extended Producer Responsibility-related legislation and other initiatives.

Coordinated with ABAG Legislation & Governmental Organizations Committee staff to ensure that EPR and other relevant legislation be monitored as 2011 legislative priorities; attended L & GO meetings to serve as a resource.

Consulted with the Technical Advisory Committee on a project proposal for Fiscal Year 2012/13 to examine the potential to recruit and site in the Bay Area facilities that process universal wastes, such as batteries and used electronic devices.

Hired and managed the work of consultant Linda Spencer, who drafted a project proposal for Committee consideration.

Consulted with Sustainable Purchasing Work Group meetings to seek input on December conference and other potential sustainable purchasing activities.

Engaged Alicia Culver of the Responsible Purchasing Network to organize the Sustainable Purchasing workshop held in November 2011.

Maintained the Committee website (<http://www.abag.ca.gov/hazwaste/>) that lists members, posts agendas and minutes, and provides information about relevant topics and legislation.

Green Business Program:

The Green Business Program continues to grow, though at a slower pace. As of May 2012, there are 2,300 Bay Area Green Businesses, approximately the same number as last year. While counties are adding new Green Businesses (just over 200 new businesses were certified in the past year), and re-certifying many that have reached the end of their 3-year cycle, some previously certified businesses are not recertifying.

The static number of certified businesses reflects the slow economy, since a number of certified businesses have closed their doors. Businesses may be unable, or their landlords may be unwilling, to invest in the energy and water conserving fixtures the standards require. It likely also reflects program-related factors: 1) local government budgets have resulted in reduced staffing in some counties; 2) in counties that have offered the program for many years, recertification accounts for an increasing proportion of program time.

The online system was intended to improve efficiency, and enable coordinators and their partners to work with more businesses. After 18 months of intensive work, it is now fulfilling that promise. In 2011, a design firm was engaged to upgrade the user experience so that businesses now need less support from coordinators as they complete their checklists.

All 9 Bay Area counties continue to offer the Program, though at significantly different levels. San Mateo County put its program on hold in July 2011 due to budget constraints. The county hopes to resume the Program in July 2012. Solano County similarly has staffing constraints that limit its participation.

Checklists: To ensure that Program checklists reflect the most up-to-date recommendations and standards, coordinators in the Bay Area and around the state have implemented a consultation protocol so that new practices and technologies can be reviewed and added to the online checklists in a timely manner.

A checklist for Property Managers has been completed and will be submitted to the Committee for approval at the meeting on May 25, 2012. This is one of the more complex checklists to be developed, since it requires that the firm meet the standards not only at their own office but also at one or more of the properties managed. We expect it to motivate managers to implement whole building retrofits that have significant environmental benefits.

Outreach: The regional website is a key marketing tool for the Program and its businesses. The site provides a portal to the searchable listings of the Green Businesses in the Bay Area and throughout the state, validating a business's claim that it meets Program standards.

ABAG's webmaster created a portal on the Bay Area Green Business Program site that draws in the business search form from the statewide system. This preserves our local brand identity while allowing site visitors to find Green Businesses in the Bay Area and beyond. The switch from manual to automatic updates occurred in December 2010. The new interface design implemented in October 2011 significantly improved the user experience.

California Green Business Network/Program Expansion: During 2011/12, the Program and its sister programs in the California Green Business Network achieved official state status when AB 913 created the California Green Business Program. The legislation stipulates that the state program is based on the model developed here and now implemented by network members elsewhere in the state. New programs that wish to be recognized as members of the California Green Business Program must follow our model.

For the past several months, staff has worked with a statewide Committee on a scaling plan. Issues to consider include processes for timely evaluation of new members, funding to support continued maintenance and enhancement of the statewide database, development of a statewide logo and brand for the California Green Business Program and a process/timeline for integrating that logo into local program websites and materials.

The legislation directs DTSC to work with the California Air Resources Board (CARB) and other state agencies with relevant missions to forge closer relationships that might, in future, have resources to support local environmental initiatives like the green business program. The success of AB 913, which establishes the California Green Business Program with DTSC as the state coordinator, is expected to help DTSC and the local Green Business Programs around the state make a stronger case for better coordination and improved support from state agencies for our local Programs.

In 2009, the Committee approved a change to the Policy Guidelines to allow local programs to charge businesses fees for participating in the Program. Alameda and San Mateo County has indicated that they intend to begin charging fees sometime in 2012.

Constrained local budgets delayed program launch by the City of Los Angeles, and Humboldt and Mendocino counties. We anticipate they will begin operations later in 2012.

During 2011-2012 staff has accomplished the following:

- Convened and staffed county coordinator meetings.
- Facilitated development of property manager checklist.
- Updated Policy guide.
- Maintained and enhanced website.
- Managed recruitment of database design team.
- Worked with legislative staff and CAGBN members on development and coordinated solicitation of support letters for AB 913.

- Served on the scaling committee that is planning for program expansion.
- Consulted with DTSC marketing staff on efforts to develop new logo and plan a marketing campaign.
- Served on the review panel for the Air Resources Board's Cool California Awards.
- Coordinated purchase of program materials.

Appendix B

To: Bay Area Hazardous Waste Management Facility Allocation Committee
From: Technical Advisory Committee
Re: Draft Revised Committee Project: *Sustainable Processing of Universal Waste and Electronics*
Date: May 25, 2012

The Bay Area Hazardous Waste Management Facility Allocation Committee (Committee) has monitored Bay Area hazardous waste trends since 1989. Responding to state legislation, the Committee developed a regional fair-share approach for siting treatment facilities. In 2003 the Committee requested an in-depth look at the region's hazardous waste treatment capacity. Since that time the Region's treatment capacity has continued to decline. The most recent analysis of Bay Area data indicated that in 2009, over 80 percent of hazardous waste in the Bay Area was exported for treatment elsewhere.

Following the 2006 California legislation that made it illegal to dispose of universal waste (UW) products (e.g., fluorescent lamps, alkaline batteries, and electronic product) in the trash, the volume of these wastes has drastically increased at household hazardous waste (HHW) collection facilities. The challenges to local governments of managing this burgeoning volume was highlighted in the October 29, 2010 Committee report, *Hazardous Waste Generation and Treatment Trends*.¹ Ultimately most universal waste is shipped not just out of the region, but outside the U.S. for treatment/resource recovery.

Over the years, the Committee has demonstrated an interest in managing at least some of these wastes in the region. There are a number of reasons why local processing of UW may be a more sustainable option for the Bay Area.

The lack of recycling-based manufacturing and processing facilities means that the higher paying recycling jobs are located outside the region.² Increased local recovery capacity has the potential to stimulate investment and the creation of jobs in the de-manufacturing, recycling, and reuse industries.

Underutilized industrial lands are at risk of conversion to other uses. Identifying productive uses for these sites contributes to a more sustainable, resilient, balanced regional economy.

The types and volumes of wastes that are considered hazardous are on the rise; while the draft Green Chemistry rules require manufacturers of products that contain chemicals of concern to develop product stewardship plans, the rules will potentially result in new categories of consumer products that must be handled differently from the way they are handled today.

¹ <http://www.abag.ca.gov/hazwaste/staffmemos.html>

² CalRecycle (aka Integrated Waste Management Board), 2003. Benefits of Regional Recycling Markets: An Alameda County Study.

Shipping these items outside the region and/or outside the country increases the region's carbon footprint. In addition, because processors in other countries may not be bound by regulations as stringent as those in the U.S, their activities may expose workers and the environment to serious harm.

With the need growing, and technologies for processing these wastes improving, it may be appropriate to initiate a regional effort to examine the potential to site such facilities in the Bay Area at this time.

Fiscal Year 2012-13 Work Plan: Proposed White Paper

On October 7, 2011 the Technical Advisory Committee (TAC) met to plan for the next biennial analysis (during fiscal year 2012/13) of the Bay Area's 2010/11 hazardous waste generation and treatment trends. As an alternative to performing that analysis, the TAC discussed the possibility of researching how the Bay Area might encourage businesses to site state-of-the-art U and E- waste recycling facilities here. In addition to meeting the committee's objective of treating more hazardous wastes locally, such facilities might have other significant benefits:

Create jobs – provide good "green" and "green collar" jobs in de-manufacturing and re-manufacturing,

Stimulate economic development – preserve and put underutilized industrial areas back to use,

Realize savings - reduce financial costs and environmental impacts of shipping materials out of the region,

Achieve sustainability - reclaim and reuse resources from our waste stream resulting in a reduced burden on nonrenewable natural resources, and

Promote resiliency - contribute to a more diverse and sustainable economy.

The TAC discussed producing a white paper with three sections. The *first section* would identify specific u-wastes as opportunities/challenges for siting recycling facilities for certain universal and electronic wastes that show promise for local recovery. The white paper would consider the following products to investigate further: batteries, fluorescent bulbs, cell phones, computers, rigid plastics, and leaded glass. Each product would be evaluated as to how potentially successful it would be to site a processing facility based on readily available information. Evaluation criteria would include:

Innovative waste treatment technology

Low or no threat to the environment or public health

Largest flow of waste

Public acceptance

Ease of permitting

Manufacturer's priorities

Cost

Local demand

The TAC has identified the following diverse group of public, private, and non-profit organizations as stakeholders that could contribute knowledge and expertise:

Planning / Community & Economic Development departments
CalRecycle Recycling Market Development Zones
Community/Social Equity/Environmental Justice groups (Urban Habitat, Green for All)
Public agencies and affiliates (Cal EPA, US EPA, Governor's Office of Economic Development, CalRecycle, Department of Toxic Substances Control, Bay Area Air Quality Management District, SF Bay Water Quality Control Board, California Product Stewardship Council)
Environmental groups (Natural Resources Defense Council, Environmental Defense Fund, Silicon Valley Toxics Coalition)
Brownfields reuse organizations (Center for Creative Land Recycling)
TSDs and/or Waste Disposal Companies
Business and labor organizations
Product manufacturers/de-manufacturers/remanufacturers
Academic / research community

In order to conduct the research and ground-truth the evaluation, we would contact a representative sub-set of these stakeholders for input. The perception that a U-Waste recycling facility would be undesirable in local communities ultimately could be the largest obstacle to overcome. While the extensive level of outreach needed to fully address this perception is beyond the scope of the White Paper, we plan to work with key stakeholders who can help us to frame the issues constructively.

The white paper's *second section* would explore potential obstacles to siting and/or operating U-Waste recycling facilities in the Bay Area. At present, electronics is a category of wastes for which information is more readily available, and thus is used here to illustrate some of the challenges. Two current initiatives, one to process polymers and the other to process batteries are also briefly noted. If the project goes forward, the opportunities and challenges to process these and other wastes would be fully explored.

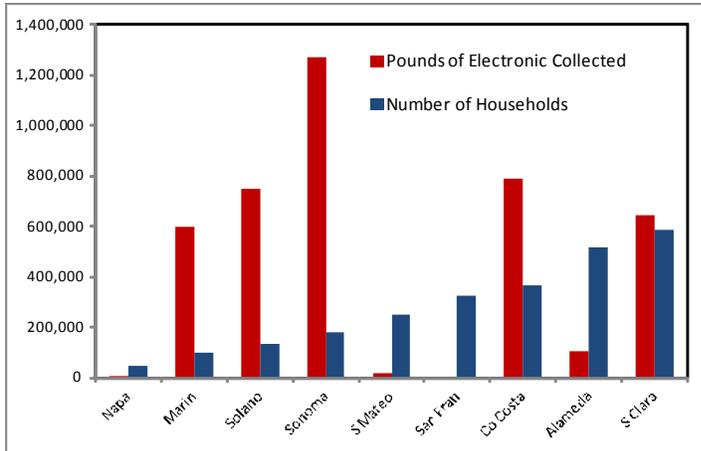
Electronics Recycling

Expanding the capacity for used electronics recycling in the Bay Area faces many obstacles, despite the passage of regulation in California that provides built-in financial incentives. The obstacles include higher costs to local governments, low recycling rates amongst households, small number of local recyclers, and concerns regarding the lack of uniformity in safe and secure recycling practices. Each of these obstacles is touched upon below, as an example of the types of issues the project would explore in greater depth.

In 2003 SB 20, the Electronic Waste Recycling Act, established an Advanced Recycling Fee (ARF) on retail sales of electronic wastes. Recyclers are reimbursed at a rate \$0.48/lb for eligible products collected and recycled, \$0.20/lb. of which must be passed on to the approved collector. The Act was subsequently amended by SB 50, and expanded by emergency DTSC regulation. Local agencies have found the ARF "difficult

to implement and administer”. A considerable amount of bureaucracy has been created to establish, collect, and disperse fees and to certify recyclers.³

Currently, the wastes that were “covered” under the Act, as amended, are video display devices with screens greater than four inches that are presumed to be hazardous when disposed including cathode ray tube (CRT) devices, CRT televisions and computer monitors; liquid crystal display (LCD) televisions and desktop monitors; laptop computers with LCD displays; portable DVD players, and plasma televisions sold in California. HHW programs also collect a significant volume of “non-covered” video display devices.



The Institute for Electronic Recyclers conducted a national survey in 2010 and found a low recycling rate amongst consumers/households. Despite the fact that the consumer market constitutes the largest electronics volume purchased, it constitutes only 26 percent of what recyclers receive. The Institute concluded that a large volume of electronics most likely ends up in landfills. In addition, they report that increasing the recycling volume amongst consumers/households “will

inevitably spur economic growth and job creation with an expanded industry.”⁴

Covered and universal electronic wastes collected in 2008/09 by HHW programs, as reported to DTSC on 303 forms, are shown here along with the number of households by county. Sonoma County reported the highest amount (1.3 million pounds). Sonoma County has consistently collected over 1 million pounds for the past three years. Staff at the Sonoma County Waste Management Agency attribute their high volumes to their aggressive advertising program.⁵ Sonoma County HHW electronics are shipped to ECS Refining in San Joaquin County (Stockton).

County	Collectors ¹	Recyclers ¹
Alameda	45	5
Contra Costa	21	1
Marin	5	0
Napa	4	0
San Mateo	10	0
San Francisco	2	0
Santa Clara	38	4
Solano	6	0
Sonoma	8	0
Total	139	10

¹ CalRecycle database, 2011. Approved to accept SB50/SB20 covered wastes.
www.calrecycle.ca.gov/Electronics/Reports/Search.aspx

³ Rob D’Arcy, 2006. Local Governments’ Looming Fiscal Crisis - Household Hazardous Products and the Need for Extended Producer Responsibility. www.calpsc.org/assets/policies/thru2008/CA_HHW_EPR_D%27Arcy_White_Paper.pdf

⁴ International Data Corporation, 2011, Survey, Inside the US Electronics Recycling Industry.

⁵ Lisa Steinman, November 21, 2011. Waste Management Specialist, Sonoma County Waste Management Agency. Personal Communication.

The variability between counties likely reflects the additional collections done by private companies that are not reflected on the 303 forms. A search of CalRecycle’s database of recyclers approved to accept covered electronic products indicates that statewide there are over 500 collectors, but just over 50 that actually do recycling. There are 10 approved recyclers in the Bay Area. The General Accounting Office reports that, “while some exported used electronics can be handled responsibly...a substantial amount ends up in countries such as China and India, where they are often handled and disposed of unsafely.”⁶ Secure destruction of all sensitive information and materials must be guaranteed, and industry experts are finding that the “reverse logistics” or the process of ensuring safe handling and destruction of potentially sensitive information stored on computers is not standardized.⁷ Third-party certification, such as R2 and e-Steward provide mechanisms to ensure environmental, worker health and safety, and security practices are adhered to.⁸ Four of the ten Bay Area recyclers who are approved by DTSC to recycle covered electronics have received third party certification.

Promising Recycling Prospects

TAC members have suggested following up with two recyclers--MBA Polymers and Akkuser—that might be good prospects for a Bay Area facility. We understand that both companies have sought to locate/expand in the Bay Area. MBA Polymers is an international company headquartered in Richmond, CA. They are equipped to receive complex waste streams, separate out the polymers, and purify them for reuse. MBA Polymers recycles plastics from goods including appliances, autos, computers, and electronics. Their primary recycling operations take place in China, Austria, and the UK. The Richmond headquarters is a research-only facility.

Akkuser is a Finland- based ISO 14001 and ISO 9001 certified battery recycling company that has sought to expand operations in Santa Clara and Alameda County. Akkuser has patented Dry-Technology® to separate and process metals back into their elemental form for reuse in

Potential Jobs Created by CA Battery Recycling				
	Alkaline		Rechargeable	
Job Type	Baseline	Full-scale	Baseline	Full-Scale
Operations	34	378	14	42
Sorting	48	310	8	24
Office	4	40	3	9
<i>Sub-total</i>	86	728	25	75
Construction	65	455	19	57
<i>Total</i>	151	1,183	44	132
Other Permanent Jobs		Full-Scale Statewide Implementation		
Collection Logistics		3,700		
Retail Collections		8,880		
Data supplied by Akkuser, Hørsholm, Denmark				
Alkaline: Baseline=1 crushing 2 leaching plants; Full-scale= 7 crushing 15 leaching plants				

⁶ General Accounting Office, August 2008, Electronic Waste: EPA Needs to Better Control Harmful U.S. Exports through Stronger Enforcement and More Comprehensive Regulation, GAO 08-1044.

<http://www.gao.gov/new.items/d081044.pdf>

⁷ Haber, Terry, 2011. Bringing Standardization to Asset Recovery Logistics, Reverse Logistics Magazine, Edition 31, 2011. <http://viewer.zmags.com/publication/d9a28d6b#/d9a28d6b/4>

⁸ R2 Solutions www.R2solutions.org. e-Stewards www.e-stewards.org

foundries. For the past five years, Akkuser has successfully recycled rechargeable batteries throughout Scandinavia. New technology has been developed to efficiently recycle alkaline batteries at an estimated cost of about 25 cents per pound. In a prospectus provided to Santa Clara County, Akkuser estimates that seven crushing and fourteen leaching plants would be needed to recycle all the alkaline batteries generated within California. In order to recycle rechargeable batteries not currently collected (4,536 tons), Akkuser estimates the need for three crushing plants in California. This table summarizes the number of jobs created by both a baseline scenario (one alkaline battery crushing plant, two alkaline leaching plants, and one rechargeable plant) and a full-scale scenario to meet statewide recycling demand, as determined by Akkuser.

While we haven't yet researched this extensively, a recent article in the New York Times⁹ describes how household batteries are being shipped to Mexico for processing where the rules are less stringent and enforcement virtually nonexistent. Just south of our border, workers, residents, and the environment are being exposed to dangerous levels of lead. According to the article, about 20 million batteries will cross from the U.S. into Mexico this year.

The third and *final section* of the white paper would recommend future actions such as developing a pilot project locally, applying for a grant for additional research, etc.

Recommendation

The TAC recommends that the Hazardous Waste committee postpone the scheduled analysis of Bay Area Hazardous Waste Trends (covering the 2010/2011 data) currently scheduled for FY 2012/13. Instead of conducting that analysis, the TAC recommends that staff, the TAC, and a consultant collaborate on developing the white paper outlined above. A key piece of the effort would be to work with stakeholders who could inform and advise the work as it proceeds. The TAC would present the Draft White Paper summarizing the results of our research, findings, and recommendations for future action at a Committee meeting in FY 2012/2013.

⁹ Rosenthal, Elisabeth, December 8, 2011. Lead from Old U.S. Batteries Sent to Mexico Raises Risks. New York Times.