Meeting is wheelchair accessible. Sign language interpreter may be available upon five (5) days notice by calling 510-891-6500. Members of the public wanting to add an item to a future agenda may contact 510-891-6500.

AGENDA

MEETING OF THE ALAMEDA COUNTY WASTE MANAGEMENT AUTHORITY (WMA) BOARD AND
THE ENERGY COUNCIL (EC)

Wednesday, March 26, 2014

Closed Session
2:30 P.M.

Regular Meeting
3:00 P.M.

StopWaste Offices
1537 Webster Street
Oakland, CA 94612
510-891-6500

Meeting is wheelchair accessible. Sign language interpreter may be available upon five (5) days notice by calling 510-891-6500. Members of the public wanting to add an item to a future agenda may contact 510-891-6500.

CLOSED SESSION (WMA only):

CONFERENCE WITH LABOR NEGOTIATORS (pursuant to Government Code Section 54957.6) Agency Designated Representative: Gary Wolff. Unrepresented Employee: Authority Counsel (confidential materials mailed separately)

CLOSED SESSION (WMA only)
CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Government Code Sections 54956.9(d)(2): (1 potential case) (confidential materials mailed separately)

REGULAR MEETING

I. CALL TO ORDER (WMA & EC)

II. ROLL CALL (WMA & EC)

III. ANNOUNCEMENTS BY THE PRESIDENTS (Members are asked to please advise the board or the council if you might need to leave before action items are completed)

Page

IV. CONSENT CALENDAR (WMA & EC)

1 1. Approval of the Draft Minutes of February 26, 2014 (WMA & EC-Separate Votes) (Gary Wolff) Action

7 2. Adoption of a Resolution to Adopt the San Francisco Bay Area Integrated Regional Water Management Plan Update (Gary Wolff & Teresa Eade) (WMA only) Action
Staff recommends that the Waste Management Authority Board adopt the attached Resolution 2014- [__], adopting the San Francisco Bay Area Integrated Regional Water Management Plan Update.

V. OPEN PUBLIC DISCUSSION (WMA & EC)
An opportunity is provided for any member of the public wishing to speak on any matter within the jurisdiction of the board or council, but not listed on the agenda. Total time limit of 30 minutes with each speaker limited to three minutes.

VI. REGULAR CALENDAR (WMA & EC)

11 1. BayREN Contract Amendment - Resolution (Gary Wolff & Wendy Sommer) (EC only)
Adopt the Resolution attached.

15 2. Household Hazardous Waste Services and Fee Ordinance (Gary Wolff) (WMA only)
After a public hearing and a report on the number of protests, consider adopting the ordinance (this would include waiving reading of the entire ordinance, and reading the ordinance by title only). Staff may want to make a more specific recommendation after the public hearing and report on the number of protests.

3. Interim appointment(s) to the Recycling Board for WMA appointee unable to attend future Board Meeting(s) (WMA only) (P&O and Recycling Board meeting - April 10, 2014 at 4:00 p.m. - StopWaste Offices)

VII. COMMUNICATIONS/MEMBER COMMENTS (WMA & EC)

VIII. ADJOURNMENT (WMA & EC)
I. CALL TO ORDER
President Biddle, WMA, called to meeting to order at 3:05 p.m.

II. ROLL CALL
WMA & EC
County of Alameda
City of Alameda
City of Albany
City of Berkeley
Castro Valley Sanitary District
City of Dublin
City of Emeryville
City of Fremont
City of Hayward
City of Livermore
City of Oakland
City of Piedmont
City of Pleasanton
City of San Leandro
City of Union City

Keith Carson (arrived 3:35 p.m.)
Lena Tam
Peter Maass
Gordon Wozniak
Danny Akagi
Don Biddle
Jennifer West
Anu Natarajan
Barbara Halliday
Laureen Turner
Dan Kalb
Margaret Fujioka
Jerry Pentin
Pauline Cutter (left 4:35 p.m.)
Lorrin Ellis

Absent:
City of Newark
Oro Loma Sanitary District

Luis Freitas
Laython Landis

Staff Participating:
Gary Wolff, Executive Director
Richard Taylor, Counsel, Authority Board
Arliss Dunn, Clerk of the Board

III. ANNOUNCEMENTS BY THE PRESIDENTS
There were none.

IV. CONSENT CALENDAR (WMA & EC)
1. Approval of the Draft Minutes of January 22, 2014 (WMA & EC-Separate Votes) Action (Gary Wolff)
2. Minutes of the February 14, 2014 Technical Advisory Group (TAG) Information (Gary Wolff) (EC only)
3. Amendment to the Human Resources Manual (Attachment A) Action
DRAFT
Adopt the revised "Attachment A" to the Agency’s Human Resources Manual.
(Gary Wolff & Pat Cabrera) (WMA only)

4. Regionalizing Bay-Friendly Landscaping (Gary Wolff & Wendy Sommer) (WMA only)
Accept the recommendation of both WMA Committees and the Recycling Board.

5. Grants Under $50,000 (Gary Wolff) (WMA only)
Ms. West restated her comments made at the P&A committee meeting with respect to Item #IIIA, Amendment to the Human Resources Manual. Ms. West stated she is looking forward to further improvements. Mr. Wozniak made the motion to approve the Consent Calendar for the WMA Board. Ms. Tam seconded and the motion carried 16-0 (Carson, Freitas and Landis absent).

Ms. Cutter made the motion to approve the Consent Calendar for the Energy Council. Ms. West seconded and the motion carried 15-0 (Carson and Freitas absent).

V. OPEN PUBLIC DISCUSSION (WMA & EC)
Thomas Silva, Director, California Apartment Association, provided comment on the need to create a viable mattress recycling program in Alameda County.

Robert Fraguglia, San Leandro, property owner, provided comment regarding dissatisfaction with Unions and the City with respect to costs associated with mattress disposal.

Ruthie Smith, resident, recommended assessing a fee for illegal dumping of mattresses. She also stated her opposition to the proposed HHW fee.

VI. REGULAR CALENDAR (WMA only)
1. Revisions to the Draft Fee Ordinance (Gary Wolff) (WMA only)
We recommend that the WMA Board hold a public hearing, waive reading of the entire ordinance (Attachment A) and read it by title only, and schedule this ordinance rather than the previous draft ordinance for consideration of adoption on March 26, 2014, unless comments at the public hearing justify delaying the date for consideration of adoption.

Mr. Wolff provided an overview of the staff report. The report is available here: http://www.stopwaste.org/docs/02-26-14-fee-ordinance.pdf

Mr. Wolff stated that the ordinance has been revised in response to comments received stating that the legal authority for the ordinance was not evident in the previous draft. The findings of the ordinance have been substantially revised to demonstrate step-by-step the legal authority to propose this ordinance. There are other minor clarifications or amendments in the revised draft ordinance such as adding the word property before owner, etc.

Staff recommends that the Board hold a public hearing and upon hearing public comments, waive reading of the entire ordinance by title, and schedule the revised ordinance for consideration of adoption at the March 26 meeting.

Ms Fujioka recommended including the definition of hazardous waste in the ordinance, and inquired if the Board considered a fee based on square footage or sliding scale for low-income, seniors or similar populations. Mr. Wolff said that the full definition would be provided in the staff report next month, and stated the board considered a fee based on size of garbage service but the collection mechanism is much more complicated and expensive, and there is no necessary correlation between the amount of household hazardous waste produced and the size of garbage service.

Ms. Halliday asked for clarification on when the fee will be automatically adjusted. Mr. Wolff stated the fee, based on an audit of the tipping fee revenue received, and any cost offsets from other sources (e.g., the PaintCare stewardship program) may be adjusted for the first year in the third year and in the fourth year for
the second year, and so forth. An additional clarification to the revised draft ordinance was to include that the ordinance does not permit the fee to exceed $9.55 per year.

President Biddle opened the public hearing on the Draft Fee Ordinance. There were 20 public speakers on this item.

David Mix, Oakland resident, stated the Authority lacked legal authority to levy the HHW "tax," and referenced letters sent to the Board. The Board confirmed that they had received all but one of his letters.

Thomas Silva, California Property Association spoke regarding the lack of transparency with respect to the lack of a budget and to utilize the timeline between now and August 10th (date to file with Assessor's office) to develop a more equitable program with respect to multi-family residents. Mr. Wolff responded that the HHW budget contained in the HF&H report was posted on the website on October 4, 2013, and it was presented at four community meetings in Berkeley, Castro Valley, Fremont and Livermore. The budget contains detailed tables and information about revenue and expenses relevant to the HHW program.

Timothy May, Executive Director, Rental House Association, proposed a reduced fee for multi-family properties. The South Bay Waste Management Authority as well as the city of Danville charge approximately half of the fee imposed on single family homes. Mr. May also spoke to the problems with property owners receiving letters with the incorrect number of units or not receiving a letter at all.

Councilmember Kalb responded to a comment with respect to asking Waste Management, Inc. to help offset the cost of the fee. Mr. Kalb stated that the city of Oakland is currently in process of negotiating its franchise agreement with more than one company to determine who will be the waste hauler and will make a decision this year. Oakland residents can contact their Councilmember to find out which companies are part of the negotiation process.

Other public speakers included:
Barbara Azad    Martin Duane Mongerson    John Sullivan
Charles Feltman    Richard Philips
H. Hill    Alejandro-Soto Vigil
Matt Hummel    David Ponas
Linda Lonay    Ken Pratt
Terri A. Lutz    Russell Schleske
Gloria Ma    Neil Straus

Most were against the fee, and either stated in another way the comments summarized above, or indicated concern about the financial burden of the fee. An audio of the public hearing is available here:
http://www.stopwaste.org/docs/02-26-14-WMA-EC_public.mp3

After hearing from all the public speakers the public hearing was closed.

Ms. Cutter stated that she has some concerns prior to the vote in March. She would like to hear more regarding the mailing issues and request information on imposing half of the fee for multi-family units and the study that shows they are creating the same amount of waste. Ms. West asked for clarification on the two mailings. Mr. Wolff stated the second mailing was a simple postcard that was a supplemental mailing to the first letter. We did not repeat the 'tear-off' structure of the first mailing because it might have led people to believe they needed to submit the protest form again. For those who say they did not receive the first mailing, we've provided a blank letter and form on the website so residents can print the form and write in their parcel number and number of units and provide their signature. Or they can send a letter containing that information and state their opposition.
Ms. Natarajan asked if staff is comfortable with the data from the 2008 Waste Characterization Study. Mr. Wolff affirmed and stated the data is consistent with data from the 1995 and 2000 study as well.

Ms. Natarajan asked that staff provide a report detailing the issues raised by Mr. May comparing single family to multi-family waste and background on the South Bay decision to charge half as large a fee to multi-family residences.

Mr. Wozniak stated that if the Board decides to reduce the fee for multi-family residents it will require increasing the fee for single family residents. Mr. Wolff added that if that were the case, we would likely need to re-notice the ordinance again.

Ms. Halliday stated that she concurs with the concerns raised by board members West and Cutter as well as looking at the size of units with respect to waste generated. She is further concerned about the problems with the mailing. Mr. Wolff stated that we used the information provided by the County Assessor and we provided the opportunity for residents to correct their information. We will work as best we can with the registrar of voters to ensure the accuracy of the protests. Ms. Halliday inquired about the impact of delaying the vote in March. Mr. Wolff stated that if there is a new proposal that requires changing the ordinance the Board would need to vote on the new draft ordinance in April and then to mail notification letters of a new opportunity to protest the new ordinance 45 days prior to consideration of adoption of the revised ordinance. That consideration would need to take place in June at the latest, so that the ordinance would go into effect prior to the August deadline for submitting information to the assessor's office for their next billing cycle. We will also need to clarify that this is a new ordinance and the protest votes submitted for the old ordinance are invalid.

Mr. Pentin stated that he is concerned that maybe this was a flawed process regarding the mailing problems and the transparency in correcting the problems. Mr. Maass stated that invariably there will be glitches with a mailing of this size. Additionally, the opposition is better directed towards the state that mandates the law that StopWaste is following. Mr. Maass stated that he is more concerned about the studies that South County used to assess its fees as well as other agencies that may have done analysis on this issue. Mr. Wolff stated that he was informed by staff a year ago upon checking with these agencies that charged half to single family and there was no data to support those decisions. But staff will research again to see if such data exist.

Ms. Turner stated she is not assured that multi-family residents generates as much waste as single family residents, and requests that staff provide information on lowering the fee for multi-family residents. Ms. Turner stated she is concerned about the mailings and whether people had success in submitting their protests. Ms. Turner stated we should have used a full election balloting process and asked Legal Counsel to research to see if it is viable. Ms. Turner cautioned against relying solely on the website for dissemination of information. Mr. Wolff stated that the registrar of voters is responsible for counting the protests and we will ask them to keep a tally of all disqualifications. They will make the official count and Board members will have this information prior to the vote on the ordinance.

Mr. Ellis stated that he shares the concerns regarding the mailing problems. Mr. Ellis encouraged the Board to focus on the items that the EPA designates as household hazardous waste and the agency's mission of properly disposing of these items, noting that many of these items are related to having a residence, regardless of the size of the residence. One example he provided was oven cleaner; every residence has an oven.

Ms. Tam asked if staff will have sufficient time to gather the information by the March 26 meeting. Mr. Wolff affirmed.
Mr. Wozniak cautioned against relying on the data comparing multi-family to single family. Mr. Wozniak asked if staff can provide information on the number of people that did not receive the letter and weigh against the number of letters mailed.

Ms. West stated her appreciation for Mr. Ellis' comments and stated the importance of having a functioning HHW program in the County. She added she looks forward to a point-of-sale program.

Mr. Wozniak made the motion to hold the public hearing, waive reading of the entire ordinance (Attachment A) and read it by title only, and schedule this ordinance rather than the previous draft ordinance for consideration of adoption on March 26, 2014. Mr. Ellis seconded and the motion carried 17-0 (Cutter, Freitas and Landis absent).

2. Appointment to the Recycling Board (Gary Wolff) Action
M.s Natarajan made the motion to appoint Board member Turner to the Recycling Board for a second two-year term. Ms. West seconded and the motion carried 17-0 (Cutter, Freitas and Landis absent).

3. Interim appointment(s) to the Recycling Board for WMA appointee Action unable to attend future Board Meeting(s)
(P&O and Recycling Board meeting- StopWaste Business Awards - March 13, 2014 at 8:00 a.m. - Zero Net Energy Center, 14600 Catalina Street, San Leandro, CA)
Ms. Cutter volunteered to attend as the interim for Ms. Turner. Ms. West made the motion to approve the interim appointment. Ms. Natarajan seconded and the motion carried 17-0 (Freitas, Natarajan, and Turner absent).

VII. COMMUNICATIONS/MEMBER COMMENTS (WMA & EC) Information
There were none.

CLOSED SESSION (WMA only)
CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Government Code Sections 54956.9(d)(2): (1 potential case)
(confidential materials mailed separately)

CLOSED SESSION (WMA only):
A. PUBLIC EMPLOYEE PERFORMANCE EVALUATION (pursuant to Government Code Section 54957) Title: Authority Counsel

B. CONFERENCE WITH LABOR NEGOTIATORS (pursuant to Government Code Section 54957.6) Agency Designated Representative: Gary Wolff. Unrepresented Employee: Authority Counsel (confidential materials mailed separately)

Due to the number of speakers for the public hearing, Board members present decided to move the scheduled Closed Session items to the beginning of the March 26th meeting, and to start at an earlier time at 2:30 pm instead of 3:00 pm. Staff will send an email to ensure that a quorum of the members will be able to attend at the earlier start time.

VIII. ADJOURNMENT (WMA & EC)
The meeting adjourned at 5:05 p.m.
DATE: March 20, 2014

TO: Waste Management Authority Board

FROM: Gary Wolff, Executive Director

BY: Teresa Eade, Senior Program Manager

SUBJECT: Adoption of a Resolution to Adopt the San Francisco Bay Area Integrated Regional Water Management Plan Update

BACKGROUND:
To be eligible for state water bond grants, watershed areas must develop and implement an Integrated Regional Water Management (IRWM) Plan. The San Francisco Bay Area IRWM plan was developed to encourage integrated regional strategies and is a comprehensive nonbinding plan that analyzes and prioritizes water supply, wastewater and recycled water, storm water and flood protection, watershed management, habitat protection and restoration needs and projects in the nine county Bay Area region. The original plan was created in 2006 and was broadly adopted by cities, counties and water districts throughout the Bay Area. The Bay Area IRWM Plan was updated and submitted to the Department of Water Resources in January, 2014. A copy of the plan can be seen here: http://bairwmp.org/docs/2013-bairwm-plan-update/2013-final-plan/final-bairwmp-2013

DISCUSSION:
In 2011, StopWaste collaborated with several water agencies, cities, and counties to jointly apply for nearly $30 million dollars to fund programs on Recycled Water, Water Conservation, Wetland Ecosystem Restoration and Green Infrastructure. DWR awarded a grant, known as Prop. 84 Round I funding, to the Bay Area IRWM group, including StopWaste’s portion of $230,247 to leverage Bay-Friendly Landscape & Garden education resources with the regional lawn rebate programs being implemented by 10 water agencies in the 9 Bay Area counties. Staff learned last month that DWR has approved additional funding to StopWaste as part of Prop. 84 Round II in the amount of $200,000. A condition set by DWR for grant acceptance is the adoption of the Bay Area IRWM Plan Update by May 11, 2014. The third "Whereas" on the second page of the Resolution makes clear that adopting the plan creates no obligation on the part of this Agency.

RECOMMENDATION:
Staff recommends that the Waste Management Authority Board adopt the attached Resolution 2014- [__], adopting the San Francisco Bay Area Integrated Regional Water Management Plan Update.
ALAMEDA COUNTY WASTE MANAGEMENT AUTHORITY

RESOLUTION #WMA 2014 – [__]

MOVED:
SECONDED:
AT THE MEETING HELD MARCH 26, 2014

ADOPTING THE SAN FRANCISCO BAY AREA
INTEGRATED REGIONAL WATER MANAGEMENT PLAN UPDATE

WHEREAS, the State electorate approved multiple statewide bond measures since 2000, including Propositions 50 and 84, to fund water and natural resource projects and programs, including Integrated Regional Water Management (IRWM); and

WHEREAS, the benefits of integrated planning for water resources management activities include increased efficiency or effectiveness, enhanced collaboration across agencies and stakeholders, and improved responsiveness to regional needs and priorities; and

WHEREAS, state statute and guidelines required that an IRWM Plan be adopted by the governing boards of participating agencies before IRWM grant funds would be provided for water resources management projects that are part of the IRWM Plan; and

WHEREAS, several of the participating agencies in the Bay Area, including the Alameda County Waste Management Authority (“Authority”) jointly submitted an IRWM grant application for state consideration where a condition for funding required the Bay Area IRWM Plan to be adopted by January 1, 2007; and

WHEREAS, the Bay Area agencies that received funding in previous grant rounds did adopt the Bay Area IRWM Plan before such funds were received; and

WHEREAS, more recent state statutes and guidelines require that the Bay Area IRWM Plan be updated before agencies may receive future IRWM grant funding; and

WHEREAS, a grant was received to update the Bay Area IRWM Plan, that Plan having been completed in the fall of 2013 and submitted to the Department of Water Resources in January 2014; and

WHEREAS, a series of workshops were held on the initial Bay Area IRWM Plan and recently the Plan Update to provide stakeholders, including Bay Area local governments, an opportunity to ask questions, provide comments and make recommendations; and

WHEREAS, the Draft Bay Area IRWM Plan Update was posted on the internet and made available for public comment; and
WHEREAS, the Bay Area IRWM Plan Update before the Authority Board for consideration incorporates changes based on comments received during the public review period in the areas of environmental justice, technical project data, and other elements of the Plan; and

WHEREAS, the Bay Area IRWM Plan Update provides an implementation framework that calls for tracking accomplishments, developing lists of prioritized projects and periodically updating the Bay Area IRWM Plan as conditions warrant, provided that funding and resources are available to carry out these activities; and

WHEREAS, adoption of the Bay Area IRWM Plan Update does not entail a direct commitment of resources and implementation of each project, as such will be the responsibility of the project proponent and any applicable project partners, and there is no joint commitment or responsibility by the Bay Area IRWM Plan Update participants, including the Authority, to implement any or all of the projects; and

WHEREAS, the Bay Area IRWM Plan Update is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines §15262 and §15306 because the IRWM Plan Update consists of basic data collection that would not result in the disturbance of any environmental resource and involves planning studies for possible actions that the participating agencies have not yet approved; and

WHEREAS, the IRWM Plan Update is meant to be complementary to participating agencies’ individual plans and programs and does not supersede such plans and programs, and adoption of the IRWM does not prohibit or affect in any way the Alameda County Waste Management Authority’s planning efforts separate from the IRWM Plan; and

NOW THEREFORE, BE IT RESOLVED THAT:

The Bay Area IRWM Plan Update, a comprehensive nonbinding plan that analyzes and prioritizes water supply, wastewater and recycled water, stormwater and flood protection, watershed management, habitat protection and restoration needs and projects in the nine county Bay Area region, is hereby adopted.

ADOPTED BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSENT:
ABSTAIN:

I certify that under the penalty of perjury that the foregoing is a full, true and correct copy of Resolution No. 2014-___.

_________________________________________
GARY WOLFF, PE, PhD
EXECUTIVE DIRECTOR
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DATE: March 20, 2014

TO: Energy Council Board

FROM: Gary Wolff, Executive Director

BY: Karen Kho, Senior Program Manager

SUBJECT: BayREN Contract Amendment - Resolution

BACKGROUND
On February 27, 2013 the WMA Board adopted a resolution authorizing the Executive Director to enter into a contract with the Association of Bay Area Governments (ABAG) for implementation of the San Francisco Bay Area Regional Energy Network (BayREN) program. This contract was transferred to the Energy Council in June 2013. The Energy Council is leading the implementation of the regional multifamily program, called Bay Area Multifamily Building Enhancements (BAMBE), which launched on July 9, 2013. The program is designed to provide a “middle of the road” participation path in the hard-to-reach multifamily sector. The multifamily market has responded favorably to this new program, and the pipeline of eligible properties has already exceeded the program’s projections. The program is on track to incentivize efficiency upgrades in approximately 12,500 units throughout the region, which is more than double the original goal of 5,000 units. We anticipate 22% of these units will be in Alameda County. By 'incentivize,' we mean the provision of free technical assistance audits that assess and make recommendations for energy efficiency upgrades. If the multi-family property owner implements measures that are estimated to create 10% or more energy savings, they receive $750 per residential unit. If 22% of 12,500 units are upgraded in Alameda County, multi-family property owners will receive more than $2 million in rebates, plus free technical assistance.

DISCUSSION
In order to serve the demand for the BAMBE program, BayREN is seeking $4.7 million to supplement the multifamily program’s original approved budget of $7.2 million. The BayREN Coordinating Committee has recently approved an internal transfer of funding of $1.4 million from other BayREN programs that will be underspent in 2014. ABAG has also submitted a funding request to the California Public Utilities Commission for an additional $3,300,700 in 2014. In order to move forward with the project, the EC Board needs to authorize the Executive Director to enter into an agreement with the ABAG and execute the necessary documents to accept up to an additional $4 million, and other related actions. Included in the resolution is the authorization for the Executive Director to enter into contracts with vendors and allocate staffing as needed to implement the agreement.

RECOMMENDATION
Adopt the Resolution attached.
ENERGY COUNCIL
RESOLUTION #EC 2014 –

MOVED:
SECONDED:

AT THE MEETING HELD MARCH 26, 2014

RESOLUTION AUTHORIZING THE EXECUTIVE DIRECTOR TO ACCEPT ADDITIONAL
BAY AREA REGIONAL ENERGY NETWORK (BayREN) FUNDS AND OTHER RELATED
ACTIONS

WHEREAS, The Energy Council recognizes that it is in the interest of the local, regional, state, and
federal agencies to stimulate the economy; create and retain jobs; reduce fossil fuel emissions; and reduce
total energy usage and improve energy efficiency; and

WHEREAS, Energy Council was formed to seek funding to develop and implement programs and
policies that reduce energy demand, increase energy efficiency, advance the use of clean, efficient and
renewable resources, and help create climate resilient communities; and

WHEREAS, the California Public Utilities Commission (CPUC) has recognized the need for expanded
collaboration with and participation by local governments to achieve market transformation toward
energy efficiency as part of its Long Term Energy Efficiency Strategic Plan; and

WHEREAS, in Decision 12-05-015, the CPUC recognized the role of and need for Regional Energy
Networks (RENS) and invited local governments to submit proposals; and

WHEREAS, with ongoing input from the Energy Upgrade Technical Advisory Group (TAG) Energy
Council partnered with the Association of Bay Area Governments (ABAG) and the 8 counties within the
Bay Area to form the San Francisco Bay Area Regional Energy Network (BayREN) and submit a
proposal to the CPUC; and

WHEREAS, Energy Council has been designated as the lead regional implementer for the multifamily
subprogram, and

WHEREAS, the regional multifamily program is on track to exceed its original goals and BayREN has
proposed a budget increase of $4.7 million in 2014, and

WHEREAS, ABAG intends to provide Energy Council with additional budget to serve the demand for
the program;

NOW THEREFORE, BE IT RESOLVED, that the Energy Council hereby authorizes the Executive
Director to:

1. Enter into all necessary contracts and agreements with ABAG in order to accept additional funds
up to $4 million, amend the FY 2013/14 budget to add these funds to Project 1347: BayREN.
2. Approve any required time extensions, modifications, or amendments thereto.
3. Allocate the necessary resources to implement and carry out the amended scope of work.
ADOPTED BY THE FOLLOWING VOTE:

AYES:
NOES:
ABSENT:
ABSTAINED:

____________________________________
Gary Wolff, PE, PhD
Executive Director
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March 20, 2014

TO: Waste Management Authority Board

FROM: Gary Wolff, Executive Director

SUBJECT: Household Hazardous Waste Services and Fee Ordinance

The decisions before the Board

The decision before the Board today is whether to adopt an ordinance that imposes a fee for continued operation and expansion of the countywide household hazardous waste program (Attachment A). But if the fee is to be implemented, there are at least three decisions by the Board, followed by an action by the Executive Director.

To support sound decision-making, and given the lengthy history of discussion of this issue with the Board (Attachment B), this memorandum provides a summary of the relevant information. The memo also includes many details and supporting documents in attachments. The number of protests against the fee will be reported to the Board after the close of the public hearing. Staff will not know that number in advance.

As stated, the first decision is whether to adopt the draft fee ordinance.

The second decision is whether to approve a final Fee Collection Report. The draft Fee Collection Report (available for review at our front desk) is a list of parcels and the fee that would apply to each parcel if the number of households in the list for each parcel is correct. However, the public process we are in at present allows parcel owners to inform us that the number of households on their parcel is incorrect, so the fee that would apply is different than shown in the draft report. The Board will be asked to approve a final Fee Collection Report after the protest period is over and we have corrected inaccuracies in the draft Report. The Fee Collection Report can also be used to describe alternate sources of funds with which to pay the fee; for example, if there were a legally appropriate source of funds to reduce the fee for low-income owners of residences (e.g., general tax revenue or franchise fee revenue in a member agency), the specific residences to receive this assistance, and the specific source of funds, can be specified in the Fee Collection Report.

The third decision is whether to approve amended Memoranda of Understanding (MOUs) with the County and the City of Fremont for operation of the HHW facilities they control.
The second and third decisions must be completed no later than the July WMA meeting if the fee action is to be implemented this year. The fee ordinance requires that the amended MOUs be finalized before implementation. In addition, the Executive Director cannot transmit instructions to the County Assessor's office about collection of the fee (by approximately August 10th) unless the final Fee Collection Report has been approved by the Board before that date.

Some historical information about the countywide HHW Program

The current countywide household hazardous waste (HHW) program began in the early 1990s in response to state law that famously required 50% 'diversion from landfill' of general municipal waste by the year 2000 (AB939: the Integrated Waste Management Act of 1989). Each of the 14 Cities in Alameda County, and the County, are obligated to plan for safe collection, recycling, treatment, and disposal of HHW. Section 25218.1(e) of the Health and Safety Code defines HHW as "hazardous waste generated incidental to owning or maintaining a place of residence."

The 14 Cities and the County (in consultation with the two sanitary districts that operate in the unincorporated part of the County) decided that a countywide system of drop-off facilities would be more cost-efficient than separate programs by each government entity. The system was funded from the beginning with a fee per ton (currently $2.15) of disposed (landfilled) waste. In some years the fee generated more revenue than was required to fund operations and a temporary surplus accumulated in an HHW trust fund maintained by the County. In more recent years the fee has been inadequate to pay for on-going operations and the trust fund balance has been reduced. The recent imbalance is primarily because disposed tons have been declining as recycling increases. The financial history and operating statistics for the program as of April 2013 are summarized in Attachment C. Like recycling, there has been a steady upward trend in program use for more than two decades, as public norms and behavior have changed.

A productivity analysis was conducted in February 2012 to identify possible ways to cut operating costs (Attachment D). Some efficiency improvements were identified and implemented. We subsequently thoroughly investigated the possibility of additional revenue from manufacturer stewardship programs (like PaintCare) that include end-of-product-life management costs in the price of the products covered by the stewardship program, or by state or local advance disposal fees that impose end-of-product-life management costs as a fee at the point of purchase for those products. Both are ideal long-term solutions, but neither is practical as a complete solution today (see Attachment E). These solution, however, have been integrated with the fee ordinance such that increased revenue from such sources in the future will automatically decrease the annual HHW fee in subsequent fiscal years.

Current HHW Program Services

The countywide HHW program currently operates four drop-off facilities, collects from around 30 satellite locations, and 'live answers' around 30,000 phone inquiries per year. Three of the
facilities (Oakland, Hayward, and Livermore) are on land owned by the County and are operated by County staff. One facility is part of the privately owned and operated Fremont Transfer Station; but that facility is controlled in substantial measure by the City of Fremont under long-term agreements for operation of the Station.

The Oakland, Hayward, and Livermore facilities are open to Alameda County households 4 hours per day every week on Thursday, Friday, and Saturday in Oakland and on those same days twice per month in Hayward and Livermore (excluding Holidays). The Fremont facility is open to households four days a week (Wed-Sat) and for more hours because the City of Fremont has chosen to pay for these additional hours of service via their garbage rates.

The facilities are also open to small businesses (conditionally exempt small quantity generators, or CESQGs) on other days and times during the week. It is not legal to service CESQGs and residents during the same working hours. At present, CESQGs must pay to use the facilities. The typical unloading time for a customer is around 3 minutes, in order to make the service as convenient as possible. Facility workers have many other duties, however, when cars or businesses are not dropping off HHW. These include testing and sorting dropped off materials into approximately 35 categories, and properly labeling, handling or bulking the materials for reuse, recycling, or disposal. All of the facilities operate a 'swap area' where reusable HHW is given away. About 45,000 households were served in FY2012-13, and about 1443 tons of HHW were managed in that year. By comparison, about 3400 tons were landfilled in 2008.

The proposed HHW service and fee
The proposal before the Board now was developed through an analysis of service level and funding options that was first presented comprehensively in April 2013, and that is described in more detail below. The current proposal involves the following significant changes (additional details are available in Attachment F, Table 1):

- expansion of hours and days open to residents (a 1/3 increase in days open per month; an additional 1.5 hours per day on Wed/Th/Friday, and an additional 3 hours per day on Saturdays, at the county-operated facilities),
- 12 one-day drop-off events held around the County to make drop-off more convenient,
- an outreach campaign targeted at neighborhoods or communities that use the facilities less in order to equalize usage over time to the extent possible, and
- a point-of-purchase outreach campaign to encourage owners of residences and their tenants to 'buy what they need, use what they buy, and properly manage the rest.' We hope and intend that the point of purchase campaign, along with legislative advocacy, will make renewal of this fee at the end of its 10 year life unnecessary.
- Waiver of the CESQG fee that now applies to owners of residential rental property.
- Adding electronic waste to the materials accepted at the County operated facilities
Together, these changes are expected to increase the number of households served per year from about 45,000 to about 78,000, and to increase tons of HHW managed per year from about 1443 to about 2500.

The fee of $9.55 per household per year will sunset (end) in 10 years, and will be reduced automatically starting in year 3 if revenue from the $2.15 per ton fee or cost offsets due to manufacturer stewardship or advance disposal fees (e.g., PaintCare) are higher than specific dollar figures by year listed in the ordinance. Given that PaintCare is a new program, it seems reasonable that the fee will in fact be lower than $9.55 per household in its third or later years. This innovative automatic fee reduction mechanism is proposed because legislators asked us directly, when we sponsored the Corbett household battery stewardship bill in the California legislature several years ago, whether adopting the bill would reduce costs to fee- or rate-payers in Alameda County. We said it would reduce future costs, but could not demonstrate a specific and firm benefit to fee- or rate-payers. The automatic reduction mechanism in this ordinance makes clear to legislators that any bill that actually reduces the cost of handling HHW locally will directly reduce the financial burden on fee-payers in Alameda County.

The Legal Authority for the Fee
Attachment G is a memo by our General Counsel describing our legal authority to adopt this fee. In short, the Health and Safety Code explicitly permits cities and counties and sanitary districts to adopt fees to pay for their sanitation systems, including garbage and refuse collection, and to collect those fees through the property tax rolls. This power is shared by all our member agencies, and under our Joint Powers Agreement that power is granted to our governing Board. HHW is a component of garbage and refuse, as demonstrated in numerous waste characterization studies in our County and other parts of California. Proposition 218, a California Constitutional Amendment adopted in 1997, imposed additional decision-making process requirements for charges associated with refuse collection, which we have followed. Proposition 26, another California Constitutional Amendment, adopted in 2010, expands the definition of special taxes by narrowing the definition of local government fees. But this fee satisfies at least the benefits conferred and the 218 process exceptions to the definition of a special tax in Proposition 26, and is therefore a fee.

The Austerity Option
If the proposed fee is not adopted, the existing countywide HHW Program will need to reduce services to 'live within' the existing and projected revenue stream. In order to continue to operate the HHW Program through the year 2020, cuts in facility hours of operation will be required. The Austerity Option described in Attachment F describes the reduced availability of HHW services that will likely occur if the proposed fee is not adopted.

The Austerity Option, in summary, involves the following significant changes from the existing Program (additional details are available in Attachment F, Table 1):
• About a 40% reduction in days and hours of operation for both residents and small businesses (CESQGs) at the Oakland, Hayward, and Livermore facilities.
• A reduction in households served from about 45,000 to about 20,000.
• A reduction in HHW managed per year from about 1443 tons to about 640 tons.
• Exact reductions at the Fremont facility are unknown, but very likely per Fremont staff.

The City will need to decide how to respond to reduced revenue from the countywide program, if the Austerity Option is implemented. They currently supplement funding from the countywide program with additional funding from their garbage rate base.

**The Rental Housing Association of Southern Alameda County**

Mr. Tim May of the Rental Housing Association (RHA) of Southern Alameda County, and some other speakers, asked the Board at its February 26th meeting to reduce the fee for multi-family households to $5.00 per year (their request and concerns are included in Attachment H). They believe that households of different sizes, or in multi-family buildings rather than single family buildings, produce different quantities of HHW. They did not present evidence to support their belief, but questioned our 2008 Waste Characterization Study (WCS) and a similar 2009 statewide WCS study by CalRecycle, both of which found that multi-family and single-family households disposed about the same amount of HHW.

The RHA expressed three specific concerns. First, the definition of multi-family waste in the study would allow up to 20% of the truckload to be commercial, rather than multi-family waste. We investigated this concern, and found that the actual samples taken in 1995, 2000, and 2008, according to the site supervisor for all three studies, were 'pure' multi-family waste (email from Matt Southworth in attachment H). The site supervisor reported that the multi-family waste was visually separable from commercial waste when each truckload was dumped, and therefore 'pure' multi-family waste samples were easy to obtain. The prime consultant for the 2008 study also confirmed that multi-family samples did not contain commercial waste (Memorandum from Leidos Engineering in Attachment H).

Second and third, the RHA expressed concern about the statistical methods used in the analysis, and about the practice of including 2, 3, and 4 residential-unit buildings in the single family category. Attachment H is a reply to the specific concerns expressed, written by the people who performed the statistical analysis in the 2008 study. They report that they followed well established methods, including standards of the American Society of Testing Materials (ASTM) and written guidance from CalRecycle about WCS. They conclude that it is unlikely that the amount of HHW differs between single and multi-family residences.

The RHA said that Danville and the South Bayside Waste Management Authority (SBWMA; covering eight governmental jurisdictions in southern San Mateo County) charge multi-family units approximately half of what they charge single family units. The reference to Danville was
apparently an error. The HHW facility that serves Danville is located in Martinez and is managed by the Central Contra Costa Sanitary District (CCCSD). CCCSD staff report that Danville residents pay about $14.54 per year for the HHW facility as part of their $405 per year per residential unit sewer fee. The sewer fee is collected through the property tax rolls in Danville and most of the CCCSD service area. The Proposition 218 protest process is used when there are changes in the sewer fee, including the HHW portion of the fee, which is not itemized.

San Ramon and the SBWMA do charge multi-family residences about half as much as single family residences for on-call HHW service.¹ On-call service involves collection of HHW at the residential curb by appointment, and is provided by a division of Waste Management. *Because the cost of these services is recovered through refuse rate charges made by the private franchised hauler, there is more legal flexibility about how costs are allocated across customer classes than is the case for our fee proposal.* It is worth noting that the on-call service is in addition to, not instead of, drop-off HHW facilities, which are paid for in San Mateo County through a per ton landfill fee, and in San Ramon through a combination of garbage and sewer rates.

When asked if they used WCS data as the basis for the differential fees for on-call service, both San Ramon and SBWMA staff said no. San Ramon staff said they are not aware of any WCS for San Ramon or Contra Costa County. SBWMA staff sent us two recent WCS; a 2012 study of single family residential and a 2013 study of multi-family residential. Both had a limited number of samples (60 in each study) as compared with our 2008 study (333 single family samples and 202 multi-family samples). Nonetheless, the SBWMA information is consistent with our finding of no difference between the sectors, or that the multi-family sector may produce more HHW (including e-waste). The 60 random single family samples had a mean of 0.9% HHW (including e-waste); the 30 multi-family samples that were random had a mean of 2.6% HHW (including e-waste). The large difference in single and multi-family results may be due to the small number of samples. There were also 30 not-so-random SBWMA multi-family samples taken in order to see if there were any patterns of waste composition that depend on the number of units in the complex or the level of recycling (high/low). With respect to HHW, there was no clear pattern. Although the sample number is small and the samples were not random, the study does not support the 'common sense' assertion of the RHA that larger buildings produce less HHW.

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¹ Payments to the contractor in 2013 were, in San Ramon, $0.25 per multi-family household per month and $0.59 per single family household per month. Single family rates are reported to increase to $0.64 per household per month in 2014, $0.69 per household per month in 2015, and $0.74 per household per month in 2016. Multi-family rates are reported to increase by a refuse rate index every January. San Ramon staff did not have participation data to share, but as noted in the HFH Report in Attachment D (beginning at page 15), participation in on-call programs is a significant determinant of cost. Payments in the SBWMA are $0.20 per multi-family household per month and $0.45 per single family household per month. About 5% of households reportedly use the service each year. They expect rates to go up on January 1, 2015.
The preponderance of evidence is that granting the request from the Rental Housing Association would be unfair to owners of single-family residences. And this is not surprising. Consider the many factors that could affect the quantity of HHW produced at any residence over time other than whether the building is multi-family or single family: size of the building, age of the building, type of construction, maintenance practices (while occupied or while vacant, etc.), habits of the residents, number of residents, size of the residence, level of recycling, owner-occupied versus rental,\textsuperscript{2} and so forth.

In contrast, the preponderance of evidence supports an equal fee per household. This is because the primary benefit of the fee is that owners of residences have an equal opportunity to dispose of HHW in a safe and legal manner. That is, all households have equal 'entitlement' to use the facilities to get rid of as much HHW as they produce, in practice.\textsuperscript{3} Our studies (1995, 2000, 2008) have consistently shown HHW (including electronic waste) present in residential garbage and refuse in the range of 0.6\% to 1.0\%. Other studies (e.g., CalRecycle, 2009; SBWMA 2012 and 2013) find similar or higher percentages (0.8\% to 2.5\%). Relevant tables from the studies are provided in Attachment I.

Finally, the RHA suggests some ways in which we might replace the $700,000 or so per year of reduced revenue that would result from their proposal, but none of the suggestions is feasible. First, they suggest that we require those who haul residential waste out of county to pay the per-ton HHW fee. That is already the case for franchised haulers. A new fee action that would be difficult to enforce would be required to impose the HHW per ton fee on non-franchised haulers leaving the County. That might be a viable action to take, but as we've discussed in the context of fee evasion issues, a new ordinance to address hauling to out-of-county landfills will take at a year or more to develop and implement. Second, the RHA suggests that we not expand days of service at the HHW facilities because they believe the facilities are "already underutilized." But the productivity analysis in Attachment C found that the facilities are operated efficiently now. If we want to increase convenience and therefore support the historic upward trend in facility use -- an important policy direction the Board previously made -- we will need to expand to manage more HHW. Third, the RHA suggests we somehow negotiate with haulers so that the haulers provide the additional $700,000 per year. Apart from the fact that we don't have any direct

\textsuperscript{2} We were unable to find data on the percentages of single, and multi-family, residences in Alameda County that are rented versus owner-occupied, as requested by one Board member on February 26th. However, around 45\% of total residences in Alameda County are rented, per the US Census. About 30\% of total residences are in multi-family buildings, so although the rental and multi-family categories overlap, there are many rented single family residences and many owner-occupied multi-family residences.

\textsuperscript{3} There are some limitations specified in law, but they are so large as to not limit use in practice. Residents can drop-off no more than 15 gallons or 125 pounds of HHW in any one trip to the facilities, but can make as many trips to the facilities as they wish. Conditionally Exempt Small Quantity Generators (CESQGs; the equivalent of small businesses in the jargon of the HHW regulations) can drop-off no more than 220 pounds per month plus an unlimited quantity of latex paint, household batteries, and fluorescent lamps. Under the fee proposal, CESQGs that are owners of residences will be able to register as such, and pay no fees for use of the HHW Program other than the $9.55 per year.
contract relationships with haulers, and our member agencies prefer to negotiate such contracts
themselves, there is ample evidence from rate reviews and competitive bids in recent years that
haulers do not have $700,000 of 'excess revenue' to redirect into support of the countywide
HHW Program.

Other Service Options Previously Evaluated
Some people have asked why only two options appear in the HFH Consultants report on options
(Attachment F). That is because we previously evaluated other options, and a notification and
protest process involving multiple options would be extremely confusing. The Board narrowed
the options down to expansion or austerity through the series of meetings listed in Attachment B,
before initiating the notification and protest process.

Two discarded options, however, are worthy of a short summary. First, the status quo option was
discarded because it could not accommodate the historic upward trend of facility use. Many
Board members seemed to believe that it would not be worthwhile to go through a funding
decision and implementation process that would not provide adequate funding just a few years
from now. In addition, many Board members said it was essential to increase the convenience of
the system, which means the status quo is not acceptable.

Second, on-call service (as in San Ramon and the SBWMA) was considered, but rejected for
public funding. This is because experience elsewhere indicates that on-call service does not fully
replace permanent HHW facilities, and that the full comparable cost of on-call service is likely
higher per household served than drop-off service (see pages 15-20 of Attachment C). The
provider of on-call services in San Ramon and the SBWMA told us that they would not collect
on-call and then deliver to our HHW facilities; that is not their business model. Consequently,
we are pursuing an approach that secures funding for the permanent HHW drop-off facilities, but
that initially reaches out to residents through means other than on-call service (12 one-day events
per year, and point of purchase information). And if appropriate, we can add on-call service in
future years as a fee-for-service paid by those who want it. We could do that by contracting with
one or more companies that will collect on-call and deliver to the four permanent facilities. The
fee-for-service would pay for transportation only; that is, the drop-off facilities would not charge
for materials collected and delivered through the on-call service.

In addition, the issues of Sunday operation of the four HHW facilities, and weekly versus every
other week service in Hayward and Livermore, were discussed extensively. The landfills and
transfer stations in our County are not open on Sundays, with the exception of the Pleasanton
Garbage Service Transfer Station. We found that Los Angeles operates its HHW drop-off
centers on Saturdays and Sundays, and by analyzing their data compared with ours, we found
that the number of users of the service on Sundays is well less than on Saturdays and is
comparable to weekday use in our County. Consequently, the Board concluded that having 12
one-day drop-off events per year at locations around the County, primarily on Sundays, and
having every week Friday and Saturday service in Livermore and Hayward (along with every week Wednesday through Sunday service in Oakland and Fremont) would maximize convenience for customers. The one-day drop-off events may cost a modest amount more than the permanent facilities, per household served, but the additional convenience was deemed significant enough to justify a small additional cost. On the other hand, there may be an opportunity to save some money, or provide more one-day drop-off events, by combining some of the 12 new full-service HHW one-day drop-off events with one-day drop-off events held now and paid for by some of our member agencies for a limited number of HHW categories.

**Other Funding Mechanisms Previously Evaluated**
We also previously evaluated a variety of funding mechanisms, summarized as follows.

Increasing the per-ton fee was considered an inferior funding source because landfilled waste is declining in our county. That is good: less waste has many benefits for the community. But the decline also means that revenue from this source would decline. That in turns means the fee would have to either be much larger at first, to compensate for lower revenue later, or the fee would need to be adjusted upward every few years as tons decline. Neither structure would provide stability in fees so that fee payers can plan their expenditures and budgets. In addition, residential waste is not tracked separately every year, at present, so there would be additional administrative costs under this funding option.

Imposing a fee through garbage and refuse bills was also an option. There are at least 16 garbage and refuse rate systems in our county, administered by 16 government entities and at least four private contractors. In three cases, garbage and refuse rates are already collected through the property tax rolls. Although this approach is feasible, it is also much more complicated that our proposal. Collecting a uniform fee through the property tax rolls countywide has the lowest administrative cost of any option (less than 2% of gross revenue), while collection through the garbage and refuse billing systems would likely cost between 3% and 10% of gross revenue.

Some member agency staff suggested that we assign a proportional share of the countywide expense to each member agency so that they could determine how best to pay that share. That option was deemed too burdensome and expensive for member agencies.

As noted on the second page of the memo, we also thoroughly investigated the possibility of additional revenue from manufacturer stewardship programs (like PaintCare) that include end-of-product-life management costs in the price of the products covered by the stewardship program, or by state or local advance disposal fees that impose end-of-product-life management costs as a fee at the point of purchase for those products. Both are ideal long-term solutions, and the proposed fee ordinance lowers the fee if these funding sources grow as we hope they will, but neither is practical as a complete solution today.
Finally, with respect to funding mechanisms for HHW collection, some parties asked if the countywide program and HHW collection through franchise agreements of some materials (e.g., household batteries and motor oil) involve ‘paying twice’ for services. The answer is no. For example, most motor oil from residences is collected curbside, or at oil change centers. The drop-off centers don’t get much motor oil. Oil that is collected curbside is paid for in the rate; oil that is dropped off is paid for in the HHW fee, but in no instance does collection of a gallon of oil get charged twice. It is also relevant that the HHW drop-off centers take the full range of HHW materials, which means that the centers often receive materials such as motor oil or household batteries from customers in jurisdictions that offer that service through their franchisee at the curb, but because the customer wants to get rid of all their HHW at the same time, it is more convenient for them to bring it all to the HHW drop-off center.

Public Communications and Outreach
This decision process began as early as July 2010, when the Boards adopted a strategic workplan for the year 2020 that identified advance disposal fees or extended producer responsibility legislation and stewardship plans as top priorities for possible future funding of the countywide HHW system. We eventually concluded that these approaches are not immediately feasible in Alameda County, but might be able to replace or substantially reduce traditional funding over enough time (e.g., 10 years).

In April 2013, we began to discuss other options with the WMA Board and Recycling Board (in its role as a committee of the WMA). HHW was a topic of discussion in 2013 at the Brown Act noticed Board and committee meetings listed in Attachment B. Beginning in September 2013, we began a public outreach campaign to solicit public input on the preferred approach of the Board at that time. The effort included (not necessarily in chronological order):

- A dedicated email address for inquiries about our "HHW Service and Fee Proposal"
- A web page for information on the proposal, updated frequently
- Four community meetings in October (video of Livermore meeting posted to website)
- Special outreach to rental property associations (emails and phone calls)
- First and second mailed notifications to owners of residences
- Newspaper advertisements
- City Council presentations or information items
- Responses to email and phone inquiries
- Responses to some letters to the editor

Since we began to discuss the Board's preferred option with the public in October 2013, we have received and replied to about 400 contacts from the public (around 80 email strings, 275 phone calls, and 45 walk-ins; with some multiple phone contacts by the same person). This memo addresses the issues raised in the comments received. In a few cases, a commenter asked that
their comments be shared with the Board and the public. Attachment J contains such comments, along with a recent newspaper article that has not yet been provided to the Board.

Some people commented through these venues or at the February 26 meeting that they did not receive the first mailed notification send in early January, or that the notification contained the wrong number of residential units on their property. As stated at the January WMA meeting, the mailhouse we used 'de-duplicated' the mailing list without our consent, causing some of the January mailing to be sent less than 45 days prior to the February 26 meeting. That is why the Board directed us in January to extend the protest period until March 26 and to mail again. We mailed to the full list of record owners on February 5, 2013.

With respect to the number of units, we are obligated to give record owners a chance to tell us that the number of units is incorrect, and to change the Fee Collection Report accordingly if their correction appears to be accurate. We will do that, after the protests have been tallied and reported to the Board, if the Board adopts the fee ordinance.

With respect to anyone who says they did not receive the first or second mailed notices, we can only mail the notifications; we cannot ensure they are delivered. This is what the Health and Safety Code and Proposition 218 require. We've also, of course, gone beyond the legal requirements by implementing customer service practices to assist people who may have not received mailings.

For example, we posted a generic 'tear-off' form for filing a written protest on our website shortly after the first mailing was made, and we have provided that form or explained to people what must be included in a letter to constitute a valid protest. In cases where the name or address of the record owner is reported to us as inaccurate, we've recorded that information so that we can amend the Fee Collection Report before it is finalized. However, the law requires that changes of name and address must be initiated by the record owner themselves directly with the assessor's office. We cannot make those changes ourselves, nor can the assessor's office without a direct request from the record owner. We have been and will continue to help record owners make changes of name or address requests to the assessor's office.

Finally, some comments objected to the protest process procedure as not being a full election, or as being biased in favor of adoption of the fee, or for various other reasons (they had to place a stamp on the pre-addressed protest form). Those criticisms fail to acknowledge that the protest procedure was adopted by a statewide voter initiative (Prop 218) amending the California Constitution. Although some people would prefer that the Constitution be different than it is, we are following the law as determined by the people as a whole, and in many respects went beyond the minimum requirements of the law in order to be as transparent as possible.
**Recommendation**
After a public hearing and a report on the number of protests, consider adopting the ordinance (this would include waiving reading of the entire ordinance, and reading the ordinance by title only). Staff may want to make a more specific recommendation after the public hearing and report on the number of protests.

**Attachments**
A: Draft ordinance  
B: WMA Board and committee chronology since April 2013  
C: Countywide HHW Program Graphical Summaries, as of April 2013  
D: HFH Consultants Productivity Analysis (February 13, 2012)  
E: Advance Disposal Fees or Extended Producer Responsibility as Funding Options  
F: HFH Consultants HHW Program Design and Funding (October 4, 2013)  
G: SMW memorandum on legal issues  
H: Comments from the Rental Housing Association of Southern Alameda County, Feb 26, 2013  
   Email from Matt Southworth, WCS field supervisor  
   Leidos Engineering response to comments on the 2008 WCS Methodology  
I: Tables from ACWMA 2008 WCS, CA 2009 WCS, and SBWMA 2012 and 2013 WCS  
J: Public comments we were asked to share publicly
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ORDINANCE 2014-__

AN ORDINANCE ESTABLISHING A HOUSEHOLD HAZARDOUS WASTE COLLECTION AND DISPOSAL FEE

The Board of the Alameda County Waste Management Authority hereby ordains as follows:

Section 1. Findings

The Authority finds that:

(a) It has been standard practices since the early 1990s for Cities and Counties in California to periodically characterize the components of garbage and refuse sent to landfill in order to facilitate planning for diverting recoverable and harmful materials from landfill disposal. Waste characterization studies for Alameda County, and the State of California overall find that household hazardous waste (HHW; see Health & Safety Code Section 25218.1 (e)) is about the same weight or percentage of residential garbage and refuse regardless of whether the dwelling unit is in a single family or multi-family residential building. Furthermore, vacant Households also require household hazardous waste collection and disposal in connection with property improvements, maintenance, or landscaping.

(b) State law precludes disposal of household hazardous waste in municipal landfills such as those serving Alameda County residents and the Alameda County Integrated Waste Management Plan calls for removing hazardous wastes from the solid waste stream for proper separate management through separate collection and other programs.

(c) In Health and Safety Code section 25218 the State legislature has found that “residential households which generate household hazardous waste and conditionally exempt small quantity generators which generate small amounts of hazardous waste in the state need an appropriate and economic means of disposing of the hazardous waste they generate” and disposal of household hazardous waste “into the solid waste stream is a threat to public health and safety and to the environment.” The Health and Safety Code further provides for the establishment of "household hazardous waste collection facilities", which are defined in Section 25218.1 (f) as facilities operated by public agencies or their contractors for the purpose of collecting, handling, treating, storing, recycling, or disposing of household hazardous waste and hazardous waste from conditionally exempt small quantity generators.

(d) The Alameda County Environmental Health Department, with policy direction and funding provided by the Waste Management Authority, operates three permanent Household Hazardous Waste (HHW) collection facilities located in the northern, southern, and eastern sections of the County and BLT Recycling, under contract with the City of Fremont, operates a fourth HHW collection facility at the Fremont Transfer Station, partially funded by the Authority. These facilities are operated in accordance with Health & Safety Code 25218 et seq, and under two memoranda of understanding (MOUs) between the Authority and the County
of Alameda and the Authority and the City of Fremont. These MOUs will be revised to implement this ordinance. 

(e) These Household Hazardous Waste collection facilities benefit and serve Alameda County residential property owners by collecting and providing a legal, safe, place for disposal of HHW materials generated in Alameda County in compliance with the law. The services and facilities of this program may be used only by Alameda County Households. The Household Hazardous Waste Collection and Disposal Fee funds this program and may not be used for any other purpose. The program was evaluated in an October 4, 2013 memorandum from HF&H Consultants, LLC to the Alameda County Waste Management Authority which determined that the funds generated by the fee do not exceed the costs of the program services and facilities.

(f) The costs of the program’s HHW collection and disposal services and facilities for Alameda County Households are offset in part by funds received or cost reductions associated with product stewardship programs implemented in accordance with State law (such as the PaintCare Product Stewardship Program established at Public Resources Code sections 48700 et seq. which reduces costs associated with collection and disposal of architectural paints and provides funds for processing those materials). These programs are expected to expand in the future and the amount of the fee will be reduced commensurate with the cost offsets or funding associated with these programs. In anticipation of full cost offset and funding from these programs in the future the fee sunsets in 2024.

(g) Article 4 of Health & Safety Code Division 5, Part 3, Chapter 6 authorizes public agencies including cities, counties, and special districts, upon a two-thirds vote of the legislative body, to prescribe and collect fees for garbage and refuse collection services and facilities on the tax roll. This ordinance prescribes a fee for collection and disposal at the four HHW facilities in Alameda County of the HHW component of garbage and refuse generated by Alameda County Households.

(h) The Authority has the power to enact this Ordinance pursuant to the Joint Exercise of Powers Agreement for Waste Management. That agreement grants the Authority all of the powers necessary to implement the Alameda County Integrated Waste Management Plan including the power to levy and collect fees and charges for programs such as HHW collection and disposal services and facilities.

(i) This Ordinance was introduced on December 18, 2013 at which time the Board set a public hearing for consideration of the Ordinance on February 26, 2014 and directed the Executive Director to prepare a report containing a description of each parcel of real property with one or more Households, the number of Households on each parcel, and the amount of the charge for each parcel computed in conformity with this Ordinance. The Board directed the Executive Director to publish and cause a notice in writing of the filing of said report and the proposal to collect the annual charge on the tax roll together with the time and place of hearing thereon, to be mailed to each person to whom any parcel or parcels of real property described in said report is listed as owner in the last equalized assessment roll available on the date said report is prepared (a “Record Owner”), at the address shown on said assessment roll or as known to the
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Executive Director. On January 22 the Board continued the protest hearing date to March 26, 2014. Notice of the new hearing date and extended protest period was published and mailed in accordance with law. This Ordinance was re-introduced with clarifying amendments on February 26, 2014.

(j) Following the protest hearing the Board considered all objections or protests to the report and this Ordinance. Protests were received from the Record Owners of (1) less than a majority of the separate parcels of property described in the report and (2) less than a majority of the Households on property described in the report. The Board approved the ordinance by a two-thirds majority or greater of the Board membership.

(k) Enactment of this Ordinance is not a “project” subject to the requirements of the California Environmental Quality Act, California Code of Regulations, title 21, section 15378(b)(4); further, even if it were a “project,” it would be categorically exempt from the California Environmental Quality Act pursuant to California Code of Regulations, title 21, section 15308.

Section 2. Definitions

(a) “Alameda County” or “County” means all of the territory located within the incorporated and unincorporated areas of Alameda County.

(b) “Authority” means the Alameda County Waste Management Authority created by the Joint Exercise of Powers Agreement for Waste Management.

(c) “Board” means the governing body of the Authority made up of elected representatives of the member agencies pursuant to the Joint Exercise of Powers Agreement for Waste Management.

(d) “Executive Director” means the individual appointed by the Board to act as head of staff and perform those duties specified by the Board.

(e) “Fee” means the fee described in section 3 of this ordinance.

(f) “Fee Collection Report” means the annual report containing a description of each parcel of real property with one or more Households served by the Household Hazardous Waste Collection and Disposal Program, the number of Households on each parcel described, the amount of the charge for each parcel for the year, computed in conformity with this Ordinance, and whether the Fee is to be collected on the tax roll or by other means.

(g) “Household” means a residential dwelling unit (e.g., a single family home, apartment unit or condominium unit in a multi-unit building, etc.). Nothing in this Ordinance is intended to prevent an arrangement or the continuance of an existing arrangement under which payment for garbage and refuse collection and disposal service is made by residents of a household who are not the owner or owners thereof. However, any such arrangement will not affect the property owner’s obligation should such payments not be made.
(h) “Household Hazardous Waste Collection and Disposal Program” means the Proposed System Expansion Option described in the October 4, 2013 memorandum from HF&H Consultants, LLC to the Alameda County Waste Management Authority.

(i) “Other Revenue” means the sum of (1) revenue received from the household hazardous waste fee of $2.15 per ton pursuant to Authority Resolution No. 140 and Resolution No. 2000-03 and (2) Product Stewardship Offsets.

(j) “Product Stewardship Offset” means funds received by the Household Hazardous Waste Collection and Disposal Program or operational cost reductions at the program attributable to household hazardous waste product stewardship programs implemented in accordance with federal, state, or local laws.

(k) “Small Quantity Generator” has the same meaning as Conditionally Exempt Small Quantity Generator as defined in California Health and Safety Code Section 25218.1 as it now exists or may be amended from time to time hereafter.

Section 3. Household Hazardous Waste Collection and Disposal Fee

(a) An annual household hazardous waste collection and disposal fee of $9.55 or such lesser amount established by the standards below shall be paid by each Household in Alameda County beginning July 1 2014 and ending June 30, 2024 in the manner set forth in this ordinance.

(b) No later than December 31 of 2015 and each year thereafter the Executive Director shall prepare a report identifying the amount of Other Revenue received by the Household Hazardous Waste Collection and Disposal Program in the prior fiscal year. If the report of Other Revenue exceeds the projected amount specified in subsection (c), the fee shall be reduced for the following fiscal year by an amount equal to the excess revenue divided by the number of Households subject to the fee in the prior fiscal year. If revenues equal or fall below that specified in subsection (c) there shall be no increase in the fee. The Fee per Household shall never be greater than $9.55 per year.

(c) The fee is based on the following projected Other Revenue:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Projected Product Stewardship Offset</th>
<th>Projected Tip Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>$263,225</td>
<td>$1,849,000</td>
<td>$2,112,225</td>
</tr>
<tr>
<td>2015-2016</td>
<td>$263,225</td>
<td>$1,713,550</td>
<td>$1,976,775</td>
</tr>
<tr>
<td>2016-2017</td>
<td>$263,225</td>
<td>$1,578,100</td>
<td>$1,841,325</td>
</tr>
</tbody>
</table>
(d) The fee shall be used exclusively for the Household Hazardous Waste Collection and Disposal Program.

(e) As a condition of receiving payments funded by the Fee, a collection and disposal service provider (e.g., at present, the County of Alameda and the City of Fremont) must agree that no charge will be imposed on (1) residents of Alameda County Households for services included in the Household Hazardous Waste Collection and Disposal Program or (2) Small Quantity Generators who are owners of residential rental property in Alameda County for disposal of household hazardous wastes from Households in Alameda County. Any such agreement shall be in the form of a contract or memorandum of understanding (MOU) approved by the Board. The Executive Director shall not cause the fee to be collected as described in Section 4 of this ordinance until revised MOUs with the County of Alameda and the City of Fremont have taken effect.

Section 4. Administration

(a) Each year the Executive Director shall cause a Fee Collection Report to be prepared in accordance with this Ordinance and applicable law.

(b) The Fee Collection Report shall be reviewed by the Board to ascertain the accuracy of the information contained therein. A notice of the report’s availability and a time and place of a public hearing on the report and the collection of such charges on the tax roll shall be published as set out in Government Code Section 6066 in a newspaper of general circulation printed and published within the County. At the conclusion of the hearing, the Board shall make its determination upon each charge and its collection on the tax roll or by other means. The determination of the Board shall be final. Upon such final determination, on or before August 10 of each year, the Executive Director shall endorse the final report with a statement that it has been finally adopted by the Board, and shall file the signed report with the County Auditor. Authority staff is hereby authorized to undertake all administrative tasks to implement collection
of the Fee, including, but not limited to an agreement with Alameda County for collection, which may provide payment to Alameda County of its reasonable costs of collection.

(c) The Fee for the period of July 1st, to and including June 30th of each fiscal year shall be entered as a charge on the tax roll against the parcels identified in the Fee Collection Report as paying through the tax roll. The Fee shall be collected at the same time and in the same manner as ad valorem taxes and other charges as are otherwise collectible by the county. All laws applicable to the levying, collection and enforcement of ad valorem taxes shall be applicable to such charges as provided herein except as otherwise provided by law. Fees paid with the tax bill shall be deemed to have been paid by those Households located on that property/parcel.

(d) The annual Fee for any Household located on property which is not designated for collection on the tax roll in the Fee Collection Report shall be collected by the Executive Director and shall be due and payable at least once per year on a schedule to be determined by the Executive Director.

Section 5. Enforcement. The Executive Director and the County of Alameda are authorized to undertake all appropriate actions necessary to collect the Fee in the manners authorized by law. The Executive Director may direct collection and disposal service providers to deny access to services included in the Household Hazardous Waste Collection and Disposal Program for Households with unpaid charges.

Section 6. Severability. If any provision of this Ordinance or its application to any situation is held to be invalid, the invalidity shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared to be severable.

Section 7. Notice. This Ordinance shall be posted at the Authority Office after its second reading by the Board for at least thirty (30) days and shall become effective thirty (30) days after the second reading.

Passed and adopted this __ day of ____________, 2014, by the following vote:

AYES:

NOES:
ABSTAINING:

ABSENT:

I certify that under the penalty of perjury that the foregoing is a full, true and correct copy of the ORDINANCE NO. 2014-__.

____________________________

GARY WOLFF

EXECUTIVE DIRECTOR
WMA Board and committee chronology since April 2013

April 11, 2013: comprehensive informational memo on HHW Options presented to both WMA committees.

May 22, 2013: The WMA Board by consensus approved the preliminary staff recommendation in favor of an equal fee per residential unit and collection through the property tax roll mechanism.

June 13, 2013: Staff requests both WMA committees for direction with respect to the service level option. The Programs and Administration Committee recommends Expansion Option 1 by a vote of 10-0, with direction to staff to further consider Sunday operation and other ways of making the service as convenient as possible. The Planning and Organization committee recommends Expansion Option 2 by a vote of 9-0-1, with similar direction to staff.

July 24, 2013: The WMA Board votes 13-1-2 to direct staff to prepare for public review an expansion option that combines aspects of Expansion Options 1 and 2 and includes 12 rather than 4 one-day drop-off events. The Board vote also directs staff to follow a schedule involving community meetings in October and a report back to the Board on the results of the community meetings at the October 23 WMA meeting.

Early September, 2013: began announcing community meetings on our HHW Services and Fee Proposal

October 8, 10, 15, and 17, 2013: Community Workshops in Livermore, Berkeley, Castro Valley, Fremont

October 23, 2013: After discussing a summary of public feedback in October, the WMA Board directs staff to draft and bring to the Board a draft HHW services and fee ordinance and associated legal documents for possible first reading on December 18, 2013. The Board specifically directs staff to include a 'tear-off' form in the notification letter for filing protests.

December 18, 2013: The WMA Board voted 18-0 to waive reading the draft fee ordinance in its entirety and reads it by title only; schedule the draft fee ordinance for consideration of adoption at its February 26 meeting, and direct staff to implement the notification and protest processes required by law in early January, 2014.

January 26, 2014: The Board voted 18-0 to extend the protest period until March 26th, to send a second notice to all potentially affected residential parcel owners, and to amend the procedures resolution to reflect these changes.

February 26, 2013: The Board considered testimony from the public on the proposed HHW services and fee, and voted 17-0 to modify the draft fee ordinance (repeat the first reading) in order to clarify and expand upon the legal basis for the fee. Staff commits to investigate the request for a lower fee for multi-family residential units, and concerns about the notification by mail process.
### Budget retrospective FY 1992 through FY 2020

![Graph showing revenue, expense, and balance over time.]

### Trust Fund, Revenues and Expenses

<table>
<thead>
<tr>
<th>FY</th>
<th>Beginning Balance</th>
<th>Revenue</th>
<th>Expense</th>
<th>Fremont</th>
<th>Gap</th>
<th>End Balance</th>
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</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>$ 5,054,842</td>
<td>$ 3,820,917</td>
<td>$ 2,742,556</td>
<td>0</td>
<td>$1,078,361</td>
<td>$ 6,769,355</td>
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<td>2007-08</td>
<td>$ 6,769,355</td>
<td>$ 3,651,302</td>
<td>$ 2,869,461</td>
<td>0</td>
<td>$ 781,841</td>
<td>$ 7,067,413</td>
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<tr>
<td>2008-09</td>
<td>$ 7,067,413</td>
<td>$ 3,028,103</td>
<td>$ 3,051,109</td>
<td>$ 350,000</td>
<td>-$ 373,006</td>
<td>$ 7,106,396</td>
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<tr>
<td>2009-10</td>
<td>$ 7,106,396</td>
<td>$ 2,579,293</td>
<td>$ 3,041,226</td>
<td>$ 350,000</td>
<td>-$ 811,933</td>
<td>$ 5,890,425</td>
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<tr>
<td>2010-11</td>
<td>$ 5,890,425</td>
<td>$ 2,487,548</td>
<td>$ 2,818,907</td>
<td>$ 350,000</td>
<td>-$ 681,359</td>
<td>$ 5,523,363</td>
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<tr>
<td>2011-12</td>
<td>$ 5,523,363</td>
<td>$ 2,177,855</td>
<td>$ 2,842,051</td>
<td>$ 352,812</td>
<td>-$ 1,017,008</td>
<td>$ 4,063,015</td>
</tr>
<tr>
<td>2012-13*</td>
<td>$ 4,063,015</td>
<td>$ 2,119,091</td>
<td>$ 3,150,000</td>
<td>$ 355,625</td>
<td>-$ 1,386,534</td>
<td>$ 2,676,481</td>
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</tbody>
</table>

*Estimated: $ 300,000 has been added to earlier budget estimates for this year to account for: Higher paint disposal costs due to delays in executing a paintcare agreement, and higher than budgeted consultant costs and prepayment of Authority marketing expenses in this budget year to take advantage of a grant reimbursement opportunity.
Who goes where by percent %

[Bar chart showing the distribution of who goes where in different cities, with color-coded sections for Fremont, Livermore, Hayward, and Oakland.]
### 2011-12 Participation

<table>
<thead>
<tr>
<th>Facility</th>
<th>Household days open</th>
<th>Households Served</th>
<th>Households per Facility/day</th>
<th>Small Business days</th>
<th>Small business served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakland</td>
<td>147</td>
<td>17,785</td>
<td>121</td>
<td>32</td>
<td>215</td>
</tr>
<tr>
<td>Hayward</td>
<td>71</td>
<td>6,851</td>
<td>96</td>
<td>12</td>
<td>156</td>
</tr>
<tr>
<td>Livermore</td>
<td>82</td>
<td>7,994</td>
<td>97</td>
<td>12</td>
<td>108</td>
</tr>
<tr>
<td>Fremont</td>
<td>206</td>
<td>12,068</td>
<td>59</td>
<td>44</td>
<td>183</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>492</strong></td>
<td><strong>44,698</strong></td>
<td><strong>91</strong></td>
<td><strong>100</strong></td>
<td><strong>662</strong></td>
</tr>
</tbody>
</table>

### Household Participation by Year

<table>
<thead>
<tr>
<th>Facility</th>
<th>FY 05-06</th>
<th>06-07</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakland</td>
<td>10,481</td>
<td>10,984</td>
<td>11,145</td>
<td>13,548</td>
<td>15,970</td>
<td>16,907</td>
<td>17,785</td>
</tr>
<tr>
<td>Livermore</td>
<td>5,432</td>
<td>6,371</td>
<td>6,899</td>
<td>6,925</td>
<td>7,264</td>
<td>7,572</td>
<td>7,994</td>
</tr>
<tr>
<td>Hayward</td>
<td>9,567</td>
<td>10,927</td>
<td>12,219</td>
<td>8,531</td>
<td>7,331</td>
<td>7,252</td>
<td>6,851</td>
</tr>
<tr>
<td>Fremont</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>9,397</td>
<td>11,971</td>
<td>12,324</td>
<td>12,068</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>25,480</strong></td>
<td><strong>28,282</strong></td>
<td><strong>30,263</strong></td>
<td><strong>38,401</strong></td>
<td><strong>42,536</strong></td>
<td><strong>44,055</strong></td>
<td><strong>44,698</strong></td>
</tr>
</tbody>
</table>
Tipping Fee Revenues by Fiscal Year

- $1.25/ton tipping fee
- $2.15/Ton tipping fee

Period: 1/1/2000
February 13, 2012

Debra Kaufman
Senior Program Manager
StopWaste.Org
1537 Webster Street
Oakland, CA 94612

Subject:     HHW Productivity Review – Final Report

Dear Debra,

With this final letter report, HF&H Consultants, LLC submits its findings and recommendations for the Household Hazardous Waste Program Review (HHW Review or Review). The final report addresses comments received on the final revised draft report from StopWaste.Org and the municipal programs identified in the following paragraph, but is not otherwise updated from the data collection and analysis conducted March through July 2011. We very much appreciate the request to conduct the Review, and look forward to further assisting in shaping the future of HHW programs in Alameda County.

We wish to acknowledge the assistance of the following individuals and programs in conducting the Review, and to thank them for their time: Bill Pollock, Alameda County Household Hazardous Waste Program; Ken Pianin, City of Fremont Solid Waste Management Program; Rich Dubiel and Bruce Fritz of BLT Enterprises, Inc.; Rob D'Arcy, Santa Clara County Household Hazardous Waste Program; Sushma Bhatia and Marjaneh Zarehparvar, City and County of San Francisco Household Hazardous Waste Program; Billy Puk and Todd High of Recology - San Francisco, and; Bill Anderson, At-Your-Door, Inc.

OVERVIEW

The Overview presents the findings and recommendations of the Review, addresses the scope of the report, and provides a summary of the evolution of HHW programs and management in California over the past twenty years.

Findings and Recommendations

The following is a summary of the key findings and recommendations of the Review. The findings and recommendations reflect the scope and level of detail of the Review and, in some cases, the participation of HF&H’s engagement manager, Mr. Deibler, in similar past comparative reviews of the Alameda County Program. There is additional detail in the body of the Review for some of the findings and recommendations.
Findings

1. In general, after adjusting for key differences in program design and circumstances, the Alameda County Program appears to be operating in a cost-effective and efficient manner. The Program compares well to that of Santa Clara County, as well as to the Fremont and San Francisco programs on the basis of cost and productivity indices for total and operating costs per household, and for transportation and disposal costs. While the Alameda County Program does not appear to compare as favorably to that of Santa Clara County on the basis of cost and productivity indices for total and operating costs per pound and weight of material managed per employee, this is likely in part a function of program design and service delivery rather than relative efficiency. The text of the report identifies likely reasons for both the more favorable and less favorable comparisons.

2. The Fremont and San Francisco programs provide a good comparison since both drop-off programs operate at privately-owned transfer stations, and E-scrap can be easily excluded from analysis of both programs. However, program efficiencies could be substantially affected by inclusion of E-scrap. While the Fremont Program receives a relatively small amount of E-scrap, the San Francisco Programs captures substantial amounts of E-scrap through retail take back programs the cost of which cannot easily be quantified. In general, after adjusting for key differences in program design and circumstances, the Fremont Program appears to be operating in a cost-effective and efficient manner. The Fremont Program compares well to the San Francisco Program, as well as to the other two programs on the basis of cost and productivity indices for total costs and operating costs, both per household and per pound managed, and the total weight of material managed per employee. The Fremont Program's transportation and disposal costs per pound, E-scrap excluded, do not compare as favorably to those for the San Francisco and Alameda County programs. The text of the report identifies likely reasons for both the more favorable and less favorable comparisons.

3. There are an increasing number of available options for collection, treatment and disposal of various types of HHW, including regular curbside collection with recyclable and compostable materials which the majority of member agencies now have in some form, on-call curbside collection, and voluntary and mandatory take back programs.

4. Public sector HHW program design is evolving to include a wider range of options. With increasing variation in program design, it is becoming difficult to make clear comparisons between programs based on cost and productivity indices. To the extent that program designs continue to diverge, it will be increasingly difficult to compare programs on an equal basis.

5. Other programs that also rely primarily on disposal-based funding are experiencing similar difficulties to those of the Alameda County Program. While the Program's current operating deficit is largely due to economic conditions resulting in decreased disposal, disposal-based funding is inconsistent with achieving longer-term, County-wide solid waste diversion goals.

6. The Program has a history of effectively identifying and implementing cost-saving measures and of developing or modifying programs in a cost efficient manner, in consultation with StopWaste.Org staff and within the framework of the current service delivery structure. The Review identifies several immediate and near-term options for cost reduction. While it is possible that in total, these
changes might alleviate the annual operating deficits, they are not likely to be sufficient to address the long-term reduction in the Program’s trust fund reserves.

7. Until several years ago, most Program planning was done on an annual basis. A relatively shorter-term planning horizon was generally satisfactory during past periods of more stability in funding and in HHW program design and service delivery.

8. On-call curbside collection of HHW may provide a viable option for augmenting current programs, but should not be considered a means for replacing current programs until regulatory and cost issues identified in the Review are satisfactorily addressed.

9. The San Luis Obispo County Integrated Waste Management Authority’s (San Luis Obispo) mandatory take back program appears to have successfully achieved a permanent, nonsubsidized status. We estimate that the total cost of a program with the same design and funding, scaled up to the larger population of Alameda County would be about $6 million over a phase-in period of three years. Based on the limited sample business profiles analyzed in the Review annual costs might range from about $560 for a small paint retailer collecting only paint to $2,080 for a larger retailer collecting three of the four target materials. However, it is not possible to project the potential relative cost effectiveness of a mandatory take back program for Alameda County, measured in dollars per ton collected, based on the Authority program due to lack of available data for tonnages collected for each material type covered by the Authority program.

Recommendations

The following recommendations address near-term issues related to Program management and finances as well as longer-term issues affecting future evaluation of the Program and consideration of additional options for HHW management in the future.

1. StopWaste.Org and the Program should continue the shift they have begun to a multi-year planning process that can help provide a framework for further cost reducing measures.

2. StopWaste.Org and the Program should develop and articulate broad goals and objectives for acceptance and management of materials by the Program that address key issues for program design. This process would provide decision-makers with a clearer sense of the available options, and the tradeoffs associated with managing each type of material, whether within or outside of the Program. Several examples of key issues include:
   a. Should the Program seek to reduce costs by focusing on those HHW materials for which there are minimal, or no other, readily available and safe treatment and disposal options?
   b. How can StopWaste.Org and the Program best develop additional public and private partnerships to reduce costs?
   c. How should the Program balance cost and environmental objectives?

3. Future review of the Program’s cost-effectiveness and productivity should be based primarily on benchmarking against the Program’s past performance and less on broad comparisons to other
Final Report

HHW programs. Program staff does this effectively now with regard to transportation and disposal costs. However, to the extent cost and productivity data can be isolated, it will likely be useful to conduct more targeted comparisons with other programs addressing specific aspects of program design or structure.

4. With regard to on-call curbside collection of HHW, StopWaste.Org should consider further evaluation and data gathering, including review of actual program data to better understand cost effectiveness and stability of pricing over time. The best way to determine likely actual pricing for this service in Alameda County would be to issue a request for proposals to service providers, possibly for collection and delivery to the Program’s facilities, or for both collection and disposal.

Scope of the Report

As in past HHW reviews conducted by StopWaste.Org, the primary objective of the Review is to evaluate the efficiency and cost-effectiveness of the HHW collection services provided by the Alameda County Household Hazardous Waste Program.\(^1\) The majority of these programs’ costs are funded through the HHW Fee of $2.15 per ton levied on solid waste disposal. Over the past several years, HHW Fee revenues have decreased as the overall tonnage of disposed solid waste has decreased. Revenues are not adequate to meet expenses, and the County’s HHW Fund reserves are decreasing as annual operating deficits increase. The Review relies primarily on data for July 1, 2009 through June 30, 2010, FY 2009-10. The Review also examines several additional, emerging options for delivery of HHW management. Following is an overview of the key topics for the Review.

HHW Program Efficiencies and Short-Term Cost Reductions

The comparison of HHW program efficiencies has two components.\(^2\) The first is a comparison of the operational efficiency of the three County facilities operated by the Alameda County HHW Program (Alameda County Program, or Program) to those of Santa Clara County. The second is a comparison of the operational efficiency of the City of Fremont’s HHW Program with that of the City and County of San Francisco. In each case, the comparisons are based on data for FY 2009-10.

In addition, this section of the Review addresses short-term options for reducing expenses for both the Alameda County Program and the Fremont Program.

On-Call HHW Curbside Collection Programs

This section includes a broad discussion of the options for using on-call programs in Alameda County, and the key variables to use in comparing on-call options to each other, and to other options.

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\(^1\) "Alameda County Household Hazardous Waste Program – FY 2009-10 Annual report", presented at the January 11, 2011 meeting of the Alameda County Waste Management Authority’s Programs and Planning Committee.

\(^2\) The Review does not constitute an “audit”. HF&H reviewed program annual reports, requested follow-up material and asked questions via email, and interviewed key program staff by phone. HF&H did not review underlying records as would be necessary to confirm the reported facts.
Final Report

HHW Retail Take-Back Options

This section includes an overview discussion of state and regional efforts to develop voluntary and mandatory take-back programs, and the estimated scope and cost for a retail take back program for Alameda County similar to that now provided in San Luis Obispo County.

HHW Program Evolution in California

The following is a summary, quite generalized, of the growth and evolution of HHW programs in California over the past 20 years. The summary provides useful context for the HHW Review findings and recommendations presented below, and for considering future program design options.

1. Municipal HHW programs began in the early 1990's in response to state legislation. These programs, and particularly those in more urban areas, tended to use a centralized, fixed facility model in which residents dropped-off HHW materials, either with or without appointments. Facilities were either free-standing or co-located with solid waste transfer stations or wastewater treatment plants. Other early municipal programs used periodic temporary (usually one or two day) events in different locations to maximize convenience. These programs tended to be more common in larger and/or more rural service areas. Finally, some programs used a mixture of the two approaches. These are still the dominant formats for municipal programs.

2. By the mid-1990's programs became more diverse, with added periodic temporary events, and some on-call pickups at residences. Private sector firms first began offering on-call collection services in northern California in the mid-1990's.

3. With the early 2000's came the addition of universal wastes ("U-Wastes", such as fluorescent lamps) and electronic scrap ("E-scrap", such as computers and monitors). During the same period, municipally-contracted or franchised solid waste collectors began offering limited curbside collection of HHW on single family routes. Initial materials included motor oil and oil filters, and later household batteries. Curbside collection options have subsequently expanded to include fluorescent lamps, sharps, automotive batteries, and other materials.

4. Over the past several years, in part due to the state of municipal finance, there has for the first time been serious interest in using private sector on-call curbside programs to enhance and even replace municipal programs.

5. Now, as Extended Producer Responsibility (EPR) concepts are becoming more widely understood and accepted, there is increasing focus on the use of voluntary and mandatory take-back options at the municipal, county and state levels. The goal of EPR is to shift the physical and financial responsibility for product end-of-life management to producers. Internalizing the full life-cycle cost of product manufacture, use, and "end-of-life" by incorporating these costs into the initial price of each product, can provide a source of funding for management of discarded products, whether by the manufacturer (ideally) or by the public sector.

In summary, at this point in time there is a wide and diverse range of options for HHW management, being applied in varying ways to different materials.
HHW PROGRAM EFFICIENCIES AND SHORT-TERM COST REDUCTIONS

Comparative Analysis of HHW Programs

The comparative program analysis consisted of the following steps.

First, HF&H collected the following data from each program for use in analyzing program efficiency:

1. Population served measured in households, and households served as a percentage of total households in the service area.
2. Total program costs, and cost subtotals for operations (primarily labor), transportation and disposal, and overhead, as available.
3. Total full-time equivalent (FTE) positions.
4. Total pounds collected by method (e.g., facility drop-off, temporary events, collection from take back locations, on-call pickups, etc)
5. Total pounds collected by major category (such as latex paint, flammables and poisons, U-Wastes, E-scrap, antifreeze, motor oil, batteries, etc).
6. Total pounds managed, with subtotals by method (such as reuse, recycling, treatment, landfill disposal and incineration).

Figure 1 provides total pounds of material collected and managed, relative percentages by weight for the types of materials collected, method of collection, method of managing the collected materials, and percentages of materials reused or recycled.
**ATTACHMENT D**

Ms. Debra Kaufman  
February 13, 2012  
Page 7 of 22

Final Report

**Figure 1: Summary Data for Collection and Management of Materials**

<table>
<thead>
<tr>
<th></th>
<th>Alameda County</th>
<th>Santa Clara County</th>
<th>City of Fremont</th>
<th>San Francisco City &amp; County*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Pounds Collected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pounds Per Year</td>
<td>2,098,704</td>
<td>3,398,738</td>
<td>857,659</td>
<td>1,200,023</td>
</tr>
<tr>
<td>Total Pounds Per Year (Excluding E-scrap)</td>
<td>2,098,704</td>
<td>n/a</td>
<td>711,706</td>
<td>1,200,023</td>
</tr>
<tr>
<td><strong>Materials Collected</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flammable and poisons</td>
<td>50.2%</td>
<td>43.7%</td>
<td>21.0%</td>
<td>24.6%</td>
</tr>
<tr>
<td>latex paint</td>
<td>27.8%</td>
<td>31.5%</td>
<td>27.8%</td>
<td>34.4%</td>
</tr>
<tr>
<td>antifreeze, auto batteries, motor oil</td>
<td>8.6%</td>
<td>6.1%</td>
<td>10.6%</td>
<td>17.2%</td>
</tr>
<tr>
<td>universal waste (excluding E-scrap)</td>
<td>6.9%</td>
<td>8.1%</td>
<td>4.3%</td>
<td>17.8%</td>
</tr>
<tr>
<td>E-scrap</td>
<td>0.0%</td>
<td>6.6%</td>
<td>19.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>other HHW</td>
<td>6.0%</td>
<td>4.0%</td>
<td>16.7%</td>
<td>6.0%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>99.6%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Collection Method**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>permanent</td>
<td>99.0%</td>
<td>33.7%</td>
<td>100.0%</td>
<td>45.6%</td>
</tr>
<tr>
<td>temporary</td>
<td>0.0%</td>
<td>56.5%</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>door-to-door</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>14.8%</td>
</tr>
<tr>
<td>takeback</td>
<td>1.0%</td>
<td>5.5%</td>
<td>0.0%</td>
<td>20.6%</td>
</tr>
<tr>
<td>curbside</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>other (load check)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>15.3%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>100.0%</td>
<td>95.8%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Disposal Methods/Weight**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>recycling</td>
<td>43.8%</td>
<td>52.6%</td>
<td>69.3%</td>
<td>63.1%</td>
</tr>
<tr>
<td>fuel incineration</td>
<td>42.0%</td>
<td>28.9%</td>
<td>6.5%</td>
<td>22.3%</td>
</tr>
<tr>
<td>destructive incineration</td>
<td>12.6%</td>
<td>11.5%</td>
<td>16.0%</td>
<td>7.1%</td>
</tr>
<tr>
<td>landfill disposal</td>
<td>1.4%</td>
<td>0.8%</td>
<td>2.3%</td>
<td>7.4%</td>
</tr>
<tr>
<td>reuse</td>
<td>0.0%</td>
<td>0.6%</td>
<td>5.8%</td>
<td>0.2%</td>
</tr>
<tr>
<td>other</td>
<td>0.2%</td>
<td>5.5%</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Total Percentage Diverted (recycle, reuse)**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43.8%</td>
<td>53.2%</td>
<td>75.0%</td>
<td>63.2%</td>
</tr>
</tbody>
</table>

*The San Francisco Program includes collection of substantial quantities of E-scrap through take back programs at retailers. The cost of managing these materials cannot be readily quantified. Thus, "Total Pounds Per Year" and "Materials Collected" exclude E-scrap for the purposes of developing the efficiency indices shown in Figure 2."
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Figure 2 provides comparative indices used in the following pages to discuss the programs. With regard to “percent of households served”, the figure shown for Alameda County excludes the three Tri-Cities, and the Fremont program figure reflects service provided to the Tri-Cities area.

<table>
<thead>
<tr>
<th></th>
<th>Alameda County</th>
<th>Santa Clara County</th>
<th>City of Fremont</th>
<th>San Francisco City &amp; County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a Number of Households Served</td>
<td>31,396</td>
<td>34,629</td>
<td>11,995</td>
<td>11,201</td>
</tr>
<tr>
<td>1b Percent of Total Households Served</td>
<td>7.0%</td>
<td>5.8%</td>
<td>10.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>2 Total Cost Per Household Served</td>
<td>$96.87</td>
<td>$113.20</td>
<td>$72.43</td>
<td>$202.21</td>
</tr>
<tr>
<td>3a Total Cost Per Pound</td>
<td>$1.45</td>
<td>$1.15</td>
<td>$0.90</td>
<td>$2.02</td>
</tr>
<tr>
<td>3b Total Cost Per Pound (Excluding E-scrap)</td>
<td>$1.45</td>
<td>n/a</td>
<td>$1.03</td>
<td>$2.02</td>
</tr>
<tr>
<td>4 Operating Cost Per Households Served (Excluding Overhead)</td>
<td>$86.49</td>
<td>$107.49</td>
<td>$61.29</td>
<td>$202.21</td>
</tr>
<tr>
<td>5a Operating Cost Per Pound (Excluding Overhead)</td>
<td>$1.29</td>
<td>$1.10</td>
<td>$0.86</td>
<td>$1.89</td>
</tr>
<tr>
<td>5b Operating Cost Per Pound (Excluding Overhead and E-scrap)</td>
<td>$1.29</td>
<td>n/a</td>
<td>$0.99</td>
<td>$1.89</td>
</tr>
<tr>
<td>6 Transportation and Disposal Cost Per Pound</td>
<td>$0.35</td>
<td>$0.55</td>
<td>$0.41</td>
<td>$0.32</td>
</tr>
<tr>
<td>6a Transportation and Disposal Cost Per Pound (Excluding E-scrap)</td>
<td>$0.35</td>
<td>n/a</td>
<td>$0.45</td>
<td>$0.32</td>
</tr>
<tr>
<td>7 Total Pounds of Material Managed Per Year, Per FTE</td>
<td>144,738</td>
<td>339,874</td>
<td>285,886</td>
<td>109,093</td>
</tr>
</tbody>
</table>

Challenges in Comparing HHW Programs

The indices shown in Figure 2 must be used with caution. Making fair HHW program comparisons has always been as much an art as a science. But as HHW programs have evolved and become more diverse, the use and interpretation of the indices must be tempered with a good understanding of the programs. For instance:

1. Individual programs vary in design and efficiency based on the balance they each strike regarding qualitative factors such as maximizing customer convenience, maximizing reuse and recovery
options and minimizing landfill disposal, and trying to minimize intake of materials for which there are other collection options (such as motor oil). Total weights managed may also vary depending on how contractors weigh materials prior to shipment.

2. Program costs can be difficult to compare because of varying degrees to which full-cost accounting is used, there is comparably detailed cost information, and shared expenses are accurately allocated.

3. Increasingly, comparative indices will not directly provide an apples-to-apples comparison of relative program efficiency. However, the indices used in the Review, as well perhaps as new ones, will continue to be useful for isolating programmatic variations that affect cost and efficiency.

The following are some examples of caveats to keep in mind when using the indices:

1. Per-household indices were very useful for comparing fixed facility and event-based programs, but are now less useful because they do not factor in take back options. The San Francisco Program is an example of this since material is collected from a large number of take back locations for which there are no data for the number of users, and the cost of the take back function cannot be isolated. In addition, it is difficult to apply the term "per-household" consistently. Some programs count "cars" (counted as multiple households as identified by the party delivering the material) or "loads" (counted as a single household). This effect, for instance, can be seen in the Figure 2 data in which the Santa Clara Program's costs for indices 2 and 4 are high relative to those for the Alameda County and Fremont programs, since the former program counts loads and the latter two programs count cars as multiple households.

2. The relative degree to which each program accepts and manages high volumes of low cost materials such as E-scrap, motor oil and latex paint strongly affects comparisons based on total costs, and total disposal costs per pound. Consequently, relative program cost efficiency for the San Francisco Program, were E-scrap to be included, might appear significantly more favorable than shown in Figure 2.

3. Figure 1 compares the total percentages of materials that are reused or recycled for the four programs. These percentages may reflect specific goals for diverting material from disposal or destructive incineration. More importantly, they reflect the management options that are available for specific types of materials. For example, while the total percentage of material reused and recycled by the Fremont Program is higher than for the Alameda County Program, the former program manages a relatively high percentage of materials that lend themselves to reuse and especially recycling, including E-scrap. The Alameda County Program has a much higher percentage of flammables and poisons for which incineration is the preferred disposal method.

**Program Summaries**

The following summarizes the key features of the four programs:

**Alameda County Program**: The County Program operates three facilities located in Hayward, Livermore and Oakland on a fixed schedule. The primary means of service delivery is through resident and small
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business drop-off of material at the facilities. The Program also provides a “cooperative” program with member agencies that provides transportation and disposal of materials collected through member agency sponsored special events and drop-off sites. The Program does not accept E-scraps, but refers residents to private sector E-scraps facilities that are located near the Program facilities and are in good standing with State regulatory agencies. Thus, the Program offers an integrated approach without incurring the cost of managing E-scrap, although it entails two stops for residents, rather than one. The County Program is primarily funded by a $2.15 HHW Fee levied on solid waste disposal. The Program also collects a small amount of revenue from fees paid by small business users. The County Program is further profiled in the FY 2009-10 Annual Report (see Footnote 1.)

Fremont Program: The Fremont Program is operated by BLT Enterprises and is co-located with solid waste functions at the Fremont Transfer and Recycling Station. Fremont City staff oversees BLT’s HHW activities and conducts outreach related to these services. The Fremont Program is funded in part by the City through a solid waste rate surcharge and reserves in its Solid Waste Fund, and in part by the County Program from HHW Fee revenues. Beginning with FY 2011-12, the Fremont Program is benefitting from certain services provided by the Alameda County Program, including “piggy backing” on the County’s transportation and disposal contract, and scheduling and determining eligibility of small business users. The term “Fremont Program” is used in the Review to refer to City of Fremont staff and BLT staff both separately and collectively.

Santa Clara County Program: The Santa Clara County Program uses a combination of material drop-off at fixed facilities, periodic temporary events at various locations, participation in member agency neighborhood cleanups, and “door-to-door” collection for disabled and home-bound residents. About 90 percent of materials are collected through the permanent facilities and temporary events; neighborhood cleanups and door-to-door collection play a minor role. The Santa Clara County Program has two permanent facilities and is building a third. Use of the facilities is by appointment. In addition, Santa Clara County acts as a contractor to individual cities in seeking retail businesses to serve as voluntary collection points for the “Take-It-Back” program. There are currently about 120 businesses participating in battery, fluorescent lamp, discarded prescription, sharps, and paint drop-off. The Santa Clara County Program is primarily funded by a $2.60 HHW Fee levied on solid waste disposal.

City and County of San Francisco Program: San Francisco oversees Recology Inc.’s HHW Program which the latter conducts as part of its overall franchised solid waste operations funded through solid waste customer rates. The City’s direct program role has decreased in recent years. City staff provides broad oversight, markets the take back service to potential participating businesses, and conducts a broad range of public outreach related to hazardous waste and toxic substances management in general, and the Program in particular. Recology operates a HHW facility at its Tunnel Road Transfer Station, and also collects materials from over 100 municipal and retail drop-off locations around the City.
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**Comparison of Alameda County and Santa Clara County Programs**

Based on previous periodic HHW reviews conducted by StopWaste.Org, the Santa Clara County program is the Bay Area program that is most directly comparable to the Alameda County Program. In drawing on the information in Figures 1 and 2, we observe that:

1. The two programs provide service to a similar percentage of the total target population.
2. Both programs identify and allocate expenses that are shared with other programs or activities.\(^3\)
3. Both programs are becoming more diverse, and it is harder to make apple-to-apples comparisons between them.
4. The Santa Clara Program accepts E-scrap while the Alameda County Program does not do so directly. Thus, the best comparisons between the two programs exclude E-scrap.
5. As discussed below in Item 7 of the observations regarding the Fremont and San Francisco programs, an unintended consequence of the advent of the Fremont Program is to increase some Alameda County Program costs.

Based on the information contained in Figures 1 and 2, we find that the Alameda County Program compares well to that of Santa Clara County, as well as to the other two programs as follows:

1. Total and operating costs per household are relatively lower.
2. Transportation and disposal costs are quite low. This is impressive given the relatively costly mix of materials handled by the Program and reflects many years of experience in negotiating competitive contracts.

Conversely, the Alameda County Program does not compare as favorably to that of Santa Clara County on the basis of following:

1. Total and operating costs per pound.
2. Weight of material managed per employee.

Lower figures for these indices may reflect the “over-capacity” issue, as well as the cooperative back program and the services provided to the Fremont Program by the Alameda County Program.

**Comparison of Fremont and San Francisco Programs**

Based on previous periodic HHW reviews conducted by StopWaste.Org, the City and County of San Francisco’s HHW program was selected for comparison with the City of Fremont Program. Both programs are primarily facility-based and the facilities are co-located at solid waste transfer stations.

In drawing on the information in Figures 1 and 2 to compare the programs, we observe that:

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\(^3\) With regard to labor, the Indices in Figure 2 address both Program employees and temporary staff provided through transportation and disposal contracts.
1. The Fremont Program provides service to about 10.8 percent of the households in its target service area, versus 3.4 percent for the San Francisco program.

2. Both programs state that they identify and allocate expenses that are shared with other programs or activities.

3. The Fremont Program does not have a take back program as is the case for San Francisco, and the San Francisco Program does not isolate the materials or costs associated with the take back program. The effect of this is to artificially inflate the total cost and operating cost per household indices shown in Figure 2 for the San Francisco Program. While all collected tons are captured in the numerator, the denominator does not factor in the sources of the take back materials.

4. Both programs isolate the HHW operation from the rest of facility operations. In particular, both programs clearly identify HHW materials from load checking — materials that are separated from solid waste delivered to the transfer station and then brought to the HHW portion of the facility. However, while the Fremont Program isolates the associated costs for this material, the San Francisco Program does not. As with the take back program, the effect is to inflate the total cost and operating cost per household indices shown in Figure 2.

5. The Fremont Program benefits from, and can further benefit from assistance provided by the Alameda County Program. In particular, the County Program has offered the Fremont Program access to the transportation and disposal contract negotiated by the County, which provides relatively low unit prices based on the economies of scale of the larger County Program. In addition, the County Program provides phone scheduling for small business users (CESQ6’s or Conditionally-Exempt Small Quantity Generators), and vets the eligibility of interested businesses to ensure they meet regulatory requirements for use of the service.

6. As provided in the memorandum of understanding between StopWaste.Org and the City of Fremont, collection of E-scrap is optional on Fremont’s part and the BLT Facility does collect E-scrap. The San Francisco Program also includes E-scrap collection but this service is provided under a separate budget, and Figures 1 and 2 do not include information related to the E-scrap service. As noted in Figures 1 and 2, the Alameda County Program does not accept E-scrap, but refers residents to nearby private sector drop-off facilities. The County facilities were not built to handle E-scrap and there are a number of for-profit vendors that manage the material. This fact is of importance because of the low net cost per pound associated with E-scrap management. Thus, the best comparisons exclude E-scrap.

7. One consequence of adding the Fremont BLT Facility to the existing three-facility County system is that the use of the Hayward Facility — that facility nearest to Fremont — has decreased since some material that previously would have been brought to the Hayward facility is now being delivered to the Fremont facility. County Program staff had originally planned to increase operating hours at the Hayward facility, but they have instead maintained the past operating level.\(^5\) The effect of

\(^4\) "Memorandum of Understanding for Household Hazardous Waste Services", City of Fremont and the Alameda County Waste Management Authority, August 4, 2007, Article 1, item p.

\(^5\) See Footnote 1.
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maintaining the same level of operations is to create a degree of "over-capacity" that artificially inflates the cost indices in Figure 2.

8. The City of Fremont tracks the percentage of total collected materials that are diverted through reuse and recycling. Generally, between 70 and 85 percent of total collected materials are diverted. As far as we know, none of the other programs participating in the Review conduct similar tracking. Based on the information contained in Figures 1 and 2, we find that the Fremont Program compares well to the San Francisco Program, as well as to the other two programs as follows:

1. The Fremont Program has the lowest indices for total costs and operating costs, both per household and per pound managed.

2. As a measure of labor productivity, the total weight managed per employee is significantly higher for the Fremont Program than for that of San Francisco.

3. Both the Fremont and the San Francisco programs have reasonable overhead rates, in the range of 7 to 12 percent.

Conversely, the Fremont Program's transportation and disposal cost per pound, E-scrap excluded, is high relative to that of the San Francisco and Alameda County programs. This is likely to be primarily the result of the economies of scale achieved by the two latter programs.

Additional Comment Regarding Program Comparisons

Intuitively, one might expect that co-located facilities that use a combination of dedicated and shared staff would have relatively high productivity in terms of weight per full time employee equivalent (FTE). Interestingly, however, the Santa Clara Program has the highest productivity figure for the four programs based on this measure, which is inclusive of permanent employees as well as temporary employees obtained through each program's transportation and disposal contracts. As a matter of speculation, perhaps this is a function of the relative amount of labor involved in preparing materials for shipping, which varies significantly on a unit basis depending on material type. It may be that, on a relative basis, the Santa Clara Program generates less material requiring a high level of preparation for shipping, and that this savings outweighs any inefficiency that stems from greater reliance on temporary events.

Near-Term Options for Improving Efficiency and Reducing Program Expense

We acknowledge and endorse the County Program's ongoing efforts to improve efficiency and reduce costs within the current framework for service delivery, such as those identified in the FY 2009-10 Annual Report⁶. We also offer the following recommendations as several short-term options for reducing expenses for both the Alameda County Program and the Fremont Program. Staffs of both programs are aware of, and have plans for pursuing these options.

⁶ See Footnote 1, pages 12-13.
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1. The Fremont Program should look for opportunities to increase use of the Alameda County Programs’ transportation and disposal contract. As shown in Figure 2, the Fremont Program’s unit cost per pound for FY 2009-10 was about 20 percent higher than for the County Program. The greater volume of material collected through the County Program, and many years of experience in competitive contracting for these services have resulted in favorable pricing reflecting economies of scale. We suggest that Fremont Program and County Program staff meet quarterly to review options for increasing the Fremont Program’s use of the County’s contract. As a rough estimate, if use of the County contract reduced the Fremont Programs total transportation and disposal cost by 10 percent, resulting savings would total about $35,000 per year.

2. Both programs should maximize the opportunities presented by the state’s paint stewardship legislation, AB 1343, to reduce the cost of managing paint. AB 1343 establishes an EPR system for paint, and the regulations implementing it are scheduled to take effect July 1, 2012. The draft regulations will help reduce costs related to related disposal, materials, labor and supplies. County Program and Fremont Program staffs estimate annual savings beginning in FY 2012-13 of about $500,000 and $110,000, respectively, due to the paint regulations.

3. As discussed above, as a result of the opening of the Fremont facility, the Alameda County Program has made shifts in the use of the Hayward and Oakland facilities that result in somewhat underutilized staff and facilities. StopWaste.Org and County Program staffs are aware of this issue, and have discussed how to address it. Options include using the existing staffing level to increase hours of operation, and/or to decrease staffing levels. We do not have an estimate for possible associated savings. While either action would improve the County Program’s total and operating cost, and weight per employee indices shown in Figure 2, they are unlikely to be substantial enough to remedy the Program’s current fiscal problems.

4. The Santa Clara County Program has a partnership with PG&E to help recycle compact fluorescent bulbs through additional public outreach and provision of recycling bags to individuals. StopWaste.Org staff and Program staff have obtained similar funding from PG&E as well as from the state. However, any increased recycling of lamps due to such a partnership is unlikely to lead to substantial cost reduction for the Program.7

It appears that recommendations 1 and 2 could result in annual savings of up to $145,000 for the Fremont program and about $500,000 for the County Program. While these changes, plus any savings that may result from actions related to Recommendations 3 and 4, can reduce the rate at which County HHW Fund reserves will be reduced, they will not likely be adequate to balance current revenues as discussed in the FY 09-10 Annual Report.

The Possible Impact of Near-Term Savings on Trust Fund Reserves

As noted in the Program’s annual report for FY 2009-10, over a period of years the Program’s trust fund balance grew, with revenues exceeding expenses through the close of FY 2007-08.8 In FY 2008-09,

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7 Rob D’Arcy, Santa Clara County, telephone call with Peter Deibler of HF&H, June 2, 2011.
8 See Footnote 1, pgs 4-5.
expenses exceeded revenues and the trust fund balance began to decline. The operating deficit for FY 2009-10, the amount by which expenses exceeded revenues, totaled about $810,000. Program staff projections based on actuals through February 2011 indicate a similar trend for FY 2010-11. It appears possible that the savings identified above could significantly reduce or possibly eliminate the annual operating deficit, and they certainly should be pursued. However, while the identified savings could help delay the need to seek an increase in the current per-ton fee or other forms of revenue enhancement, they will not be sufficient to close the revenue gap.

ON-CALL HHW CURBSIDE COLLECTION PROGRAMS

This section provides a brief summary of the recent use of on-call collection programs in other jurisdictions, key variables for use in comparing the on-call option to other options, and a broad discussion of the options for using on-call programs in Alameda County.

On-Call Programs in California

In addition to the cities summarized below, three of the programs profiled for the Review have, or have had, on-call collection programs. As noted above, Santa Clara County has a door-to-door collection program for disabled or home bound residents. However, the County charges about $120 per pick-up, what it has calculated to be the “true-cost” of the program, and the cities do not take much advantage of it. Of course, there are few economies of scale that can be achieved in routing collection if pickups are sporadic and very limited in number. The Alameda County and San Francisco programs have had on-call collection at times in the past, but do not currently provide this service.

The following summary information is presented alphabetically for several on-call programs for which contracts have recently been signed with “At-Your-Door Special Collections”, a company formerly named Curbside, Inc. that was purchased in late 2010 by WM, Inc. However, other solid waste collection companies are also beginning to offer similar services. In general, At-Your-Doors’ municipal programs provide for residents to make an appointment for pickup. Customers are mailed a special bag with a label and instructions for setting out material. At-Your-Door will accept a broad range of materials, excluding ammunition, explosives and other “prohibited materials” that are generally excluded from HHW programs. The list of acceptable materials is tailored to individual community needs. While there is generally no stated limit for the size of an individual set-out, the volume of the bag provides a practical limit for HHW while a specified amount of E-scrap may be set-out next to the bag. In some jurisdictions, At-Your-Door also provides and services drop-off containers at central locations for specified materials such as sharps and provides mail-back programs for sharps.

City of Cupertino

At-Your-Door recently began providing curbside collection of HHW to Cupertino residents, and provides two drop-off containers for pharmaceuticals and sharps at convenient locations in Cupertino. The service is provided through a contract with Cupertino’s solid waste collector, Recology Los Altos. Recology bills its residential customers for the service and pays At-Your-Door directly from rate
revenues. The contract provides pricing at three levels of participation: $0.45 per household for up to 10 percent participation, $0.59 per household for from 10 to 20 percent participation, and $0.64 per household for participation of 20 percent and over. The contract provides for no more than two pickups per year from a single customer. Recology collects monthly revenue and program data to be included with its annual report to the city at the close of the calendar year.9

City of San Ramon

In late 2010, the City of San Ramon entered into a contract with At-Your-Door to provide general on-call residential collection10. However, as of mid-2011, the service had not yet begun due to a permit condition prohibiting acceptance of out-of-county material at At-Your-Door’s Hayward facility. The scope of the program includes HHW, E-scrap and consumer electronics and, at the City’s specific request, propane canisters.

At-Your-Door is compensated at the equivalent rate for solid waste collection of $0.52 per single-family household per month and $0.25 per multi-family household per month. Pricing was provided at an assumed participation level of 8 percent, but City staff indicates that there is no cap on participation or provision for added compensation should actual participation exceed eight percent. The total annual program cost is $140,000. The contract is for a one year period, with one year renewals at City discretion – a contracting arrangement known as “evergreen”. San Ramon is paying for the service through a combination of solid waste rate surcharges and the use of solid waste enterprise fund reserves. The contract also requires that At-Your-Door indemnify the City for all costs due to spills and accidents, except for force majeure events, and that the company provide environmental liability insurance. At-Your-Door may leave prohibited materials at the curb.

South Bay Waste Management Authority (SBWMA)

The South Bayside Waste Management Authority (SBWMA) is comprised of eight cities and special districts in San Mateo County. In 2009 the SBWMA conducted a competitive procurement and entered into a master agreement with At-Your-Door (then still named Curbside Inc.) to provide HHW collection to single-family and multi-family residents living in seven participating member agencies. The program covers a broad range of materials including U-waste, E-scrap, sharps, and pharmaceuticals. The initial cost was $0.45 per single-family household and $0.20 per multi-family household. Each participating member agency committed to including these charges in their solid waste collection rates. Key features of the contract include a three year term, annual CPI increases, and unlimited participation. The staff report to the SBWMA Board notes that Curbside’s initial proposal for multi-family was $0.35 per

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month. Figure 3 summarizes the key variables that drive the cost of on-call programs, with related comments about how they apply to the programs profiled above.

<table>
<thead>
<tr>
<th>Key Variable</th>
<th>Examples</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augments municipal program</td>
<td>Santa Clara County, Cupertino, San Ramon, and SBWMA.</td>
<td>A program that augments an existing municipal program will recover more material at a higher total “system” cost.</td>
</tr>
<tr>
<td>Replaces municipal program</td>
<td>To our knowledge, Santa Monica is the first jurisdiction to seek to do so. Santa Monica’s goal is to replace the current municipal program, and to reduce costs by an estimated $100,000 per year.</td>
<td>The City has been denied approval for the proposed replacement due to regulatory concerns related to placement of HHW at the curb and is awaiting state legislative charges that would allow for program approval.</td>
</tr>
<tr>
<td>Materials included</td>
<td>Materials range from “traditional” HHW generally handled only by municipal programs, such as flammable materials, as well as auto batteries, fluorescent lamps, propane canisters, and sharps that are also collected through other programs.</td>
<td>As indicated by the program summaries above, there are a wide range of materials included. As with the four profiled municipal programs, the likely mixture of materials and their relative cost of management help dictate estimated program costs.</td>
</tr>
<tr>
<td>Population covered</td>
<td>Target populations vary, from specific populations (Santa Clara County and Richmond (senior citizens) to the residential population at large.</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td>Demographics are an important factor in pricing the service. More affluent communities tend to use the service more. Less affluent communities tend to use the service less, and a higher percentage of collected materials are relatively lower cost materials such as motor oil and oil filters.</td>
<td>Estimating usage is a challenge. For example, “At Your Door” found it had underestimated the volume of fertilizers and pesticides collected in the SBWMA service area. These materials are relatively expensive to manage.</td>
</tr>
</tbody>
</table>

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11 "Resolution Approving Master Agreement with Curbside, Inc.", Staff Report for October 22, 2009 SBWMA Board Meeting, page 2.

12 Much of the information regarding pricing strategy was provided by Bil Anderson of At-Your-Door, telephone call with Peter Delbier of HF&H, March 17, 2011. Some of the material contained in Figure 3 is from Debra Kaufman, StopWaste.Org, email to Peter Deibler, June 10, 2011, summarizing a meeting between StopWaste.Org and At-Your-Door staff.
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<table>
<thead>
<tr>
<th>Key Variable</th>
<th>Examples</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population density</td>
<td>Denser populated areas help achieve economies of scale through scheduling more appointments in a smaller geographic area.</td>
<td>On-call services will be tend to be more expensive in rural or less densely populated areas. Company staff notes an average rate of collection of twenty houses per truck per day, but that efficient routing could result in collection from as many as fifty houses per day.</td>
</tr>
<tr>
<td>Assumed rate of participation for eligible population</td>
<td>Assumed rates of participation are generally 8 to 10%. The participation rate is, in particular, a function of the level of outreach and publicity associated with the program.</td>
<td>The Cupertino contract illustrates the effect of participation on pricing, with price tiers for increased levels of participation. In general, At-Your-Door programs have a 4 to 5 percent participation rate, with first year rates of 12-14 percent. A monthly collection pilot program in Los Angeles had a participation rate of 30 percent, which made it too expensive and it was not extended.</td>
</tr>
<tr>
<td>Participant use per year</td>
<td>The general assumption is that 90% of those using the service will do so once per year.</td>
<td>The Cupertino program provides for no more than two pickups per year from a single customer.</td>
</tr>
<tr>
<td>Unit cost</td>
<td>Unit costs vary as shown above, and reflect the various factors described in this table.</td>
<td>The use of union or non-union labor will have a substantial impact on overall cost. For instance, At-Your-Door staff estimates that the use of union labor would increase the costs for the SEWMA program by about 40 percent.</td>
</tr>
<tr>
<td>Contract duration</td>
<td>Contract terms vary, as indicated above.</td>
<td>At Your Door will enter into contracts of as little as one to three years. The San Ramon evergreen contract effectively has a one year term.</td>
</tr>
<tr>
<td>Funding</td>
<td>Funding sources vary. The certainty of the funding source, such as rate based revenue vs. grant funding, can affect pricing.</td>
<td>For years many At-Your-Door programs were funded through periodic grants received by individual communities. Solid waste rate-based funding provides greater continuity.</td>
</tr>
<tr>
<td>Treatment/Disposal</td>
<td>It is our understanding that contracts generally do not specify management techniques to be utilized, or place requirements on the contractor for reuse or recycling.</td>
<td>San Ramon staff, for instance stated they did not know what would happen to the material following consolidation at a Hayward facility.</td>
</tr>
</tbody>
</table>
Final Report

Summary Observations Regarding On-Call Curbside Programs

In general, we note that on-call curbside collection of HHW may provide a viable option for augmenting current programs. However, on-call programs tend to result in collection of additional material and do not reduce current municipal program costs.

Cost per household and per pound are key productivity indices for evaluating the relative effectiveness of on-call HHW collection services. As part of better understanding and evaluating a possible role for on-call programs, we recommend that StopWaste.Org collect and review actual program data as it becomes available from other Bay Area programs. The data can then be used to estimate a range of costs per household served and for pounds of material managed for a potential Alameda County program(s). Any comparison of on-call options to the Alameda County Program need to adjust for, or at least identify and acknowledge, the costs and pounds associated with options such as drop-off containers that do not correlate directly to number of households. The comparison could be more easily made to the Fremont facility since its program scope is limited to household and small business drop-off.

In addition, we note the following concerns and suggest they be addressed prior to placing significant reliance on an on-call curbside HHW collection option: 13

1. Santa Monica is the only California jurisdiction we are aware of that plans to replace its municipal program with an on-call curbside option. However, local regulatory agencies, such as that overseeing the Santa Monica program, have expressed concerns about the safety aspects of leaving HHW unattended at the curb. In Santa Monica's case, this issue has resulted in a lengthy delay in implementing the shift to an on-call program. In addition, there are no direct provisions for addressing safe and timely removal of prohibited materials. San Ramon's contract, for instance provides that At-Your-Door may leave prohibited materials on the curb.

2. Use of such services should be accompanied by ongoing public education to change consumer purchasing behavior in favor of safer, less toxic products. Jurisdictions with sustainability and/or zero waste goals that address toxics reduction efforts may wish to consider how to integrate those goals into broader community goals.

3. One program manager stated that with regard to treatment and disposal, public sector contracts should specify how materials will be managed and should include provisions for tracking and verification of management in order to ensure due diligence.

4. As currently envisioned, on-call collection perpetuates the current municipal funding model, and could delay a long-term transition to an EPR-based economy in which the cost of collecting these materials is fully internalized. However, if on-call services were instead funded by the producers of toxic materials as part of voluntary and mandatory efforts to ensure that the full life cycle cost of individual types of product are collected at the time of purchase, on-call collection could be part of the solution.

13 HF&H wishes to acknowledge Rob D'Arcy of Santa Clara County for his thoughts on some of these issues. However, the observations as expressed are the sole responsibility of HF&H.
5. It is difficult to know whether private companies providing on-call service as part of a broad range of other services are proposing program costs that provide full-cost accounting on equal footing with municipal programs. For instance, waste management companies can absorb overhead such as insurance and management costs related to such programs as a cost of doing business. Conversely, perhaps communities are not overly concerned about whether full cost accounting is employed, if the perception is that there is a net cost decrease for a substantially equivalent level of service.

6. There is some uncertainty about the longer-term costs, and the stability of the costs related to reliance on a service provided by the private sector. The current County Program facilities and properties are fully owned by the county. It would not be prudent to abandon and then possibly need to replace debt-free facilities unless and until there is a clearer sense that the risks of doing so are better understood and are acceptable.

**HHW RETAIL TAKE-BACK OPTIONS**

This section includes a broad discussion of state and regional efforts to develop voluntary and mandatory take-back programs, and an estimate based on the San Luis Obispo County program of the potential scope and cost for a similar program in Alameda County. In broad terms, mandatory take back programs are an important component of EPR, internalizing the life cycle cost of product management in the initial purchase price, and thus eliminating municipality obligation or responsibility to pay for these costs. Voluntary take back programs are a starting point towards EPR, establishing a role for businesses in taking back products they sell. In some cases, including in Alameda County, local retailers are establishing voluntary take back programs, and bearing the cost of doing so. But for the most part, for voluntary programs set up through public sector the costs are still borne by municipalities. In addition, it is clear that take back programs augment existing municipal collection programs. From a customer perspective, take back programs provide an additional, convenient means for disposing of HHW. Thus, from a system perspective, these programs add both to total volumes of materials collected and total costs.

**Voluntary Take Back Efforts**

There are a number of efforts underway in the Bay Area to develop voluntary take back options. Three of the four programs included in the Review have some degree of voluntary take back as described below.

A key role for San Francisco municipal staff is to identify retail businesses to serve as drop-off sites for residents, and to set-up the drop-site area including providing signage. Recology then transports the material back to the HHW facility. San Francisco has over one hundred take back locations. Santa Clara County's HHW Program has instituted the "Take-It-Back" program with about 120 businesses participating in battery, fluorescent lamp, discarded prescription, sharps, and paint drop-off. The Alameda County Program has a "cooperative" take back program collecting material from municipally-sponsored drop-off locations. The role of the activity continued to increase in FY 2010-11, as is the case for the other two programs.
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Estimated Cost of a Comprehensive Take Back Program in Alameda County

The information in Figures 4 and 5 provides a profile of the cost and impact of the San Luis Obispo County Integrated Waste Management Authority (San Luis Obispo) mandatory take back program. Whether a program with a similar scope is instituted on Alameda County on a voluntary or mandatory basis, the San Luis Obispo experience provides some guidance regarding total system costs regardless of whether they are borne by the private and/or public sectors.

Figure 4: San Luis Obispo County Integrated Waste Management Authority Take Back Grant Funding

<table>
<thead>
<tr>
<th>Program</th>
<th>Initial Year</th>
<th>Total Grant Amount</th>
<th>Grant Duration (Years)</th>
<th>Business Locations</th>
<th>Average Annual Subsidized Cost Per Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries and fluorescent tubes</td>
<td>2006</td>
<td>$299,977</td>
<td>3</td>
<td>385</td>
<td>$260</td>
</tr>
<tr>
<td>Sharps</td>
<td>2007</td>
<td>$296,300</td>
<td>3</td>
<td>46</td>
<td>$2,147</td>
</tr>
<tr>
<td>Latex paint</td>
<td>2008</td>
<td>$387,435</td>
<td>3</td>
<td>41</td>
<td>$3,150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2008</strong></td>
<td><strong>$983,712</strong></td>
<td><strong>3</strong></td>
<td><strong>41</strong></td>
<td><strong>$3,150</strong></td>
</tr>
</tbody>
</table>

* Battery collection locations include 127 CFL takeback locations.

Figure 4 provides summary information regarding the San Luis Obispo mandatory take back program. The program began in 2006 and phased-in the requirement for retailers to take back specific materials. The initial program included batteries and fluorescent tubes; sharps and latex paint were added in 2007 and 2008, respectively. The program used three years of grant funding for each set of materials to subsidize initial program costs. During this period, average annual cost per participating business for transport and processing of the dropped-off materials ranged from about $260 for batteries and fluorescent tubes to about $3,150 for latex paint. According to San Luis Obispo Program staff, the volumes of materials collected through the program have not changed appreciably following the end of grant funding. Thus, it appears that businesses have internalized ongoing costs. The San Luis Obispo Program does not conduct ongoing tracking of the types of materials collected and managed by its private sector participants.

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Figure 5: Sample Annual San Luis Obispo County Integrated Waste Management Authority Take Back Program Business Profiles

<table>
<thead>
<tr>
<th>Business Type</th>
<th>Small Business</th>
<th>Medium Business</th>
<th>Large Business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paint Store</td>
<td>General Retail</td>
<td>&quot;Big Box&quot;</td>
</tr>
<tr>
<td>Annual Frequency of Collection</td>
<td>4</td>
<td>12</td>
<td>52</td>
</tr>
<tr>
<td>Batteries</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Flourescent Tubes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sharps</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Plant</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Annual Collection Fees</td>
<td>$160</td>
<td>$480</td>
<td>$2,080</td>
</tr>
<tr>
<td>Annual Material Fees</td>
<td>$400</td>
<td>$80</td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>$560</td>
<td>$560</td>
<td>$2,080</td>
</tr>
</tbody>
</table>

* Collection will vary greatly between stores, therefore, we are unable to make assumptions.

While estimates of average cost per business are of some value, Figure 5 profiles how program cost might impact four types of businesses. Figure 5 uses the San Luis Obispo program fees for collection and processing for specific material types, and assumptions about the number of pickups per year, to calculate an annual dollar cost for each business type. The sample annual costs range from $560 for a small paint retailer collecting paint on a quarterly basis, to $2,080 for a large retail chain store collecting three of the four target materials on a weekly basis. These estimates are intended to provide a general sense of potential cost ranges for participating businesses, and more specific cost analysis should be part of program design for any new, mandated take back program.

Based purely on relative population, instituting a substantially identical program in Alameda County would entail initial costs of about six times that of the San Luis Obispo program, or nearly $6 million. In practice, since subsequent state EPR legislation has targeted latex paint and there may be an emerging national solution for manufacturer EPR for batteries, Alameda County might not choose to target the exact same set of materials. In addition, note that the total net costs discussed above would be lower to the extent that, over time, the targeted materials are collected through retailers instead of through the County HHW program.

Very truly yours,
HF&H CONSULTANTS, LLC

Robert D. Hilton, CMC
President

Peter M. Deibler
Senior Project Manager

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15 The San Luis Obispo County fees are in 2006 dollars.
Advance Disposal Fees or Extended Producer Responsibility as Funding Options

We studied the possibility of advance disposal fees paid at the point of purchase when "HHW products" are sold since shortly after our most recent strategic plan was adopted in 2010. This would cause each person who decides to use those products to bear the 'full cost' of their purchasing decision. That is not intended in a punitive way, but as a way of being fair to those who use less of these products. We've found that an advance disposal fee system at retail locations could be implemented locally, but only with a degree of complexity that seems inadvisable now (or perhaps ever).

The Strategic Plan for the Agency, adopted in July 2010, included research on Advance Disposal Fees. Advance Disposal Fees (ADFs) are consumer fees on hard-to-recycle, hazardous and litter prone products. These fees would be paid to retailers at the point of purchase and remitted from retailers to our Agency and/or member agencies to support the high cost of proper disposal. The intent of these fees is to help recover costs for end-of-life management of these products (whether it is for litter control, hazardous waste handling or recycling). There is a good rationale for requiring those who buy the products to pay for their ultimate disposal. Advance disposal fees were examined as a way to help the Agency diversify revenue sources beyond per-ton landfill fees, and send a price signal to both manufacturers and consumers of these products that they are costly to properly handle at end-of-life.

The jurisdictions in Alameda County as a whole spend a considerable amount annually to deal with the end-of-life of products including about $22 million for curbside recycling, about $26 million for litter control and about $3.5 million for household hazardous waste facilities (the latter reflects the costs for collecting and processing only a fraction of the HHW products that need to be disposed of each year). Using fees to partially offset these costs has been considered and adopted by a few other states and communities, including a 20 cent litter fee on cigarette packs in San Francisco.

The research we have conducted to date on ADFs has been pursued simultaneously with exploring the use of alternative strategies for managing problematic materials, including statewide extended producer responsibility (EPR) legislation, retailer take-back programs, and the potential for product bans where appropriate. Staff continues to first and foremost prioritize statewide manufacturer responsibility though statewide legislation, but the political will has not always been there to make this successful for the primary hazardous product categories. Paint is an example of where this approach has been partially successful and batteries are an example of where it has not yet been successful, but active dialogue is still occurring in Sacramento.

In October 2011, staff brought a status report on ADFs to the board that outlined some of the obstacles standing in our way of implementing ADFs. That memo concluded that using ADFs to support the HHW program via administration through the state Board of Equalization (BOE), who administers other statewide retail product fees, would be expensive, time consuming, and unlikely to lead to a suitable outcome for us. This is because BOE staff told us they would need detailed legislation describing every product category to be covered and the fees for each product category, and in addition said they could not agree to a cap on their expenses which would
jeopardize or make revenue yields too uncertain. That 2011 report also concluded that a local administration system would require a broader base of local support and resources.

To fully pursue the possibility of an ADF that could be administered locally, staff spent time in 2012 year researching whether a local administration system would have that broader base of support and if so, what resources would be required to implement such a system. To do that, staff met or talked with senior staff at the County and three other member agencies, spoke with several Chamber of Commerce representatives, and sought feedback from retailers themselves through surveys and a stakeholder meeting. What we found from that research is that a local administration of an ADF is possible, but not a favored policy from the business community. Retailers and business associations favor a statewide solution to the problem, to help put all retailers on the same footing. The Chambers thought that the retailers would be more supportive of providing information on hazardous products and the high cost of disposal than in charging a fee. Feedback from three member agencies indicated that it could be doable from an administrative standpoint but expressed concerns regarding either timing of implementation and the sensitivity of levying fees (particularly ones that weren’t their own). There was a willingness from the County to collect these fees, and we did secure a quote from a billing and collection company that already serves municipal government (for other revenue collection functions), and which thus far appears to be the most feasible and cost-effective means of administering the billing and collection component of this system.

Another element of this project was to determine which product categories would be most suitable for such a fee, and what the estimated costs and revenues would be. Through our research, the product categories of batteries, solvents, fertilizers and aerosols were the best candidates for an ADF. Other product categories did not lend themselves to an ADF for a variety of reasons including complexity of product category, and absence of sales data, such as toxics. Paint, which once was the best product category for an ADF is no longer on our immediate list due to the passage of a statewide manufacturer responsibility law for paint, administered through PaintCare. However, it appears to us that Paint Care fees do not cover the full cost of handling paint at end of life, and Paint Care does not address the full range of paint products (e.g., automotive and marine paints are excluded).

In addition to the costs of billing and collection there would still be other costs to implement the program including contract management, public outreach and auditing. There could be initial set up fees (depending on who actually did the billing and collection), however if we used the outside service those costs appeared to be nominal. Various methodologies estimate the ongoing annual costs to range from approximately $340,000 to $820,000, with our best guess being about $500,000. This cost estimate does not include any reimbursements or offsets to the retailers for their setup costs. These costs are not purely administrative, however, but include strong communications components that may influence purchasing behavior significantly, which would in the long-run significantly help reduce the cost of operating drop-off centers and other approaches to HHW management.

On the revenue side, revenue potential is constrained by the partial coverage of existing programs, such as Paint Care. While PaintCare does not fully reimburse HHW facilities for their
paint costs, or cover all paint products, it would be difficult and probably confusing to customers to layer another paint fee on top of the state fee.

Ultimately, we found that the net revenue that we could obtain would be modest unless we imposed relatively high advance disposal fees. Our research indicated that a 20% implementation cost was probably reasonable for this type of program. Therefore, to maintain those costs at no more than 20% of total revenue, product fees would at least need to be approximately $0.06 for each battery ($0.24 for a pack of 4), $0.06 for each aerosol can, and $1.00 for each container of solvent and fertilizer. Many staff members think that this level of product fee does not appear to be reasonable at this time, although what is reasonable is a matter of judgment.

On the other hand, staff believes that ADFs may be a viable strategy to be reconsidered in the future, especially if statewide EPR legislation is not successful for more product categories, such as batteries. Likewise, upon review of the progress of the PaintCare program, (the enabling legislation requires annual reporting to CalRecycle), the paint products category could also be reevaluated as a potential candidate for an ADF. And it is also possible that retailers will support ADFs at some future time, as some retailers already support voluntary take-back mechanisms for products through their stores (e.g., fluorescent lamps, paint, batteries).

Based on all of the potential obstacles to successful implementation of an ADF including the uncertainty in actual net revenues and input from the business community, we did not recommend moving forward with any form of ADF in April 2013. Instead, we brought forward other more traditional funding approaches for the countywide HHW program. However, as mentioned above, it does appear to have potential for further review and possible implementation in the future. And future revenue from ADFs or EPR could be used to reduce the future burden of any more traditional funding approach that is adopted.

As an alternative to ADFs, we are recommending an education campaign at the retail site to preserve some of the benefits that an ADF would have conferred. A retail point of purchase education campaign would inform consumers about the high cost of these products, about HHW alternatives where third party certified alternatives exist, and proper disposal, (e.g., bringing it to one of the four countywide facilities). We will work with retailers to find space in the store to communicate to consumers that these products are costly to dispose of, and that they should only buy what they need, use what they buy, and dispose any leftovers at HHW facilities.

This partnership campaign with retailers will build on the work already being conducted by the county-wide stormwater program (their campaign is called “Our Water, Our World”), with respect to fertilizer and pesticide alternatives. It would take that good work several steps further, and address other household hazardous waste products. The EPA and others have recognized the success of the Our Water, Our World pesticides alternatives campaign with grant funding, but funding does not currently exist to expand that to other hazardous product categories. As such, funding for this alternatives campaign, estimated at about $300,000 annually is built into all HHW programmatic options except for the austerity option. It is also included in our core budget proposal for FY13-14, so that this work can begin immediately. Funding it through the HHW program budget in future years would protect it against reductions in our core budget in future years, should that occur. $300,000 per year for source reduction and prevention of HHW seems
a reasonable spending level given the very high cost of handling HHW products at end of life once they are purchased (more than $2,000 per ton). Source reducing about 4-5% (150 tons) of the 3400 tons of HHW going to landfills (in 2008) would save as much money in end of life management as this outreach effort would cost.

Based on the possibility of future HHW ADF fees, or EPR initiatives that bring in revenue or offset costs (paid for by manufacturers or indirectly for purchases of products), we recommend that any HHW fee include an adjustment mechanism to permit the fee to decline automatically in the future should these other, more equitable sources of funding for end of life management of HHW products come into existence.
HHW Program Design and Funding – Evaluation of Future Program Options

Memorandum from HFH Consultants to the Alameda County Waste Management Authority

October 4, 2013

For additional information about future program options or to comment on this memo, contact Wes Sullens at 510-891-6500x111 or email hhwproject@stopwaste.org.

More information about the Alameda County Household Hazardous Waste program, including the times and locations of public stakeholder meetings regarding future program options, are available at www.Household-Hazwaste.org, or by calling 510-891-6500.
ATTACHMENT F

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October 4, 2013

Mr. Gary Wolff
Executive Director
Alameda County Waste Management Authority
1537 Webster Street
Oakland, CA 94612

Subject: Household Hazardous Waste (HHW) Program Design and Funding Evaluation of Future Program Options

Dear Mr. Wolff,

This report provides an Independent review and analysis of future options for the design and funding of the Alameda County Household Hazardous Waste Program.

Overview and Summary of Results

Since its inception in 1992, the Alameda County Household Hazardous Waste Program (Program) has been funded primarily through a fee on solid waste disposal at landfills located in Alameda County. The fee has been set at $2.15 per ton since 2000. The Program supports four drop-off collection facilities located in Fremont, Hayward, Livermore, and Oakland, and related activities such as satellite collection of some materials from hardware stores and public locations (e.g., batteries and fluorescent lamps). The Fremont facility is operated by a contractor; the other three are operated by County staff. Oversight and funding responsibility for the program reside with the Alameda County Waste Management Authority (also known as "StopWaste"), a joint powers authority created in 1976 by the 14 Cities in Alameda County, the County, and the Castro Valley and Oro Loma Sanitary Districts.

As is the case statewide for programs with disposal-based funding, revenues have decreased steadily as landfill diversion efforts have succeeded in reducing the amount of solid waste disposed in landfills and due to the lower level of economic activity in past years. The Program will need a new source of funding to continue for the longer-term. In the absence of new revenue, services and expenditures will need to decrease to an 'austerity level' in mid-2014, and end completely in about 2020.

The Waste Management Authority (WMA) Board and its committees discussed options for the future of the Program between April and July 2013, selected the "Proposed System Expansion Option" as the preferred option, and directed StopWaste staff to hold community meetings in October to get input on the option, and a proposed new annual fee to be placed on residential property tax bills to fund the option. The Proposed System Expansion Option\(^1\) provides a combination of features that address varied issues and concerns raised at the earlier meetings, and was designed to satisfy all of the following criteria:

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\(^1\) Gary Wolff, Executive Director, StopWaste.Org, "Household Hazardous Waste (HHW) Services and Funding", Staff Report to the Authority Board, July 18, 2013.
ATTACHMENT F

Mr. Gary Wolff
October 4, 2013
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- Participation: Support significantly increased participation in the household hazardous waste (HHW) system, based on a steady historic pattern of growth in use.

- Convenience: Maximize convenience to customers, either by being open on Sundays or by other means.

- Predictability: Be open the same days and hours every week, providing the public with a predictable schedule.

- Equity: Increase outreach efforts to bring facility use to approximately equal levels of use across the geography of the County and its demographic groups.

- Long-Term Efficiency: Reduce the long term need for the Program and its costs, by assisting the residential public through the outreach effort in making knowledgeable purchasing and use decisions associated with HHW products.

In July 2013, StopWaste engaged HF&H Consultants, LLC (HF&H) to conduct an Evaluation of the Proposed System Expansion, which provides for a new funding source, and an “Austerity Option”, which entails no new funding and a winding down of the Program. As requested by StopWaste, this report:

1. Reviews the underlying assumptions regarding the future Program service levels under each option.

2. Evaluates the feasibility of the two options to accomplish their objectives.

3. Identifies the level of the new fee that will be necessary to fund the Proposed System Expansion through FY 19-20, based on projected Program expenses and revenues.

StopWaste staff have been directed to focus on a fee on single-family and multi-family dwelling units in Alameda County collected using the County’s property tax billing system, and to continue current disposal tip fee funding at the current fee level. HF&H was requested to identify the necessary amount for the new fee, but not to evaluate or opine on the type or form of the proposed fee.

In evaluating the two Program options, HF&H requested and reviewed detailed information provided by Program and StopWaste staff, requested corroboration of data provided, reviewed key Program assumptions, and verified the accuracy of calculations.

Summary findings of the Evaluation include:

1. The proposed types and levels of service delivery for both the System Expansion and the Austerity options appear reasonable and well-considered.

2. Underlying operational and fiscal assumptions appear reasonable and well-considered.

3. The Proposed System Expansion provides a better “bang-for the-buck”, taking fuller advantage of the efficiencies that can result from a larger Program, and providing new services.
4. The Proposed System Expansion, for a six year planning period of July 1, 2014 through the close of FY 19-20 will require raising an annual average amount of $5,072,038 in new revenue with a new annual fee of $9.55 per single-family and multi-family residential unit.

The report also includes recommendations to Program and StopWaste staff regarding maintaining flexibility to modify some elements of program design if needed, notifying the Boards should disposal-based tip fees vary from projections over time, and including a mechanism to adjust the new fee, should it prove to be generating more revenue than is needed.

**Background**

**System and Program Information**

As discussed in various StopWaste staff reports to committees and Boards, current spending for the Program is about $3.95 million per year. Revenue is about $2 million per year. The primary current source of revenue is a $2.15 per ton fee on all 'disposed waste' delivered to landfills in the County. Revenue and expenditures are managed through a County trust account, but the positive balance is steadily declining as revenues decrease.

The current Program service level does not capture most HHW. Using the most recently available comprehensive data, the Program captured 1,443 tons in FY 2012-13, while as much as 3,400 tons per year of HHW is still being landfilled, contrary to State Law. However, as Attachment 1 shows, participation in the Program has grown steadily since Program inception in the early 1990s. In addition, the Proposed System Expansion anticipates an ongoing growth in participation, while the Austerity option would return the Program to the FY 01-02 level of participation prior to ending.

To date, the Fremont facility has received funding from the County HHW Fund at a level commensurate with that received by the other three facilities. However, in order to obtain a higher level of service, Fremont solid waste ratepayers have subsidized part of the facility's cost. A goal of the Proposed System Expansion is to fully integrate the Fremont facility into the County system, by providing the same level of service Countywide through the HHW Fund. Similarly, in the event that the public does not approve the Proposed System Expansion, the Fremont facility, in the absence of a new source of revenue will operate at a reduced level.

**Development of the Program Options**

The Proposed System Expansion and this report are the result of a two and half year process. In 2011, StopWaste engaged HF&H to conduct a comparative evaluation (Review) of the efficiency of the Program, which was presented to the WMA Board in October 2011. The Review was intended as a first step towards determining how best to address the long-term funding issue, beginning with an

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2 See Attachment 2; current and past fiscal year budget data from Program staff.
3 The 1,443 tons figure is from the Program’s “Form 303”, its annual summary provided to the State. The 3,400 ton figure is from StopWaste’s 2008 Waste Characterization, Table ES6.
evaluation of the efficiency and cost-effectiveness of the Program’s current service delivery. The Review included a detailed comparison of key metrics for technical and cost efficiency with similar statistics for other Bay Area HHW programs, including the City and County of San Francisco and Santa Clara County. The Review also addressed a range of topics related to HHW program management and services. The Review found that based on a detailed analysis the Program appears to be operating in a cost-effective and efficient manner. In addition, we found Program management to be proactive in trying to identify and capture efficiencies and reduce costs where possible.

Based in part on the results of the Review, the WMA Board directed staff to identify funding options for the Program. StopWaste engaged HF&H to model funding options and fee levels for the various Program service level options discussed with Agency committees and boards between April and July 2013. StopWaste then engaged HFH to prepare this more detailed review and modeling of the two options summarized above, and discussed in more detail below.

**Description of Program Options**

**Overview**

Tables 1 and 2 compare the two options, and provide a snapshot of the current services for reference. Options other than these two have been investigated, but have been excluded from this Evaluation because they do not fully satisfy the convenience, efficiency, and equity criteria summarized above.

Table 1 provides key service metrics that describe how service delivery is experienced by the public. As shown, the Proposed System Expansion option entails a significantly higher level of service than at present, anticipating the historic rate of growth in demand. The Austerity option would require a significant reduction in the current level of service. Table 1 also provides the annual tonnages managed currently, as well as for the Proposed System Expansion and the Austerity options. Table 2 provides Program staff’s proposed staffing levels for the two options, and the current system’s staffing level. Table 2 provides information for the three facilities other than Fremont, for the reasons discussed in the Background section.

With respect to the total staffing levels in Table 2, it is important to note that Program staff not only receive HHW from the public during the open hours shown in Table 1. Program staff performs many other services and activities that are not visible to the public. Program staff manages the processing and final disposition (e.g., disposal, reuse, recycling) of those materials at other times.
### Table 1 Program Service Levels

<table>
<thead>
<tr>
<th>Service Metric</th>
<th>Proposed System Expansion</th>
<th>Program Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Expansion</strong></td>
</tr>
<tr>
<td>Number of Households/Year;</td>
<td></td>
<td><strong>Austerity</strong></td>
</tr>
<tr>
<td>Annual Tons</td>
<td>72,000 households +</td>
<td><em>About 20,000 households;</em></td>
</tr>
<tr>
<td></td>
<td>6,000 households for</td>
<td><em>643 tons per year</em></td>
</tr>
<tr>
<td></td>
<td>one-day events;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2501 tons per year</td>
<td></td>
</tr>
<tr>
<td>Weekly Schedule</td>
<td></td>
<td><em>Oakland and Fremont facilities open every week</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Hayward and Livermore facilities open every week</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Facilities open every week</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Hayward and Livermore operating 3 days per week on rotating basis</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>one facility at a time</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Fremont facility likely to reduce operating days and hours</em></td>
</tr>
<tr>
<td>Household Hours</td>
<td>5.5 hours per open</td>
<td><em>Three facilities (other than Fremont): 4 hours open day</em></td>
</tr>
<tr>
<td></td>
<td>weekday</td>
<td><em>Fremont facility: 5 hours weekdays</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>6.5 hrs weekdays 8 hrs Saturdays</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Facility-Days/Month</td>
<td>48 household days</td>
<td><em>40 household days</em></td>
</tr>
<tr>
<td>(4 weeks)</td>
<td>12-16 business days</td>
<td><em>10 business days; including drop-in days</em></td>
</tr>
<tr>
<td></td>
<td>including drop-in days</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Days Per Year</td>
<td>621 household days, 48</td>
<td>147 household days; 84 business days</td>
</tr>
<tr>
<td></td>
<td>business days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>399 household days, 124 business days</td>
</tr>
<tr>
<td>Enhancements</td>
<td>12 one-day drop-off</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>events</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-4 additional business</td>
<td></td>
</tr>
<tr>
<td></td>
<td>drop-in days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>County facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>accepting E-Waste</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced outreach</td>
<td></td>
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<tr>
<td></td>
<td>to support higher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>participation rates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Point-of-Purchase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program to increase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>product user awareness</td>
<td></td>
</tr>
</tbody>
</table>
Table 2 Program Staffing Levels

<table>
<thead>
<tr>
<th>Staffing Category</th>
<th>Proposed System Expansion</th>
<th>Austerity</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Senior Hazmat Specialist</td>
<td>3.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Hazmat Specialist</td>
<td>3.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Technician</td>
<td>3.0</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>County Staff Laborer</td>
<td>2.4</td>
<td>2.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Contract Staff (&quot;Temporary&quot;) Laborer</td>
<td>4.0</td>
<td>1.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Annual Budget Overtime Hours</td>
<td>0.5 FTE</td>
<td>0.5 FTE</td>
<td>0.5 FTE</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>16.9 FTE</strong></td>
<td><strong>6.5 FTE</strong></td>
<td><strong>12.7 FTE</strong></td>
</tr>
</tbody>
</table>

**Proposed System Expansion**

The Proposed System Expansion option summarized in Tables 1 and 2 was designed to satisfy all the following criteria:

- Participation: Support significantly increased participation in the household hazardous waste (HHW) system, based on a steady historic pattern of growth in use.
- Convenience: Maximize convenience to customers, either by being open on Sundays or in any other feasible manner.
- Predictability: Be open the same days and hours every week, providing the public with a predictable schedule.
- Equity: Increase outreach efforts to bring facility use to approximately equal levels of use across the geography of the County and its demographic groups.
- Long-Term Efficiency: Maximize program efficiency, and reduce the long term need for the Program and its costs, by assisting the residential public as part of the outreach effort in making knowledgeable purchasing and use decisions associated with HHW products (e.g., pesticides, batteries, solvents, etc).

Program and StopWaste staff believes the Proposed System Expansion option meets these criteria as follows:

- Greater participation, and enhanced customer convenience are promoted by having more hours of operation in total, and on weekends.
- Predictability is achieved by having each facility open the same days and hours every week.
• Equity is promoted by having two open days per week at both the Hayward and Livermore facilities, rather than opening them on alternating weeks, and by reaching out to geographic areas and demographic groups for which the rate of use is lower than the average.

• Efficiency is promoted by increased information and education that can assist the residential public in making purchasing and use decisions that will produce less HHW waste in the future, and is also promoted by spreading fixed costs over a larger base of facility use, maximizing “bang-for-the buck”.

With the Proposed System Expansion, open days and hours at the Oakland facility will nearly match those for the Fremont facility.\(^5\) Having the Hayward and Livermore facilities open every Friday and Saturday allows the Hayward and Livermore crews to staff the Oakland facility on Wednesdays and Thursdays, which reduces the need for contractor-supplied “temporary” labor.

A benefit of the System Expansion option is the ability to service more businesses at no significant added cost. Small business participants will experience a similar total level of service to that under the current system, but with some growth in total customer capacity. Small business appointment and drop-in hours will be provided weekly at the Oakland and Fremont facilities, and twice per month at the Hayward and Livermore facilities. Small business services will be provided on Tuesdays, allowing for sharing of those days with shipping activities.

This option would add twelve one day drop-off events to be staged at varied locations around the county. These events would be managed by Program staff, but largely conducted by contractor-supplied personnel. These events would be held on Sundays, and based on experience from other Bay Area programs, are designed to serve 500 cars per event. The one-day events provide an additional means for balancing participation throughout the county. Events can be scheduled to serve any areas of the county that may have relatively lower participation rates. Program staff estimates the one day events will cost about $45,000 each.

This option includes expanded outreach as follows:

1. The availability of the one-day drop-off events will be promoted to the public. The traditional approaches of direct mail, newspaper advertisements, bill inserts, etc., are useful for the one-day events, as well as for enhancing awareness of the permanent facilities.

2. Direct mail targeted by zip code has been very effective historically in increasing visits to the permanent facilities, and can be scaled up to ensure all demographic groups know about the Program they are paying for. The cost estimate for this option includes up to 150,000 direct mail pieces per year (the historic average has been about 50,000).

3. Information and technical assistance to the public and retailers at the point of purchase of HHW products can reduce the future cost of operating the Program. For example, there are less-toxic

\(^5\) The Fremont HHW operation is one of a range of activities conducted at a larger multi-function solid waste transfer station and recycling facility, which allows for longer operating hours for the HHW program.
or non-toxic products available, and buying these alternative products, or buying just enough of
the more toxic products when they are needed, can moderate or reduce the future cost of HHW
collection and management.

4. StopWaste staff provides oversight of the agreements between the WMA and the County, and
the WMA and the City of Fremont, for the operation of the HHW facilities. Costs associated with
these activities include about $35,000 per year of staff time, and $15,000 of legal and
professional expenses.

Austerity

The Austerity option summarized in Tables 1 and 2 will mean that the facilities and their associated
services will be far less available than they are currently and will require immediate and dramatic cuts in
staff.

Some of the specific results and possible impacts of the Austerity option include:

1. **Reduced Service Availability**: Facility operating hours, number of households served, and
   cooperative local collection programs and business program hours will all be cut drastically to
   reflect the lower level of funding.

2. **Local Collection Programs**: Local city-sponsored lamp and battery collection programs will need
to be cut back or eliminated.

3. **Retail Collection**: Hardware store collection programs will no longer be free for hardware stores,
   and most will discontinue collection.

4. **Small Businesses**: Availability of appointments for small businesses will be severely reduced, and
drop-in hours may be curtailed or eliminated.

5. **Hotline and Referral Service**: The current live phone hotline and referral service, which takes
about 30,000 calls per year will be replaced by a voicemail prerecorded message system.

6. **Further Restrictions**: Available facility hours may need to be further restricted, or an
appointment system reestablished to strictly control the number of households handled per
year.

7. **"Spillover Effects"**: Sharply reduced service levels could result in the following:
   a. Local jurisdictions and public works departments should anticipate increased dumping and
      abandoned waste, with a commensurate increase in disposal cost.
   b. Landfills and transfer stations can expect to see an increase in the amount of HHW in load
      check programs.
   c. Recycling centers, E-waste collectors and other facilities in the refuse and recycling field
can expect an increase in waste they cannot accept, as well-meaning members of the
public leave their waste at a facility(ies) they believe, or hope, will handle it properly.
d. The Fremont facility will receive sharply reduced County funding, with likely corresponding decreases in service in the absence of additional funding.

**Evaluation of Program Options**

**Proposed System Expansion**

Having a consistent weekly schedule at the Hayward and Livermore facilities will increase customer participation from those portions of the county. In addition, a weekly schedule provides more certainty for users.

One day events are a relatively expensive way to provide HHW collection services. However, they can be a very useful compliment to a fixed facility program; providing a different, complementary means of service delivery. One day events were part of the early years of the County Program, and are an ongoing part of other Bay Area HHW programs. Staffing the one day events primarily with contractor-supplied staff allows most Program staff to take off Sundays and Mondays, and to use Tuesdays to package and prepare material for shipping, and otherwise prepare for the facility open days.

The cost estimate for the one day events is based on the cost incurred by Dublin to provide a recent one day collection event. The estimated cost seems a reasonable basis for budgeting and for setting the new fee. The Program’s costs may be somewhat lower for two reasons. First, the Program will conduct the one day events using its disposal contract. As a relatively small portion of a large, competitively bid services contract, the Program could pay a lower cost for the same level of service than would be the case for a party contracting for individual, stand-alone events. Second, it is reasonable to expect that there will be some efficiencies associated with holding events on a consistent, ongoing basis. Participation at one day events can be unpredictable; however, the plan to require reservations will help mitigate this effect. Actual participation may vary widely at the events, depending on a range of factors – location, weather, the level and type of advertising, and competing activities and events. It is common practice to try to serve every car that arrives by a certain time to avoid any perception that a service may be advertised but not actually available. Since the alternative may be to have the material dumped illegally it is general practice to accept the material.

In summary, the Proposed System Expansion meets the criteria defined above.

**Austerity**

The sharply decreased level of service shown in Table 1 and discussed above appears reasonable based on the level of Program staffing projected for the Austerity option.

The loss, or reduced availability of other public options (e.g., at local locations at cities and for small businesses) would certainly be unfortunate. In each case the Program’s ability to provide partial cost offsets, especially for disposal, is crucial to maintaining those programs.

Business customers accustomed to using the drop-off service will experience some decrease in available service, while appointments may take somewhat longer to schedule. The Program cannot legally provide
service to businesses and residents at the same time. Having these services scheduled for different days will avoid some inefficiency associated with the need to transition from one type of service to the other during a given service day. Program staff note, and we concur, that with PaintCare the need for drop-in hours will diminish. Painting contractors, the primary constituency for the drop-in hours, will be able to dispose of paints for free at participating retail PaintCare locations instead of paying for the service through the Program.\textsuperscript{6} We recommend that if the Proposed System Expansion is selected, Program and StopWaste staff should monitor how effectively the new format is serving business customers and should determine whether any modifications are warranted.

In the long-run, the growing availability of retail drop-off locations has been an important step towards creating the infrastructure for various forms of extended producer responsibility (EPR). As StopWaste staff have discussed in other contexts, it is hoped that EPR will provide the ultimate solution for much of the HHW problem with PaintCare being one of the first steps towards that goal. However, PaintCare (see section below on PaintCare), as well as other EPR policies that may be instituted in the next five years are unlikely to be adequate to prevent most of the impacts of the Austerity option.

Finally, with regard to the problems that Program management staff anticipate may occur, we are generally in concurrence. The need for further restrictions stem from the difficulty of anticipating and managing public demand for a popular, but diminishing service. With reduced funding and a rapidly shrinking Fund balance, there will be little or no available margin. A return to an appointment-based system would not be popular. There seems a reasonable risk that the possible spillover effects identified by Program staff may occur as the reduced service levels shift costs back to the public sector and to solid waste collection ratepayers, directly or indirectly. Finally, to the extent that a viable HHW program helps reduce the liabilities associated with improper disposal with solid waste, these liabilities are likely to grow over time with the Austerity option.

**Program Size, Productivity, and Cost Efficiency**

Staffing and its associated costs ("fully loaded", including benefits) is the largest single category of cost for the Program. In addition, staffing is a key area in which Program management can exercise a relatively high level of control. In general, greater efficiency comes with increased Program size, resulting in large part from savings for staffing.

A useful metric for relative staffing efficiency is the ratio of personnel to management staff, based on the data in Table 2. As a program grows, the ratio should increase, with more work achieved for a given level of supervision. Obviously, it is not desirable to have too high a ratio either. As provided in Table 2, and relative to the current level of staffing, the Proposed System Expansion adds 3.2 FTE’s of staff and one additional management position.\textsuperscript{7} The ratios of staff FTE’s to management personnel for the Proposed System Expansion and the current system are both 3.23, or 12.9 to 4 and 9.7 to 3.0, respectively. The System Expansion maintains the same relatively efficient configuration of staffing that has proven to be effective for the current system, but with enhanced service. The Austerity option

\textsuperscript{6} See further discussion of PaintCare later in this report.

\textsuperscript{7} We have assumed that “management staff” includes the Supervisor and Senior Hazmat Specialist positions.
represents a loss of economies of scale for staffing. The ratio of staff to management personnel is 3.5:2.0, or 1.75, far lower than that for the System Expansion. In summary, the System Expansion provides the most efficient staffing and the best leveraging of management time.

The second largest area of cost, the transportation and disposal contract, is generally less subject to control since costs are largely a function of the volume and character of material collected, and the volume varies in linear fashion with the number of households served. This is not to say that Program staff cannot, and do not closely manage the transportation and disposal contract. Over a number of cycles of bidding the contract, the Program has developed increasing ability to direct how services are delivered. A key variable is contract staffing, the use of contract employees as “temporary labor” has proven to be a very cost-effective means for meeting increases in short-term staffing needs.

There are a number of areas in which greater Program size allows for increased efficiency, many of them a function of regulatory requirements. For example, State law forbids business waste acceptance at the same time and place as household waste, which can reduce facility operational efficiency. In addition, material packaging and shipping requirements and staffing supervision requirements both favor economies of scale at greater operational levels. The Proposed System Expansion provides for better capture of these efficiencies.

**PaintCare Stewardship Program**

The PaintCare Product Stewardship Program (PaintCare) is a private sector alternative to financing and operating an architectural paint collection program, established pursuant to state law. “Architectural paint” is a subset of “paint” consisting of paints, stains and coatings for architectural surfaces. PaintCare will reduce some Program costs, and has the potential to provide a net reduction in other operating costs for managing these materials. PaintCare is one of the first statewide EPR strategies.

Only about 60 percent to 80 percent of all paints sold, by volume are eligible for coverage through PaintCare. PaintCare is a new program, and the amount it captures will increase over time. It is unknown how effective PaintCare will be in capturing all eligible paints. PaintCare provides the Program packaging materials that meet federal regulatory requirements, and transportation and recycling/disposal service for covered products at no cost to the Program’s disposal contractor, and hence to the Program. PaintCare will also reimburse the County’s contractor for certain expenses incurred in bulking paint - removing paint from partially full cans and consolidating it into 55 gallon drums. These reimbursements are passed on to the Program in the form of credits, as cash against expenses, credits of labor hours and replenishment of packaging supplies at no cost to the program.

PaintCare does not reimburse collection costs, most labor expenses, overhead, advertising, training or other general costs involved in establishing and operating a collection program – which the Program indicates represent about 50% to 70% of costs for handling these materials. In addition, in order to take advantage of PaintCare the Program must sort the incoming paint waste stream more rigorously than in pre-PaintCare days to ensure non-covered products are screened out of the PaintCare waste stream. In addition, PaintCare materials are manifested and shipped separately from non-covered materials adding complexity and cost for storage, shipment preparation and recordkeeping.
PaintCare’s services to the Program commenced in July 2013, and there is thus little experience on which to estimate cost savings. However, Program staff has been very active over the past 18 months in working to understand how PaintCare will be structured and how it will impact the Program. Program staff has conservatively assumed a cost offset of about $384,000 per year, representing just the directly quantifiable savings associated with avoided disposal and recycling costs and assuring no escalation during the 6 year planning period. There may also be some other savings from paint bulking, as well as added cost for sorting non-covered materials and for separately manifesting and shipping covered materials. While these costs will hopefully represent a net added savings over time, that remains to be seen. We think it is a reasonable approach to assume, as Program staff has, the minimum level of cost offset. Actual savings should be revisited over time as there is more experience with PaintCare. StopWaste can then determine if any added savings should be retained as Fund reserves.

Summary of Projected Program Expenses and Revenues

See Attachments 2-5, which provide a summary of recent and current expenses and revenues, and projected expenses and revenues for the Proposed System Expansion and Austerity options, respectively. See further detail below.

Our review of projected Program expenses included gaining a full understanding of current expenses, and drew on the work conducted in 2011 for the Review and earlier evaluations of the Program conducted by HF&H’s lead staff in 1998 and 2002-2003. We believe the current and projected expenses to be reasonable and justified.

In general, the modeling of expenses and reviews for each of the two options - Proposed System Expansion and Austerity – and the modeling of the Proposed System Expansion fee, as discussed in the next section addresses the following:

1. StopWaste staff plans for the Proposed System Expansion, if approved, to commence on January 1, 2015. However, the Program will incur start-up expenses in the prior six months, and in particular as it hires new staff. Thus staffing expenses will increase during July 1st – December 31st, 2014.

2. The new fee will be effective on July 1, 2014. This provides adequate time to establish the fee mechanism. [StopWaste is receiving independent advice on legal and administrative issues related to initiating the fee, and we have not reviewed the feasibility of the timing for instituting the fee.]

3. The modeling of the effect of the Austerity option assumes that decreased service delivery will begin on July 1, 2014.

4. In general, the modeling of projected Program expenses for both options uses an annual adjustment factor of 2.5%. While inflation has been very low in recent years, 2.5% seems to be a reasonable average assumed rate of cost escalation through FY 19-20. Two areas of uncertainty regarding future Program costs include the savings that will actually result from PaintCare and the future costs of transportation and disposal services that are now being rebid. Arguably, the
annual expense adjustment factor could be higher, with a corresponding increase in the required fee for the Proposed System Expansion.

5. The current tip fee revenue stream is projected to decrease from $2,119,900 for FY 12-13 to $1,171,750 for FY 19-20, resulting from the decline in the rate of disposal of solid waste to landfill, and based on StopWaste’s most recent tonnage projections. Future projected decreases in landfill tonnage result from the success of diversion programs. The state of the economy over the planning period could also affect the rate of disposal and the amount of revenue collected. We understand that the tonnage and revenue projections are updated on an ongoing basis, and recommend that StopWaste staff inform the relevant Agency committees and boards should future tip fee revenues differ significantly from the projections.

6. Projected new fee revenues for the Proposed System Expansion include an increased annual amount to be transferred to the City of Fremont for its HHW program, in lieu of the current amount transferred from the County Fund under the present MOU with Fremont. Conversely, the Austerity option results in a comparable sharp decrease in transfer of funding to the Fremont program. StopWaste and County Program staff developed an approach for revenue sharing that balances populations served and revenue collected for the Fremont facility’s service area. Fremont staff is supportive of that approach. HF&H assisted in early development of the approach and concurs that it appears to provide an equitable distribution of funding under both options.

The following provides additional detail regarding Attachments 2 through 5.

Attachment 2 projects HHW system expenses and revenues for the planning period, through FY 19-20 (June 30, 2020). The Attachment 2 figure for new annual revenue of $5,072,038 (or a total of $30,432,226 over the six years from July 1, 2014 through June 30, 2020) includes the annual County Auditor processing cost of $84,783 for billing the fee through the property tax system. Note the projected decline in tip fee revenue. “Other ongoing revenue” consists primarily of interest. Attachment 2 shows the portion of the new revenues that will be needed to fund the Fremont facility in order to provide a consistent level of service for the entire system.

Attachment 3 provides the detailed projection of HHW system expenses, and shows the County Auditor processing cost. Note that on Attachment 3, FY 14-15 is split into two half-years. This was done to show how staffing expenses for the System Expansion begin in the first half of the fiscal year as new staff is hired. The full of Expansion System costs begins in mid fiscal year, on January 1, 2015 when the new expanded services become available to the public. As noted above, expenses are generally escalated by 2.5 percent per year. PaintCare expenses are the one exception. Due to uncertainty about the actual levels of savings that will occur, the savings are not escalated.

Attachments 4 and 5 in general mirror the contents of Attachments 2 and 3, but for the Austerity option.
Proposed Funding

The Proposed System Expansion option will require a new, sustainable source of revenue. In discussions with Agency committees and the WMA Board, the Board has directed staff to model a fee on single-family and multi-family dwelling units in Alameda County collected using the County’s property tax billing system. The intent is to set the fee at the same level for both single-family and multi-family units, and to continue disposal tip fee funding at the current fee level.

The new fee is set at a level necessary to offset the ongoing projected decrease in annual tip fee revenues, with the new fee becoming the predominant source of funding. HF&H determined the necessary level of the fee by modeling the amount of revenue that must be generated to ensure that the County’s HHW Fund balance does not fall below zero dollars ($0.00) at the close of FY 19-20. Key parameters for the fee are that:

1. It will take effect on July 1, 2014.
2. It will be levied at the same amount per unit for both single-family and multi-family units. The fee is based on the current number of units, and the number of units is assumed to remain the same over the planning period.
3. The fee includes an additional amount equal to 1.7% per year of total revenue necessary for the Proposed System Expansion to pay the County administrative costs associated with billing fees through the property billing system.

Table 3 presents the average annual amount of required new revenue for the six year planning period from July 1, 2014 through June 30, 2020, the number of single-family and multi-family units the fee will be applied to, the resulting new fee for the Proposed System Expansion option based on the assumptions stated in this report (and including the 1.7% County fee), and the projected Fund balances for both options at the close of FY 19-20.

We understand that StopWaste staff is considering, and we endorse addressing uncertainty in the revenue estimates by including in the fee proposal an automatic adjustment that would reduce the fee in the future if revenue were to exceed projections, and without a corresponding means for increasing the fee should revenues be lower, or expenses higher than projected.

The Austerity option reflects no additional funding. As shown in Table 3, even at reduced service levels the Program is projected to have a negative Fund balance at the close of FY 19-20. In practice, this means the Program would need to be discontinued entirely before the close of FY19-20, if actual figures match the projections.

---

9 Jason Guo, Alameda County Auditor’s Office, Tax Analysis, email to Garry Wolff, StopWaste, October 2, 2013.
### Table 3 Proposed Funding Levels

<table>
<thead>
<tr>
<th></th>
<th>Program Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposed System Expansion</td>
</tr>
<tr>
<td>New Annual Fee</td>
<td>$9.55</td>
</tr>
<tr>
<td>Number of Residential Units</td>
<td>Single-Family 371,407 units</td>
</tr>
<tr>
<td></td>
<td>Multi-Family 159,717 units</td>
</tr>
<tr>
<td>Resulting Average Annual Revenue</td>
<td>$5,072,038</td>
</tr>
<tr>
<td>Fund Balance at Close of FY 19-20</td>
<td>$30,296</td>
</tr>
</tbody>
</table>

* * * * *

Very truly yours,

HF&H CONSULTANTS, LLC

Robert D. Hilton, CMC
President

Peter M. Deibler
Senior Project Manager
## ATTACHMENT 2
SYSTEM EXPANSION - PROJECTED REVENUE GENERATION

<table>
<thead>
<tr>
<th>Year (FY)</th>
<th>Cumulative System Beginning Balance</th>
<th>Revenue</th>
<th>System Expenses</th>
<th>Annual Net Balance</th>
<th>Cumulative System End Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Cumulative Tip Fee ($2.15/ton)</strong></td>
<td><strong>Other Ongoing Revenue</strong></td>
<td><strong>New Revenue Required to Fund Program</strong></td>
<td><strong>Three Facilities</strong></td>
<td><strong>Fund Transfer for Fremont Facility</strong></td>
</tr>
<tr>
<td>2011-12</td>
<td>$ 5,182,362</td>
<td>$ 2,264,221</td>
<td>$ 84,350</td>
<td>-</td>
<td>$ 2,967,856</td>
</tr>
<tr>
<td>2013-14</td>
<td>$ 2,763,173</td>
<td>$ 1,984,450</td>
<td>$ 94,350</td>
<td>-</td>
<td>$ 3,500,350</td>
</tr>
<tr>
<td>2014-15</td>
<td>$ 892,709</td>
<td>$ 1,849,000</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 5,056,908</td>
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<tr>
<td>2015-16</td>
<td>$ 2,181,902</td>
<td>$ 1,713,550</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 5,992,399</td>
</tr>
<tr>
<td>2016-17</td>
<td>$ 2,380,385</td>
<td>$ 1,578,100</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 6,146,670</td>
</tr>
<tr>
<td>2017-18</td>
<td>$ 2,268,885</td>
<td>$ 1,442,650</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 6,304,798</td>
</tr>
<tr>
<td>2018-19</td>
<td>$ 1,843,037</td>
<td>$ 1,307,200</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 6,466,878</td>
</tr>
<tr>
<td>2019-20</td>
<td>$ 1,098,368</td>
<td>$ 1,171,750</td>
<td>$ 94,350</td>
<td>$ 5,072,038</td>
<td>$ 6,633,011</td>
</tr>
</tbody>
</table>

**Total**  
July 1, 2011 - June 30, 2020  
$ 5,182,362 | $ 15,430,821 | $ 939,154 | $ 30,432,226 | $ 46,467,480 | $ 5,486,787 | $ 30,296
## ATTACHMENT 3
### SYSTEM EXPANSION - PROJECTED PROGRAM EXPENSES

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 12-13</td>
<td>n/a</td>
<td>$1,195,465</td>
<td>$488,651</td>
<td>$1,088,776</td>
<td>$261,581</td>
<td>$364,137</td>
<td>$ -</td>
<td>$ -</td>
<td>$3,398,610</td>
<td>$360,295</td>
<td>$3,758,905</td>
</tr>
<tr>
<td>FY 13-14</td>
<td>2.5%</td>
<td>$1,225,352</td>
<td>$750,867</td>
<td>$1,115,995</td>
<td>$268,121</td>
<td>(263,225)</td>
<td>$403,240</td>
<td>$ -</td>
<td>$3,500,350</td>
<td>$448,915</td>
<td>$3,949,265</td>
</tr>
<tr>
<td>FY 14-15</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>July 1-December 31, 2014</td>
<td>2.5%</td>
<td>$804,479</td>
<td>$465,282</td>
<td>$571,948</td>
<td>$137,412</td>
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<td>FY 14-15 Total</td>
<td></td>
<td>$1,791,539</td>
<td>$1,083,818</td>
<td>$1,147,485</td>
<td>$1,263,225</td>
<td>$350,930</td>
<td>$84,783</td>
<td>$5,056,908</td>
<td>$669,287</td>
<td>$5,726,195</td>
<td>$5,726,195</td>
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<tr>
<td>FY 15-16 [9]</td>
<td>2.5%</td>
<td>$1,938,490</td>
<td>$1,034,876</td>
<td>$1,287,088</td>
<td>$378,223</td>
<td>$661,161</td>
<td>$84,783</td>
<td>$5,959,399</td>
<td>$689,056</td>
<td>$6,681,455</td>
<td>$6,681,455</td>
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<tr>
<td>FY 16-17</td>
<td>2.5%</td>
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<td>$387,681</td>
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<tr>
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<td>2.5%</td>
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<td>$84,783</td>
<td>$6,304,798</td>
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<td>$751,378</td>
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<td>$773,199</td>
<td>$7,406,211</td>
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</table>

* INPUT

**Notes**

1. Annual adjustment to applied to Salaries & Employee Benefits, Services & Supplies, Transportation & Disposal Contract and ISF expense amounts.
2. Includes one-time expense of $250,000 for FY 13-14 expenses for public review of the proposed fee.
3. Includes annual $307,000 for Stopwaste.org Retail Point of Purchase Program starting July 1, 2014.
4. Includes $125,000 for Authority Staff and marketing in FY 14-15, adjusting to $200,000 in FY 15-16 for StopWaste program management, program outreach and marketing costs, including for one-day events.
5. Includes County GSA property management-related services provided directly to the facilities including utilities, maintenance, and equipment repair and replacement.
6. Calculated annually as 12% of net County Expenses.
7. Calculated separately as a function of declining expenses with decreased available funding, net of PaintCare savings.
### ATTACHMENT 4

**AUSTERITY - PROJECTED REVENUE GENERATION**

<table>
<thead>
<tr>
<th>Year (FY)</th>
<th>Cumulative System Beginning Balance</th>
<th>Revenue</th>
<th>System Expenses</th>
<th>Annual Net Balance</th>
<th>Cumulative System End Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Tip Fee ($2.15 per ton)</td>
<td>Other Ongoing Revenue</td>
<td>New Revenue Required to Fund Program</td>
<td>County Program</td>
<td>Fund Transfer for Fremont Facility</td>
</tr>
<tr>
<td>2011-12</td>
<td>$5,182,362</td>
<td>$2,264,221</td>
<td>$84,350</td>
<td>-</td>
<td>$2,967,856</td>
</tr>
<tr>
<td>2013-14</td>
<td>$2,763,173</td>
<td>$1,984,450</td>
<td>$94,350</td>
<td>-</td>
<td>$3,500,350</td>
</tr>
<tr>
<td>2014-15</td>
<td>$1,151,709</td>
<td>$1,849,000</td>
<td>$94,350</td>
<td>-</td>
<td>$1,611,368</td>
</tr>
<tr>
<td>2015-16</td>
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<td>$94,350</td>
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**Total**

July 1, 2011 - June 30, 2020

$5,182,362 $15,430,821 $939,154 $ - $20,183,245 $1,769,721 $ (400,629)
**ATTACHMENT 5**

**AUSTERITY – PROJECTED PROGRAM EXPENSES**

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 12-13</td>
<td>n/a</td>
<td>$1,195,465</td>
<td>$488,651</td>
<td>$1,088,776</td>
<td>$261,581</td>
<td>-</td>
<td>$364,137</td>
<td>$3,398,610</td>
<td>$360,295</td>
<td>$3,758,905</td>
</tr>
<tr>
<td>FY 13-14</td>
<td>2.5%</td>
<td>$1,225,352</td>
<td>$750,867</td>
<td>$1,115,995</td>
<td>$268,121</td>
<td>(263,225)</td>
<td>$403,240</td>
<td>$3,500,350</td>
<td>$189,915</td>
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<td>FY 14-15</td>
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<td>(60,441)</td>
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<td>$183,600</td>
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<td>2.5%</td>
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<td>$269,223</td>
<td>$258,454</td>
<td>(60,441)</td>
<td>$188,190</td>
<td>$1,696,003</td>
<td>$142,150</td>
<td>$1,838,153</td>
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<tr>
<td>FY 17-18</td>
<td>2.5%</td>
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<td>$198,686</td>
<td>$275,953</td>
<td>$264,915</td>
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<td>$202,660</td>
<td>$1,831,057</td>
<td>$153,080</td>
<td>$1,984,137</td>
</tr>
</tbody>
</table>

* INPUT

Notes

1.) Annual adjustment applied to Salaries & Employee Benefits, Services & Supplies, Transportation & Disposal Contract and ISF expense amounts.

2.) Includes one-time expense of $250,000 for FY 13-14 expenses for public review of the proposed fee.

3.) Includes $40,000 in FY 14-15 and subsequent years for Authority contract management and marketing efforts.

4.) Includes County GSA property management-related services provided directly to the facilities including utilities, maintenance, and equipment repair and replacement.

5.) Calculated annually as 12% of net County Expenses.

6.) Calculated separately as a function of declining expenses with decreased available funding, net of PaintCare savings.
MEMORANDUM

TO: Alameda County Waste Management Authority Board of Directors
FROM: Richard S. Taylor, General Counsel
DATE: March 20, 2014
RE: Authority to Adopt the Household Hazardous Waste Collection and Disposal Fee and Have the County Collect it on the Property Tax Rolls

Members of the public have inquired as to the legal basis for the Alameda County Waste Management Authority ("WMA") to adopt the Household Hazardous Waste Collection and Disposal Fee ("HHW Fee") and have the County Auditor Controller collected the Fee on the property tax rolls. This memorandum responds to those inquiries.

I. The Legal Authority of the WMA.

The WMA is a joint powers agency created under the Joint Exercise of Powers Act set forth in Government Code section 6500 and following. That act allows public agencies to enter an agreement to exercise powers common to the contracting agencies. Alameda County, all of the cities in Alameda County, and the Castro Valley and Oro Loma Sanitary Districts have entered a joint exercise of powers agreement establishing the WMA to adopt and implement the Alameda County Integrated Waste Management Plan and related waste management programs, including the Household Hazardous Waste Collection and Disposal Program that would be funded by the HHW Fee. That agreement authorizes the WMA to "perform all acts necessary for the exercise of said powers" including, but not limited to, the power to levy fees. (Joint Powers Agreement for Waste Management § 5(1).)

II. Health and Safety Code Section 5470 et seq. explicitly authorizes adoption of the HHW Fee.

The Household Hazardous Waste Collection and Disposal Fee Ordinance ("Ordinance") is authorized by Health and Safety Code sections 5470 and following ("the
statute”). That statute authorizes any “entity” to adopt a fee or charge “for services and facilities furnished by it . . . in connection with its water, sanitation, storm drainage, or sewerage system.” (Health & Safety Code § 5471.) The statute defines “charge” as “any fee . . . for services and facilities furnished by an entity in connection with its sanitation or sewerage systems, including garbage and refuse collection. (Id. §5470(f.))

A. The WMA is an “entity” that may adopt a fee under section 5471.

The statute defines “entity” to include “counties . . . cities [and] sanitary districts . . .” (5470(e).) As noted above, under the Joint Exercise of Powers Act, a joint powers agency may exercise powers shared by its member agencies. (Gov’t Code § 6502.) The WMA’s member agencies include the County, cities, and sanitary districts. Because all of these entities are authorized to adopt a fee under section 5471 and the Joint Powers Agreement for Waste Management authorizes the WMA to impose fees, the WMA also has the power to do so.

B. The HHW Fee is a type of fee that may be adopted under section 5471.

As discussed above, the statute authorizes a local agency to adopt a fee for refuse collection services and facilities. (Health & Safety Code §§ 5470(f), 5471.) Here, as discussed in more detail in the staff report for the HHW Fee to which this memo is attached (“Staff Report”), the fee funds the operation of four HHW collection facilities in the County. These facilities are part of the sanitation system in Alameda County, which also includes waste transfer stations and landfills. This system operates to collect and dispose of refuse including household hazardous waste. Kern County, for example, imposed a fee collected on the tax rolls pursuant to the statute to cover the costs of landfill operations. (Kern County Farm Bureau v. County of Kern (1993) 19 Cal.App.4th 1416.) Accordingly, the HHW Fee is a fee for refuse collection services and facilities and may be adopted under the statute.

1 The Kern County case was decided before adoption of Proposition 218. Proposition 218 placed into the Constitution many of the procedural requirements already embodied in Health & Safety Code section 5470 et seq. and did not limit the types of fees that may be adopted under the statute. Proposition 218 did adopt new substantive requirements for fees and these are discussed in section III.A of this memorandum.
C. The HHW Fee may be collected on the property tax roll.

The statute authorizes any local agency that has adopted a section 5471 fee to “elect to have such charges collected on the tax roll in the same manner, by the same persons, and at the same time as, together with and not separately from, its general taxes.” (Health & Safety Code § 5473.) It also directs the county tax collector to “include the amount of the charges on bills for taxes levied against the respective lots and parcels of land.” (Health & Safety Code § 5473.6; see also § 5473.4 (“the auditor shall enter the amounts of the charges against the respective lots or parcels of land as they appear on the current assessment roll”).) Accordingly, the WMA may have the County auditor collect the HHW Fee on the property tax bill.

III. The Fee is not a tax requiring voter approval

The California Constitution requires voter approval for taxes. (Article 13C § 2.) In 2010, State voters approved Proposition 26, which defined a “tax” to mean “any levy, charge, or exaction of any kind imposed by a local government, except” for seven specified exceptions. (Article 13C § 1(e).) The HHW Fee falls within at least two of these exceptions as discussed in subsections A and B below and thus is not a tax requiring voter approval.

A. The Fee is adopted in accordance with Proposition 218

Proposition 26 provides that property-related fees imposed in accordance with the provisions of Article 13D (also known as Proposition 218) are not taxes. (Article 13C § 1(e)(7).) Proposition 218 provides that a public agency may impose fees for refuse collection services provided that it complies with the following procedural requirements and the fee satisfies various substantive requirements discussed below. (Article 13D § 6(a),(b).) As discussed above, the HHW Fee is a fee for refuse collection services.

1. The WMA has satisfied Proposition 218’s procedural requirements

Proposition 218’s procedural requirements for fees are as follows:

1. The agency must identify the parcels upon which the fee will be imposed. The WMA satisfied this requirement by preparing a Fee Collection Report (described in the Staff Report) listing the parcels that would be subject to the Fee. The report has been available for public review since January 6, 2014.
2. Notice of the proposed fee must be mailed to the record owner of each identified parcel including the amount and basis of calculating fee, the reason for which it is imposed, and the date, time and location of a public hearing on the fee. Notice of the proposed fee was mailed in early January. Due to a mailing house error, some of those notices were mailed less than 45 days prior to the originally scheduled protest hearing of February 26, 2014. The Board continued the protest hearing to March 26, 2014 and notice of the new protest hearing was mailed on February 5, 2014. The notices described the amount of the fee, a description of the Household Hazardous Waste Collection and Disposal Program, and the date, time, and location of the protest hearing.

3. The agency must conduct a public hearing on the fee at least 45 days after mailing the notice and consider all protests against the fee. The notice of the protest hearing was mailed 49 days before the protest hearing being held March 26, 2014. As discussed in the Staff Report, the Board will consider all protests at the protest hearing.

4. The agency may not impose the fee if written protests are presented by a majority of the owners of the identified parcels. As discussed in more detail in the Staff Report, if the WMA receives written protests from more than a majority of the owners of the identified parcels, the WMA may not adopt the HHW Fee. The protests are being tabulated by the County Registrar of Voters in accordance with the procedures set forth in Resolution #WMA 2013-06 as amended by Resolution #WMA 2014-02 (“Procedures Resolution”). Section 5(f) of these procedures calls for counting a single protest per parcel; if a parcel has multiple owners, each owner may protest independently but only one protest will be tabulated in connection with that parcel.

In addition to Proposition 218’s majority protest requirement, the WMA imposed a separate limitation on its ability to adopt the HHW Fee. In section 7 of the Procedures Resolution, the WMA determined that it may not adopt the fee if it receives protests from the owners of parcels with more than a majority of the residential units that would be subject to the fee even if protests are received from fewer than half the parcels that would be subject to the fee. In counting protests received, the tabulator is recording both the number of protests as well as the number of residential units on each parcel for which a protest is filed. If protests are filed by either a majority of the owners of parcels subject to the fee or by owners of parcels with a majority of the residential units subject to the fee, the HHW Fee cannot be adopted.
2. The HHW satisfies Proposition 218’s substantive requirements

In addition to the foregoing procedural requirements, Proposition 218 (Article 13D § 6(b)) requires that fees such as the HHW Fee satisfy five substantive criteria as set forth below:

1. **Revenues derived from the fee may not exceed the funds required to provide the service.** The HHW Collection and Disposal Program was evaluated in a October 4, 2013 memorandum from HF&H Consultants, LLC to the WMA which determined that the funds generated by the fee do not exceed the costs of the refuse collection services. Section 3(b) of the Ordinance requires fee reductions if revenues from Program operations and other sources exceed projections in order to further ensure that the revenues derived from the fee do not exceed the funds required to provide the service.

2. **Revenues derived from the fee may not be used for any purpose other than that for which the fee is imposed.** Section 3(d) of the Ordinance provides that the HHW Fee funds may not be used for any purpose other than the HHW Collection and Disposal Program evaluated in the HF&H Report.

3. **The amount of the fee may not exceed the proportional cost of the service attributable to the parcel.** Each parcel subject to the HHW Fee is charged its proportional share of the refuse collection service costs because the fee is based on the number of residential units located on the parcel. As explained in the Staff Report, residential households generate HHW and the HHW facilities offer collection services to each residential unit equally. Accordingly, total Program costs were divided by the number of residential units and each parcel pays a fee based on the number of units located on the parcel. Parcels with a greater number of residential units will pay a higher total fee because waste characterization studies demonstrate that those parcels generate a greater amount of HHW.

Apportioning the costs of program among classes of parcels, which the WMA has done based on the number of residential units, is a standard mechanism in setting fees. For example, in *Griffith v. Pajaro Valley Water Management Agency* (2012) 220 Cal.App.4th 586, the court upheld a groundwater augmentation charge that the Agency apportioned among different broad categories of users. The court rejected plaintiff’s argument that Proposition 218 requires a parcel-by-parcel proportionality analysis, holding that the question of proportionality is not measured on an individual basis, but collectively, considering all rate payers.
The Griffith court also rejected plaintiff’s argument that the charge was a tax under the standards articulated in Silicon Valley Taxpayers Association v. Santa Clara County Open Space Authority (2008) 44 Cal.4th 431, which invalidated an assessment adopted under Section 4 of Proposition 218. The Griffith court held that cases such as Silicon Valley that analyze Proposition 218’s standards for assessments are inapplicable to property-related fees adopted under Section 6 of Proposition 218. Here, Section 6 explicitly includes fees for refuse collection services such as the HHW Fee and Silicon Valley is inapplicable.

4. **No fee may be imposed unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4.** The refuse collection services funded by the HHW Fee are immediately available to all owners of residential units including their families and tenants as required by Proposition 218. The HHW facilities are available to accept HHW from owners and occupants of residential units during any posted business hours.

In Paland v. Brooktrails Township Community Services District (2010) 179 Cal.App.4th 1358, the court upheld a minimum monthly charge imposed by a water district for maintenance and operation of the water system. The plaintiff in Paland argued that because the fee was imposed on parcels even when the owner did not use any water, the fee was a standby charge that must be classified as an assessment under Proposition 218. The court rejected this argument, finding that the charge was a fee for services immediately available to the property owner. It held that a service is “immediately available” when an agency has done everything it needs to do to make the water service available to the property owner, and it is only the unilateral acts of the property owner that causes the service not to be actually used. Here too, the services of the HHW Program are available to benefit all residential units at any time.

5. **No fee may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services, where the service is available to the public at large in substantially the same manner as it is to property owners.** The HHW Fee is not imposed for a general governmental service. The HHW collection and disposal service is not available to the public at large because only owners of residential units and their tenants may use the service. The refuse collection services are not available to industrial or commercial property owners or residents from outside of the County. Moreover,
the Ordinance prohibits diverting fee revenues to other general governmental programs. As noted in *Griffith v. Pajaro Valley Water Management Agency* (2012) 220 Cal.App.4th 586, this standard is met when “the revenues derived from the fee or charge are required to provide the service, and [are] used only for the service,” rather than for “general governmental service.”

***

Under the California Constitution, the WMA bears the burden of proving that the HHW Fee is not a tax. For the reasons discussed above, the HHW Fee is a valid refuse collection fee imposed in accordance with the provisions of Proposition 218. The Fee satisfies all of Proposition 218’s substantive requirements.

**B. The Fee is for a service that benefits owners of residential units.**

While the HHW Fee falls within the Proposition 26 exception for fees adopted in accordance with Proposition 218, the Fee also falls within other Proposition 26 exceptions. For instance, Proposition 26 provides that fees imposed for a specific government benefit or privilege to the payor are not taxes. (Article 13C § 1(e)(1).) The benefit must be granted directly to the payor and must not be provided to those not charged. The HHW Fee meets these requirements.

First, the HHW collection facilities directly benefit and serve owners of parcels with residential units by both collecting and disposing of HHW generated on their property and by providing a legal, safe, place for disposal of HHW materials in compliance with the law. The WMA recognizes that there are incidental benefits from the HHW Program. For instance, visitors to the county, as well as property owners, will enjoy cleaner streets free of HHW debris. Nonetheless, these incidental benefits from the HHW collection services do not change the direct benefit provided by the Program to owners of residential units in the County. For example, garbage collection fees are not taxes even though there may be some incidental benefit to the public at large or other residents of the household in having garbage regularly collected, rather than dumped on the streets. Similarly, the groundwater management programs funded by the charge upheld in *Griffith v. Pajaro Valley Water Management Agency* (2012) 220 Cal.App.4th 586 provided incidental benefits to the environment.

Second, the HHW facilities do not provide refuse collection services or benefits to those not charged. The HHW facilities only collect HHW from residential units within the County. They do not collect HHW from commercial or industrial properties.
Proposition 26 also includes additional substantive requirements that mirror those for Proposition 218. Specifically, the WMA must demonstrate that (1) the amount of the Fee is no more than necessary to cover the reasonable costs of the governmental activity, and (2) that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor’s burdens on, or benefits received from, the governmental activity. (See Article 13C § 1(e)(concluding paragraph).) The HHW fee satisfies these requirements as discussed in Section III.A.2 of this memorandum.
Before I start I need to address specific issues with ballots which are a serious concern us:
- One multifamily owner received only 2 out of 19 ballots to-date
- Another reported this morning that out of 6 properties she received 5; missed notice was for 115 votes.

On behalf of the RHA we are requesting a reduction in the fee to $5 for multifamily properties. We believe it is a matter of fairness
- The current proposal seeks to charge a the same fee to every home — from studio apartments, to 5 bedroom houses — regardless of need or use. This could cost renters in the East Bay as much as $15 million.
- Common sense, knowledge of actual rental property operations, and a further survey of the waste study methodology make us question the nexus between the fee and actual service proposed.

We recommend a different approach.

**Proposal**

- Reduce the fee for multifamily to $5 based on findings/ solutions used in Danville and SBWMA, who found that the fees for multifamily should be approximately half of those charged to single family dwellings
- Makeup for difference by
  - Requiring waste haulers to actually pay the per-ton fee for all household waste collected in the County
    - Capturing those who may be hauling out of county to avoid fees.
  - Keep the number of recycle days intact.
    - We are not sure that increasing funding for an already underutilized resource is the best approach.
  - Renegotiate a rate with haulers that compensates for reductions in revenue, instead of unnecessarily passing fee through to tax bill.
Why do we believe this should be done?

Common Sense
It is always prudent to have a reasonable, common sense expectation of what a report is expected to say. It helps us ensure that research is grounded in reality.

We believe that rental property owners are more efficient in using household hazardous waste products, and the some products do not come into play in multifamily (pest control supplies, cleaning supplies, solvents, pool supplies for example, are handled by professionals and not stored on premises.

In the case of this study we thought the findings were counter to what we expected, using our experience and common sense, so we surveyed the reports independently. We found evidence that the data may be so skewed, that it does not truly address the questions being asked.

Issues with the Study and Findings

Summary

RHA is not taking issue with staff’s interpretation of the study. IF the study was comparing waste per type of household and IF those estimates were not potentially contaminated by commercial waste then the points of the study might be valid.

What we ARE asking is if the study methodology is sound and even measures what it purports to measure. We do not believe it does and that it unfairly characterizes multifamily and single-family properties.

About Methodology
The methods used to define multifamily and single-family properties in each of the studies used are causing issues with the findings. Comparisons were made using data from both the State Study and the Local Study. We believe it cannot be a fair comparison if the definitions vary significantly, and they do. As a result we believe the findings are likely skewed and unreliable.

**Document 2009023 (state survey)**
Page 22, 82 defines single and multifamily dwellings this way:

**Single-family residential waste**
- Waste that is collected from either single-family residences or buildings that include no more than four living units

**Multifamily residential waste**
- Waste that is collected from multi-unit buildings with greater than four living units

**Document ACWCS-2008 (county survey)**
Page 523 defines single and multifamily dwellings this way:

A) Single Family Residential: Waste collected from single-family homes. Within each jurisdiction in the County, a single hauler (either private or public sector) provides collection for this generator sector. Generally, truckloads from this stream include curbside-collected waste from several hundred homes, and are relatively homogenous in composition.

B) Multi-Family Residential: Waste collected from apartments, condominiums, and other multi-family dwellings. Within each jurisdiction in the County (with the exception of Berkeley), a single hauler (either private or public sector) provides collection for this generator sector. Generally, truckloads from this stream include dumpster-collected waste from multiple multi-family dwellings, and are relatively homogenous in composition. However, trucks used for collecting multi-family waste are often used to collect commercial waste in the same loads, so care must be taken to obtain segregated multi-family waste if the sampled load is mixed. It is expected
that samples will be collected from truckloads that contain primarily or
entirely multifamily waste.

While "care is to be taken" to obtain segregated multifamily waste and that
there is a "relatively homogenous in composition", there is an opportunity
for a large margin of error in multifamily. This is apparent when looking at
the level of contamination predicted. The studies classify a truck as
"multifamily" if 80% or more of the trash in a truck comes from apartments
meaning that 20% of the trash in each sample could be commercial. A similar
potential for contamination does not exist for single family trucks. How can
we be reasonably sure that the stream from multifamily does not include
misclassified waste?

The study is measuring percentages and then applying aggregate
percentages to total weight of trash to determine final part weight.

- If they are aggregating percentages, that is not sound statistical analysis.
- If they are aggregating weights, there are better measures of central
tendency and variability. Medians are better representations of central
tendency in skewed distributions, and standard deviations (which they
used for confidence intervals) are less reliable.
- The distribution is most certainly skewed (as seen by percentages of .3 for
hazardous waste, etc).

**Reduced Fee:**

In absence of a study that answers the real questions askeu, we are
requesting a similar rate ratio to those offered for multifamily in Danville and
the South Bay Waste Management Authority which is approximately half of
what is charged for single family homes.
Gary, Wolff

Regarding the sampling of waste from multi-family residential (apartment) units, for each jurisdiction we went to considerable effort to identify route-loads that would contain dominantly multi-family waste. Some of the loads were entirely of multi-family origin and did not contain any commercial or single-family waste. We sampled these loads only after confirming with the driver that we had the correct load, doing our own visual examination of the discharged load, and having the driver point out to us commercial collections in the load, if any. If the load was too mixed with commercial waste, we rejected that load for sampling. If the load was what we expected, we sampled the multi-family portions while avoiding waste of commercial origin.

We also used this procedure on the ACWMA waste characterizations for 1995 and 2000.

Matthew Southworth, PE. - Technical Project Manager for ACWMA 2008 Waste Characterization
To: Gary Wolff – Executive Director, Alameda County Waste Management Authority
From: Navid Nowakhtar - Economic Consultant, Leidos Engineering, LLC
Subject: Alameda County 2008 Waste Characterization Study Methodology
Date: March 14, 2014

Dear Gary:

Per the request of the Alameda County Waste Management Authority (the Authority), Leidos Engineering, LLC (Leidos) has provided a response to comments raised regarding the methodology underpinning the 2008 Alameda County Waste Characterization Study (WCS). Leidos is an organization whose predecessor firm, R. W. Beck, Inc., which was acquired by Leidos subsequent to 2008, conducted the 2008 WCS. The core team members of that project were involved in the review of and response to the comments in question. The comments raised on the methodology of the 2008 WCS were provided to Leidos by the Authority, and are assumed to have been originated by the South County Rental Properties Association. Leidos has interpreted the commentary assumed to have been originated by the South County Rental Properties Association, and makes no warranty or claim of attribution with respect to the commentary or its source due to lack of specific information.

Based on the information provided by the Authority, the comments on the 2008 WCS centered on the following issues:

- The appropriateness of the use of the mean as a basis for determining the composition of the waste stream;
- The appropriateness of the methodology deployed to develop confidence intervals for the composition of the waste stream;
- The differential in household hazardous waste (HHW) composition between the single family and multi-family sectors, and
- The basis for determination of whether a given sample constitutes single-family versus multi-family waste, and more specifically, the basis and assignment protocol for duplex, triplex, and quad-plex type residences.

Each of these comments has been reviewed by Leidos, and we offer the following responses:
Use of the mean as a basis for determining the composition of the waste stream is in alignment with ASTM International standard D5231 – 92 (2008)\(^1\). ASTM International, previously known as the American Society for Testing and Materials, was formed in 1898 as an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services. Furthermore, within the state of California, CalRecycle publishes waste characterization regulations\(^2\) that also refer to the calculation of the mean and associated standard deviation to perform a waste characterization study. The 2008 WCS was conducted in accordance with such standards and regulations.

With regard to the appropriateness of the method to compute confidence intervals, the methodology deployed in the 2008 WCS uses what is referred to as a statistical transformation. Statistical transformations are applied to raw data in instances where such transformations are deemed appropriate to generate a data set that is in alignment with the assumptions of a statistical inference procedure that is to be applied (in this instance, computation of a 90 percent confidence interval using a student’s t-distribution range of critical values, the specific critical values for which converge to standard normal, or z distribution critical values as the sample size increases). The data associated with the 2008 WCS was transformed in order to manage the skewness of the data and address the challenges associated with a range of percentages that are in some instances very small across each of the waste characterization categories. The confidence intervals shown in the 2008 WCS report tables reflect results that have been transformed back to the original scale using the inverse of the transformation that was applied to the data. Evidence of the use of the transformation is noted in each of the results tables in the 2008 WCS, wherein the raw standard deviations cannot be applied directly to determine the upper and lower bounds of the 90 percent confidence intervals reported. As with any waste characterization study or other study involving the development of a sampling plan, care was taken to balance the precision requirements of the study with the cost and resources associated with arbitrarily large sample sizes.

With regard to the differential in composition of HHW between single-family and multi-family residences, it should be noted that the estimates of total tonnage generated in both sectors was

\(^1\) Refer to [http://www.aspm.org/Standards/D5231.htm](http://www.aspm.org/Standards/D5231.htm).

\(^2\) Refer to [http://www.calrecycle.ca.gov/Laws_Regulations/Title14/ch24dx.htm](http://www.calrecycle.ca.gov/Laws_Regulations/Title14/ch24dx.htm).
provided to R. W. Beck, Inc. by the Authority, and that the development of the characterization results was unrelated to the disaggregation of total tonnage into its constituent parts (i.e., the waste sort was conducted independently to determine the final composition of each sector's waste stream).

The table below summarizes the calculated mean HHW composition percentage for multi-family and single-family sectors in the three most recent Alameda County WCS:

<table>
<thead>
<tr>
<th>Sector</th>
<th>1995 WCS</th>
<th>2000 WCS</th>
<th>2008 WCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Family</td>
<td>1.0%</td>
<td>0.8%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Single-Family</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

While Leidos has not conducted any post-study analysis for this response memorandum, the percentages shown in the table above do not support the notion that multi-family residences generate less HHW than single-family residences on a percent of total basis. Probabilistically, the 2008 WCS 90 percent confidence interval for HHW composition percentage ranges from 0.6% to 0.9% for the single family sector, and between 0.8% and 1.4% for the multi-family sector. This also suggests that the notion that multi-family residences generate less HHW than single family residences is unlikely to be supported by the available data.

Leidos also computed the tonnage of HHW in each sector on a “per-unit” basis, as based on the housing unit data summarized in the 2008 WCS report and the disaggregated tonnage estimates in each sector. Based on said results, the single-family sector generated 2,050 tons of HHW across 343,355 units, and the multi-family sector generated 1,374 tons of HHW across 219,609 units. This results in a per unit tonnage amount of approximately .0059705 tons/unit for single-family and .00625657 tons/unit for multi-family. Consistent with the statistics above, it is likely that the metrics around HHW generation and composition are comparable across the sectors.

- Finally, with regard to the basis for determining whether a given sample constitutes single-family versus multi-family waste, the 2008 WCS was conducted in alignment with the state of California’s definition of the housing sectors\(^3\). This definition includes duplexes and 3-4 unit

structures in the multi-family sector. The 2008 WCS derived estimates of housing units from the State of California Department of Finance Table E-5\(^4\), and such housing units that constituted “single-attached” and “single-detached” were associated with single-family, and “two to four” and “five plus” units were associated with multi-family. Furthermore, our sample assignation process (i.e., how a sample was deemed to belong to a given sector) was conducted in accord with the above standards. As noted in the report associated with the 2008 WCS, multi-family waste collected can be at times intermingled with commercial waste, and care was taken to ensure that segregated multi-family waste was obtained. Furthermore, the Field Supervisor was responsible for recording the source of the samples, the type of vehicle delivering the load, and accompanying the host facility equipment operator that obtained each sample to verify the source and appropriate means of obtaining the sample. Given this approach, there is no downward impact or deflation of single-family percentages for the composition of HHW as a result of the inclusion of duplex, tri-plex, and quad-plex units into that sector.

Should you have any questions or concerns regarding the material in this memo, please do not hesitate to contact us.

Sincerely,

Leidos Engineering, LLC

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Final Report

2008 Alameda County Waste Characterization Study

StopWaste.Org

June 2009
## EXECUTIVE SUMMARY

### Table ES-8

<table>
<thead>
<tr>
<th>Material Group</th>
<th>Material Description</th>
<th>1995 Mean (lbs)</th>
<th>2000 Mean (lbs)</th>
<th>2008 Mean (lbs)</th>
<th>1995 Weight (tons)</th>
<th>2000 Weight (tons)</th>
<th>2008 Weight (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>Uncoated Cardboard</td>
<td>3.2%</td>
<td>2.6%</td>
<td>0.9%</td>
<td>10,701</td>
<td>8,737</td>
<td>1,266</td>
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<td></td>
<td>High Grade Paper</td>
<td>2.2%</td>
<td>1.3%</td>
<td>0.4%</td>
<td>7,964</td>
<td>6,352</td>
<td>969</td>
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<tr>
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<td>Newspaper</td>
<td>4.8%</td>
<td>5.9%</td>
<td>0.9%</td>
<td>16,001</td>
<td>16,417</td>
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</tr>
<tr>
<td></td>
<td>Mixed Recyclables</td>
<td>5.5%</td>
<td>6.4%</td>
<td>3.1%</td>
<td>28,148</td>
<td>27,941</td>
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<td>Compostable Paper</td>
<td>NA</td>
<td>NA</td>
<td>17.5%</td>
<td>NA</td>
<td>NA</td>
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<td></td>
<td>Other Paper</td>
<td>14.2%</td>
<td>14.6%</td>
<td>0.9%</td>
<td>47,537</td>
<td>48,447</td>
<td>2,652</td>
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<tr>
<td>Plastics</td>
<td>HDPE Bottles (#2)</td>
<td>0.8%</td>
<td>0.9%</td>
<td>0.5%</td>
<td>2,508</td>
<td>2,674</td>
<td>1,597</td>
</tr>
<tr>
<td></td>
<td>PETE Bottles (#1)</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>1,577</td>
<td>2,445</td>
<td>1,705</td>
</tr>
<tr>
<td></td>
<td>Other Plastic Containers</td>
<td>NA</td>
<td>0.5%</td>
<td>0.9%</td>
<td>NA</td>
<td>NA</td>
<td>4,630</td>
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<tr>
<td></td>
<td>Plastic Bags</td>
<td>NA</td>
<td>NA</td>
<td>1.7%</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>Other Film</td>
<td>4.9%</td>
<td>6.4%</td>
<td>5.1%</td>
<td>15,433</td>
<td>21,378</td>
<td>14,018</td>
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<td>Expanded Polystyrene Blocks</td>
<td>NA</td>
<td>NA</td>
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<td>NA</td>
<td>NA</td>
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<td>Mixed Rigid Plastics</td>
<td>NA</td>
<td>NA</td>
<td>3.1%</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>Other Plastics</td>
<td>4.3%</td>
<td>3.8%</td>
<td>1.5%</td>
<td>14,476</td>
<td>12,569</td>
<td>3,594</td>
</tr>
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<td>Glass</td>
<td>Recyclable Glass Bottle/Containers</td>
<td>4.1%</td>
<td>3.1%</td>
<td>2.8%</td>
<td>13,618</td>
<td>17,473</td>
<td>7,606</td>
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<tr>
<td></td>
<td>Other Glass</td>
<td>3.7%</td>
<td>2.7%</td>
<td>2.4%</td>
<td>12,246</td>
<td>10,107</td>
<td>6,968</td>
</tr>
<tr>
<td>Metals</td>
<td>Aluminum Cans</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>1,162</td>
<td>1,704</td>
<td>540</td>
</tr>
<tr>
<td></td>
<td>Non-Ferrous Metals</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1,997</td>
<td>2,106</td>
<td>1,248</td>
</tr>
<tr>
<td></td>
<td>Steel Food and Beverage Cans</td>
<td>1.4%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>4,568</td>
<td>3,721</td>
<td>2,746</td>
</tr>
<tr>
<td></td>
<td>Other Ferrous</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>4,744</td>
<td>3,889</td>
<td>4,885</td>
</tr>
<tr>
<td></td>
<td>White Goods</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0</td>
<td>113</td>
<td>45</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>Leaves/Grass/Crops</td>
<td>12.9%</td>
<td>5.1%</td>
<td>2.7%</td>
<td>42,859</td>
<td>18,939</td>
<td>7,409</td>
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<tr>
<td></td>
<td>Branches/Plants/Stumps/Trimmings</td>
<td>4.1%</td>
<td>1.9%</td>
<td>1.0%</td>
<td>13,703</td>
<td>6,122</td>
<td>2,680</td>
</tr>
<tr>
<td>Organic Materials</td>
<td>Food Waste</td>
<td>21.2%</td>
<td>23.0%</td>
<td>32.8%</td>
<td>70,464</td>
<td>79,374</td>
<td>90,186</td>
</tr>
<tr>
<td></td>
<td>Trees</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.4%</td>
<td>43</td>
<td>281</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>Untreated Lumber</td>
<td>0.6%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>2,970</td>
<td>1,493</td>
<td>1,483</td>
</tr>
<tr>
<td></td>
<td>Pallets</td>
<td>NA</td>
<td>NA</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Treated Wood Waste</td>
<td>0.5%</td>
<td>0.9%</td>
<td>1.4%</td>
<td>1,752</td>
<td>2,853</td>
<td>3,811</td>
</tr>
<tr>
<td></td>
<td>Textiles/Leather</td>
<td>4.2%</td>
<td>3.8%</td>
<td>4.2%</td>
<td>14,024</td>
<td>12,481</td>
<td>11,595</td>
</tr>
<tr>
<td></td>
<td>Carpet</td>
<td>NA</td>
<td>0.0%</td>
<td>0.3%</td>
<td>NA</td>
<td>3,154</td>
<td>927</td>
</tr>
<tr>
<td></td>
<td>Diapers</td>
<td>4.7%</td>
<td>4.5%</td>
<td>5.7%</td>
<td>15,613</td>
<td>15,565</td>
<td>15,773</td>
</tr>
<tr>
<td></td>
<td>Mulch</td>
<td>NA</td>
<td>NA</td>
<td>2.0%</td>
<td>NA</td>
<td>NA</td>
<td>8,034</td>
</tr>
<tr>
<td></td>
<td>Other Organics</td>
<td>1.2%</td>
<td>3.9%</td>
<td>0.5%</td>
<td>3,984</td>
<td>12,255</td>
<td>2,376</td>
</tr>
<tr>
<td>Inerts</td>
<td>Crushable Inerts</td>
<td>2.3%</td>
<td>2.5%</td>
<td>4.0%</td>
<td>1,268</td>
<td>6,238</td>
<td>11,542</td>
</tr>
<tr>
<td></td>
<td>Other Inerts</td>
<td>0.4%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>1,438</td>
<td>2,298</td>
<td>3,095</td>
</tr>
<tr>
<td></td>
<td>Gypsum board</td>
<td>1.2%</td>
<td>1.4%</td>
<td>2.4%</td>
<td>6,972</td>
<td>4,725</td>
<td>6,688</td>
</tr>
<tr>
<td></td>
<td>Asphalt</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>74</td>
<td>977</td>
<td>1,190</td>
</tr>
<tr>
<td>HHW</td>
<td>Paint/Kleisters</td>
<td>1.0%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>1,854</td>
<td>2,138</td>
<td>2,560</td>
</tr>
<tr>
<td></td>
<td>Vehicle &amp; Equipment Fluids</td>
<td>NA</td>
<td>NA</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Universal Hazardous Waste</td>
<td>NA</td>
<td>NA</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Medical Waste</td>
<td>NA</td>
<td>NA</td>
<td>0.1%</td>
<td>NA</td>
<td>NA</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
<td>NA</td>
<td>NA</td>
<td>0.1%</td>
<td>NA</td>
<td>NA</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Covered E-Waste</td>
<td>NA</td>
<td>NA</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
<td>849</td>
</tr>
<tr>
<td></td>
<td>Other E-Waste</td>
<td>NA</td>
<td>NA</td>
<td>0.3%</td>
<td>NA</td>
<td>NA</td>
<td>849</td>
</tr>
<tr>
<td></td>
<td>Other Hazardous Waste</td>
<td>0.0%</td>
<td>0.6%</td>
<td>0.1%</td>
<td>1,855</td>
<td>2,139</td>
<td>229</td>
</tr>
<tr>
<td>Special</td>
<td>Brown Goods</td>
<td>0.8%</td>
<td>1.4%</td>
<td>0.7%</td>
<td>2,515</td>
<td>4,588</td>
<td>1,820</td>
</tr>
<tr>
<td></td>
<td>Composite Bulky Items</td>
<td>0.1%</td>
<td>0.4%</td>
<td>0.3%</td>
<td>2,316</td>
<td>3,112</td>
<td>674</td>
</tr>
<tr>
<td></td>
<td>Other Special Waste</td>
<td>NA</td>
<td>NA</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>333,023</td>
<td>332,763</td>
<td>275,079</td>
</tr>
</tbody>
</table>

Note: see pg ES-12 for a complete description of changes to material categories.
## EXECUTIVE SUMMARY

### Table ES-9

**Countywide Multi-Family Residential Detailed Historical Comparison**

<table>
<thead>
<tr>
<th>Material Group</th>
<th>Material</th>
<th>Mean Comparison</th>
<th>Weight Comparison (tars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>1  Uncoated Corrugated Cardboard</td>
<td>4.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td></td>
<td>2  High Grade Paper</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td>3  Newspaper</td>
<td>6.9%</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td>4  Mixed Recyclable Paper</td>
<td>7.4%</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>5  Compostable Paper</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>6  Other Paper</td>
<td>11.2%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Plastics</td>
<td>7  HDPE Bottles (#2)</td>
<td>1.1%</td>
<td>0.9%</td>
</tr>
<tr>
<td></td>
<td>8  PETE Bottles (#1)</td>
<td>0.6%</td>
<td>0.7%</td>
</tr>
<tr>
<td></td>
<td>9  Other Plastic Containers</td>
<td>NA</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td>10  Plastic Bags</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>11  Other Film</td>
<td>4.0%</td>
<td>5.8%</td>
</tr>
<tr>
<td></td>
<td>12  Expanded Polyethylene Blocks</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>13  Mixed Rigid Plastics</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>14  Other Plastics</td>
<td>4.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Glass</td>
<td>15  Recyclable Glass Bottles/Containers</td>
<td>4.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td>16  Other Glass</td>
<td>0.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Metals</td>
<td>17  Aluminum Cans</td>
<td>4.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td>18  Other Non-Ferrous</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td></td>
<td>19  Steel Food and Beverage Cans</td>
<td>0.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td></td>
<td>22  Other Ferrous</td>
<td>1.2%</td>
<td>1.8%</td>
</tr>
<tr>
<td></td>
<td>23  White Goods</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>24  Leaves/Graffiti/Chips</td>
<td>8.0%</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>25  Branches/Prunes/Trimmings</td>
<td>6.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>26  Organic Matter</td>
<td>1.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Organics</td>
<td>27  Food Waste</td>
<td>32.3%</td>
<td>38.3%</td>
</tr>
<tr>
<td></td>
<td>28  Tires</td>
<td>18.7%</td>
<td>20.9%</td>
</tr>
<tr>
<td></td>
<td>29  Untreated Lumber</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td></td>
<td>30  Pallets</td>
<td>1.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td></td>
<td>31  Treated Wood Waste</td>
<td>1.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>32  Textiles and Leather</td>
<td>7.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td></td>
<td>33  Carpets</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>34  Diapers</td>
<td>0.5%</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>35  Other Organics</td>
<td>1.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Inerts</td>
<td>36  Crushable Inerts</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td></td>
<td>37  Gypsum Board</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>38  Asbestos Roofing</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>HHW</td>
<td>39  Paint/Adhesives</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>40  Vehicle &amp; Equipment Fluids</td>
<td>0.5%</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>41  Universal Hazardous Waste</td>
<td>1.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td></td>
<td>42  Medical Waste</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>43  Covered E-Waste</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>44  Other E-Waste</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Special</td>
<td>45  Other Hazardous Waste</td>
<td>4.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td></td>
<td>46  Brown Goods</td>
<td>0.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td>47  Composite Bulky Items</td>
<td>0.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>48  Other Special Waste</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note: see pg ES-12 for a complete description of changes to material categories.
California Integrated Waste Management Board

Contractor's Report
To the Board

California 2008 Statewide Waste Characterization Study

Produced Under Contract by:

Cascadia Consulting Group

California Environmental Protection Agency
### Table 15: Composition of Single-Family Residential Disposed Waste

<table>
<thead>
<tr>
<th>Material</th>
<th>Est. Tons</th>
<th>Material</th>
<th>Est. Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>1,568,183</td>
<td>Other Organic</td>
<td>3,388,119</td>
</tr>
<tr>
<td>Uncollated Corrugated Cardboard</td>
<td>176,011</td>
<td>Food</td>
<td>2,277,104</td>
</tr>
<tr>
<td>Paper Bags</td>
<td>42,018</td>
<td>Leaves and Grass</td>
<td>460,019</td>
</tr>
<tr>
<td>Newspaper</td>
<td>188,462</td>
<td>Prunings and Trimmings</td>
<td>218,759</td>
</tr>
<tr>
<td>White Ledger Paper</td>
<td>30,485</td>
<td>Branches and Stumps</td>
<td>17,032</td>
</tr>
<tr>
<td>Other Office Paper</td>
<td>118,662</td>
<td>Manure</td>
<td>20,224</td>
</tr>
<tr>
<td>Magazines and Catalogs</td>
<td>112,005</td>
<td>Textiles</td>
<td>362,018</td>
</tr>
<tr>
<td>Phone Books and Directories</td>
<td>10,228</td>
<td>Carpet</td>
<td>116,456</td>
</tr>
<tr>
<td>Other Miscellaneous Paper</td>
<td>371,879</td>
<td>Remainder/Composite Organic</td>
<td>708,776</td>
</tr>
<tr>
<td>Remainder/Composite Paper</td>
<td>556,734</td>
<td>Inerts and Other</td>
<td>823,289</td>
</tr>
<tr>
<td>Glass</td>
<td>179,435</td>
<td>Concrete</td>
<td>93,329</td>
</tr>
<tr>
<td>Clear Glass Bottles and Containers</td>
<td>63,008</td>
<td>Asphalt Paving</td>
<td>544</td>
</tr>
<tr>
<td>Green Glass Bottles and Containers</td>
<td>30,867</td>
<td>Asphalt Roofing</td>
<td>21,945</td>
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<td>Brown Glass Bottles and Containers</td>
<td>32,885</td>
<td>Lumber</td>
<td>435,877</td>
</tr>
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<td>Other Colored Glass Bottles and Containers</td>
<td>15,985</td>
<td>Gypsum Board</td>
<td>27,070</td>
</tr>
<tr>
<td>Flat Glass</td>
<td>542</td>
<td>Rock, Soil and Fines</td>
<td>88,686</td>
</tr>
<tr>
<td>Remainder/Composite Glass</td>
<td>35,578</td>
<td>Remainder/Composite Inerts and Other</td>
<td>179,466</td>
</tr>
<tr>
<td>Metal</td>
<td>355,542</td>
<td>Household Hazardous Waste (HHW)</td>
<td>23,304</td>
</tr>
<tr>
<td>Tin/Steel Cans</td>
<td>85,059</td>
<td>Paint</td>
<td>3,137</td>
</tr>
<tr>
<td>Major Appliances</td>
<td>3,010</td>
<td>Vehicle and Equipment Fluids</td>
<td>2,217</td>
</tr>
<tr>
<td>Used Oil Filters</td>
<td>111,328</td>
<td>Batteries</td>
<td>11,114</td>
</tr>
<tr>
<td>Other Ferrous</td>
<td>21,910</td>
<td>Remainder/Composite Household Hazardous</td>
<td>3,963</td>
</tr>
<tr>
<td>Aluminum Cans</td>
<td>25,491</td>
<td>Other Non-Ferrous</td>
<td>9,004</td>
</tr>
<tr>
<td>Other Non-Ferrous</td>
<td>109,134</td>
<td>Remainder/Composite Metal</td>
<td>24,213</td>
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<tr>
<td>Electronics</td>
<td>23,307</td>
<td>Special Waste</td>
<td>4,024</td>
</tr>
<tr>
<td>Brown Goods</td>
<td>10,305</td>
<td>Treated Medical Waste</td>
<td>0</td>
</tr>
<tr>
<td>Computer-related Electronics</td>
<td>19,958</td>
<td>Bulky Items</td>
<td>7,904</td>
</tr>
<tr>
<td>Other Small Consumer Electronics</td>
<td>9,480</td>
<td>Tires</td>
<td>2,570</td>
</tr>
<tr>
<td>Video Display Devices</td>
<td>2,946</td>
<td>Remainder/Composite Special Waste</td>
<td>9,093</td>
</tr>
<tr>
<td>Plastic</td>
<td>858,442</td>
<td>Mixed Residue</td>
<td>259,331</td>
</tr>
<tr>
<td>PETE Containers</td>
<td>70,247</td>
<td>Mixed Residue</td>
<td>3%</td>
</tr>
<tr>
<td>HDPE Containers</td>
<td>47,659</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Miscellaneous Plastic Containers</td>
<td>53,482</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Plastic Trash Bags</td>
<td>64,372</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Plastic Grocery and Other Merchandise Bags</td>
<td>58,649</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Non Bag Commercial and Industrial Packaging Film</td>
<td>4,016</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Film Products</td>
<td>1,897</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Other Film</td>
<td>167,064</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Durable Plastic items</td>
<td>211,081</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td>Remainder/Composite Plastic</td>
<td>159,032</td>
<td></td>
<td>259,331</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,553,746</strong></td>
<td></td>
<td><strong>259,331</strong></td>
</tr>
</tbody>
</table>

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding. More detailed composition tables can be found in Appendix D: Expanded Statewide Waste Characterization Tables.
Table 18: Composition of Multifamily Residential Disposed Waste

<table>
<thead>
<tr>
<th>Material</th>
<th>Est. Tons</th>
<th>Percent</th>
<th>+/-</th>
<th>Material</th>
<th>Est. Tons</th>
<th>Percent</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>729,689</td>
<td>21.8%</td>
<td>1.2%</td>
<td>Other Organic</td>
<td>4,111,140</td>
<td>42.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Uncoated Corrugated Cardboard</td>
<td>147,049</td>
<td>4.4%</td>
<td>1.2%</td>
<td>Food</td>
<td>759,846</td>
<td>22.6%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Paper Bags</td>
<td>16,687</td>
<td>0.5%</td>
<td>0.1%</td>
<td>Leaves and Grass</td>
<td>69,336</td>
<td>2.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>99,735</td>
<td>3.0%</td>
<td>0.1%</td>
<td>Prunings and Trimmings</td>
<td>9,518</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>White Ledger Paper</td>
<td>12,267</td>
<td>0.4%</td>
<td>0.2%</td>
<td>Branches and Stumps</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Office Paper</td>
<td>85,324</td>
<td>2.5%</td>
<td>1.2%</td>
<td>Manures</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Magazines and Catalogs</td>
<td>40,627</td>
<td>1.2%</td>
<td>0.5%</td>
<td>Textiles</td>
<td>124,941</td>
<td>3.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Phone Books and Directories</td>
<td>1,702</td>
<td>0.1%</td>
<td>0.1%</td>
<td>Carpet</td>
<td>169,538</td>
<td>4.8%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Other Miscellaneous Paper</td>
<td>187,000</td>
<td>5.6%</td>
<td>1.4%</td>
<td>Remainder/Composite Organic</td>
<td>294,167</td>
<td>8.9%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Remainder/Composite Paper</td>
<td>157,682</td>
<td>4.7%</td>
<td>1.4%</td>
<td>Inerts and Other</td>
<td>517,176</td>
<td>15.4%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Glass</td>
<td>163,497</td>
<td>3.1%</td>
<td>0.6%</td>
<td>Concrete</td>
<td>59</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Clear Glass Bottles and Containers</td>
<td>42,585</td>
<td>1.3%</td>
<td>0.6%</td>
<td>Asphalt Paving</td>
<td>10</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Green Glass Bottles and Containers</td>
<td>17,620</td>
<td>0.5%</td>
<td>0.4%</td>
<td>Asphalt Roofing</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Brown Glass Bottles and Containers</td>
<td>22,548</td>
<td>0.7%</td>
<td>0.5%</td>
<td>Lumber</td>
<td>355,021</td>
<td>10.6%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Other Colored Glass Bottles and Containers</td>
<td>13,048</td>
<td>0.4%</td>
<td>0.3%</td>
<td>Gypsum Board</td>
<td>1,251</td>
<td>0%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Flat Glass</td>
<td>582</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Rock, Soil and Fines</td>
<td>541</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Remainder/Composite Glass</td>
<td>4,514</td>
<td>0.2%</td>
<td>0.1%</td>
<td>Remainder/Composite Inerts and Other</td>
<td>1,599,962</td>
<td>4.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Metal</td>
<td>122,889</td>
<td>3.7%</td>
<td>0.3%</td>
<td>Household Hazardous Waste (HHW)</td>
<td>10,813</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Tin/Steel Cans</td>
<td>30,862</td>
<td>0.9%</td>
<td>0.3%</td>
<td>Paint</td>
<td>312</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Major Appliances</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>Vehicle and Equipment Fluids</td>
<td>2,035</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Used Oil Filters</td>
<td>2</td>
<td>0%</td>
<td>0%</td>
<td>Used Oil</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Ferrous</td>
<td>38,019</td>
<td>1.1%</td>
<td>0.9%</td>
<td>Batteries</td>
<td>2,261</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Aluminum Cans</td>
<td>4,561</td>
<td>0.1%</td>
<td>0.1%</td>
<td>Remainder/Composite Household Hazardous</td>
<td>6,204</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other Non-Ferrous</td>
<td>6,111</td>
<td>0.2%</td>
<td>0.1%</td>
<td>Remainder/Composite Metal</td>
<td>43,535</td>
<td>1.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Electronics</td>
<td>23,464</td>
<td>0.7%</td>
<td>0.2%</td>
<td>Tires</td>
<td>1,167</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Brown Goods</td>
<td>5,384</td>
<td>0.2%</td>
<td>0.2%</td>
<td>Treated Medical Waste</td>
<td>2,820</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Computer-related Electronics</td>
<td>1,062</td>
<td>0.0%</td>
<td>0.1%</td>
<td>Bulky Items</td>
<td>140,147</td>
<td>4.4%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Other Small Consumer Electronics</td>
<td>3,393</td>
<td>0.1%</td>
<td>0.1%</td>
<td>Tires</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Video Display Devices</td>
<td>15,265</td>
<td>0.4%</td>
<td>0.6%</td>
<td>Remainder/Composite Special Waste</td>
<td>1,067</td>
<td>0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Plastic</td>
<td>243,583</td>
<td>7.3%</td>
<td>0.4%</td>
<td>Mixed Residue</td>
<td>38,183</td>
<td>1.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>PETE Containers</td>
<td>34,923</td>
<td>1.0%</td>
<td>0.4%</td>
<td>Mixed Residue</td>
<td>38,183</td>
<td>1.1%</td>
<td>1.4%</td>
</tr>
<tr>
<td>HDPE Containers</td>
<td>31,186</td>
<td>0.9%</td>
<td>0.3%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Miscellaneous Plastic Containers</td>
<td>26,026</td>
<td>0.8%</td>
<td>0.2%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Plastic Trash Bags</td>
<td>20,922</td>
<td>0.6%</td>
<td>0.2%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Plastic Grocery and Other Merchandise Bags</td>
<td>18,110</td>
<td>0.5%</td>
<td>0.2%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Non-Bag Commercial and Industrial Packaging Film</td>
<td>408</td>
<td>0.0%</td>
<td>0%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Film Products</td>
<td>4,741</td>
<td>0.1%</td>
<td>0.2%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Film</td>
<td>40,706</td>
<td>1.2%</td>
<td>0.4%</td>
<td></td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Durable Plastic Items</td>
<td>26,219</td>
<td>0.8%</td>
<td>0.2%</td>
<td>Durable Plastic Items</td>
<td>1,147</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Remainder/Composite Plastic</td>
<td>42,115</td>
<td>1.3%</td>
<td>0.3%</td>
<td>Remainder/Composite Plastic</td>
<td>50</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

 Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding. More detailed composition tables can be found in Appendix D: Expanded Statewide Waste Characterization Tables.
COMPOSITION STUDY

RESIDENTIAL MSW

PREPARED FOR:

South Bayside Waste Management Authority

Submitted by:

SloanVAZQUEZ LLC
Municipal Solid Waste & Recycling Advisors
18006 Sky Park Circle – Suite 205
Irvine, CA 92614
Office: 866.241.4533
Fax: 714.276.0625
info@sloanvazquez.com

November 26, 2012
TOTAL WASTE STREAM – VARIANCE ANALYSIS

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Mean Composition</th>
<th>Standard Deviation</th>
<th>Number of Samples</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mixed Paper (WET)</td>
<td>15.8%</td>
<td>7.7%</td>
<td>60</td>
<td>14.1% - 17.4%</td>
</tr>
<tr>
<td>2. Mixed Paper (DRY)</td>
<td>7.5%</td>
<td>4.9%</td>
<td>60</td>
<td>6.5% - 8.5%</td>
</tr>
<tr>
<td>3. OCC</td>
<td>0.4%</td>
<td>0.9%</td>
<td>60</td>
<td>0.3% - 0.6%</td>
</tr>
<tr>
<td>4. Aluminum UBC's</td>
<td>0.2%</td>
<td>0.2%</td>
<td>60</td>
<td>0.1% - 0.2%</td>
</tr>
<tr>
<td>5. Tin Cans</td>
<td>0.5%</td>
<td>0.5%</td>
<td>60</td>
<td>0.4% - 0.6%</td>
</tr>
<tr>
<td>6. Mixed Metals</td>
<td>1.0%</td>
<td>1.5%</td>
<td>60</td>
<td>0.7% - 1.3%</td>
</tr>
<tr>
<td>7. PETE Containers</td>
<td>0.6%</td>
<td>0.5%</td>
<td>60</td>
<td>0.5% - 0.7%</td>
</tr>
<tr>
<td>8. HDPE Containers</td>
<td>0.9%</td>
<td>0.9%</td>
<td>60</td>
<td>0.7% - 1.1%</td>
</tr>
<tr>
<td>9. Film Plastic</td>
<td>5.2%</td>
<td>2.6%</td>
<td>60</td>
<td>4.6% - 5.7%</td>
</tr>
<tr>
<td>10. All Other Plastic</td>
<td>2.3%</td>
<td>1.8%</td>
<td>60</td>
<td>1.9% - 2.7%</td>
</tr>
<tr>
<td>11. CRV Glass</td>
<td>1.2%</td>
<td>1.2%</td>
<td>60</td>
<td>0.9% - 1.4%</td>
</tr>
<tr>
<td>12. Other Glass</td>
<td>0.1%</td>
<td>0.5%</td>
<td>60</td>
<td>0.0% - 0.2%</td>
</tr>
<tr>
<td>13. Lumber</td>
<td>1.1%</td>
<td>2.4%</td>
<td>60</td>
<td>0.6% - 1.6%</td>
</tr>
<tr>
<td>14. Green/Yard Waste</td>
<td>0.6%</td>
<td>1.5%</td>
<td>60</td>
<td>0.2% - 0.9%</td>
</tr>
<tr>
<td>15. Food Waste</td>
<td>23.4%</td>
<td>11.4%</td>
<td>60</td>
<td>21.0% - 25.8%</td>
</tr>
<tr>
<td>16. Textiles</td>
<td>3.4%</td>
<td>2.9%</td>
<td>60</td>
<td>2.8% - 4.0%</td>
</tr>
<tr>
<td>17. Inerts</td>
<td>1.6%</td>
<td>3.6%</td>
<td>60</td>
<td>0.9% - 2.4%</td>
</tr>
<tr>
<td>18. Haz Waste</td>
<td>0.2%</td>
<td>0.9%</td>
<td>60</td>
<td>0.0% - 0.4%</td>
</tr>
<tr>
<td>19. E Waste</td>
<td>0.6%</td>
<td>1.4%</td>
<td>60</td>
<td>0.3% - 0.9%</td>
</tr>
<tr>
<td>20. Fines</td>
<td>9.5%</td>
<td>5.1%</td>
<td>60</td>
<td>8.4% - 10.5%</td>
</tr>
<tr>
<td>21. Refuse</td>
<td>23.9%</td>
<td>7.3%</td>
<td>60</td>
<td>22.4% - 25.5%</td>
</tr>
</tbody>
</table>

This study was single-family (1-4 units) per SBWMA staff Cell: 3/9/14.
MULTI-FAMILY DWELLING
MUNICIPAL SOLID WASTE
COMPOSITION STUDY

PREPARED FOR:

South Bayside Waste Management Authority

Submitted by:

SloanVAZQUEZ LLC
Municipal Solid Waste & Recycling Advisors
18006 Sky Park Circle – Suite 205
Irvine, CA 92614
Office: 866.241.4533
Fax: 714.276.0625
info@sloanjazquez.com

October 28, 2013
<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Mean Composition</th>
<th>Standard Deviation</th>
<th>Number of Samples</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mixed Paper (WET)</td>
<td>7.3%</td>
<td>6.7%</td>
<td>60.00</td>
<td>5.9%</td>
<td>8.7%</td>
</tr>
<tr>
<td>2. Mixed Paper (DRY)</td>
<td>6.7%</td>
<td>8.9%</td>
<td>60.00</td>
<td>4.8%</td>
<td>8.6%</td>
</tr>
<tr>
<td>3. OCC</td>
<td>4.6%</td>
<td>5.7%</td>
<td>60.00</td>
<td>3.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>4. Aluminum UBC's</td>
<td>0.4%</td>
<td>0.9%</td>
<td>60.00</td>
<td>0.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>5. Tin Cans</td>
<td>0.4%</td>
<td>0.5%</td>
<td>60.00</td>
<td>0.3%</td>
<td>0.5%</td>
</tr>
<tr>
<td>6. Mixed Metals</td>
<td>1.4%</td>
<td>2.6%</td>
<td>60.00</td>
<td>0.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>7. PEST Containers</td>
<td>0.9%</td>
<td>0.7%</td>
<td>60.00</td>
<td>0.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>8. HDPE Containers</td>
<td>0.9%</td>
<td>1.0%</td>
<td>60.00</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>9. Film Plastic</td>
<td>1.2%</td>
<td>1.0%</td>
<td>60.00</td>
<td>1.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>10. All Other Plastic</td>
<td>2.7%</td>
<td>3.1%</td>
<td>60.00</td>
<td>2.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>11. CRV Glass</td>
<td>1.7%</td>
<td>1.6%</td>
<td>60.00</td>
<td>1.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>12. Other Glass</td>
<td>1.1%</td>
<td>1.4%</td>
<td>60.00</td>
<td>0.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>13. Lumber</td>
<td>2.7%</td>
<td>8.4%</td>
<td>60.00</td>
<td>0.9%</td>
<td>4.5%</td>
</tr>
<tr>
<td>14. Green/Yard Waste</td>
<td>0.0%</td>
<td>0.2%</td>
<td>60.00</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>15. Food Waste</td>
<td>20.5%</td>
<td>10.0%</td>
<td>60.00</td>
<td>18.4%</td>
<td>22.6%</td>
</tr>
<tr>
<td>16. Textiles</td>
<td>5.2%</td>
<td>9.4%</td>
<td>60.00</td>
<td>3.2%</td>
<td>7.2%</td>
</tr>
<tr>
<td>17. Inerts</td>
<td>0.7%</td>
<td>4.7%</td>
<td>60.00</td>
<td>0.0%</td>
<td>1.7%</td>
</tr>
<tr>
<td>18. Haz Waste</td>
<td>1.0%</td>
<td>5.9%</td>
<td>60.00</td>
<td>0.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>19. E Waste</td>
<td>1.6%</td>
<td>3.7%</td>
<td>60.00</td>
<td>0.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>20. Fines</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>21. Refuse</td>
<td>38.9%</td>
<td>10.4%</td>
<td>60.00</td>
<td>36.7%</td>
<td>41.1%</td>
</tr>
<tr>
<td>TOTAL WEIGHT</td>
<td>100.0%</td>
<td>0.0%</td>
<td>60.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE RESULTS – MSW RANDOM LOCATIONS

1. Mixed Paper (WET), 8.2%
2. Mixed Paper (DRY), 4.5%
3. OCC, 5.8%
4. Aluminum UBCs, 0.5%
5. Tin Cans, 0.4%
6. Mixed Metals, 1.5%
7. PETE Containers, 1.0%
8. HDPE Containers, 1.1%
9. Film Plastic, 1.3%
10. All Other Plastics, 2.9%
11. CRV Glass, 1.8%
12. Other Glass, 1.0%
13. Lumber, 3.4%
14. Food Waste, 20.5%
15. Refuse, 37.4%
16. Textiles, 6.2%
17. Inerts, 0.1%
18. Hat Waste, 0.2%
19. E-Waste, 2.3%
20. Samples, 3.0%
Alameda County homeowners could pay $9.55 yearly for hazardous waste program

By Matt O'Brien mattobrien@bayareanewsgroup.com Contra Costa Times

The Alameda County Waste Management Authority wants to impose an annual $9.55-per-home fee to pay for its program to dispose of hazardous household waste, but multifamily apartment building owners are asking for a special break.

The agency, also known as StopWaste, says it needs the money to sustain and expand hours at its hazardous waste drop-off sites in Hayward, Fremont, Livermore and Oakland.

Residents deliver to those four sites each year about 1,400 tons of paint, batteries, solvents, fluorescent lamps, ammunition and other hazardous junk, but county residents also dump an estimated 3,400 tons of hazardous waste into the regular trash, down drains or onto streets, endangering the environment.

"Some people don't know. Some people think it's too hard to drive over to the drop-off center," said Gary Wolff, director of the waste authority. "Other people just don't care. They're breaking the law, but no one's enforcing that law."

By making hazardous waste disposal more convenient through the expansion of drop-off days and hours, Wolff said the agency can reduce how much toxic material ends up in landfills. But he also said the Oakland-based agency needs the proposed new revenue stream of about $5 million each year just to keep the program running. That's because its longtime funding source -- a $2.15-per-ton fee on municipal solid waste disposed in landfills -- no longer covers the costs, in part because more people are recycling, Wolff said.

Letters protesting the new fee have begun streaming into the Alameda County Registrar of Voters since a postcard announcing the plan was mailed out to residential property owners. The proposed fee would take effect in July and be collected through each homeowner's property tax roll. The fee would expire in 2024 and could only be reduced, not increased, by the waste authority.

The StopWaste board will vote March 26 on whether to adopt the new fee, and it would take a mass protest of more than 50 percent of all residential parcel owners to preclude the board from approving it. Such a protest is unlikely in a populous county with more than 1.5 million people living in 317,400 single-family homes and 159,700 multifamily building units.

But apartment building owners are hoping to persuade the board to tweak the fee before approving it, arguing that apartment dwellers produce less hazardous waste because they share paint and use less fertilizer and motor oil because they do not have their own gardens and garages. One Hayward-based association representing about 600 building owners is asking for the fee to be dropped to $5 per year for multifamily properties.

"I'm really hopeful they're going to step back for a moment and think about this," said Tim May, director of the Rental Housing Association Serving Southern Alameda County. "If you're a rental property owner, let's say you have 10 units, you're going to be using household hazardous waste in a more efficient way."
Residents can comment about the proposed fee during StopWaste meetings on Wednesday and again on March 26. Both meetings will take place at 3 p.m. at 1537 Webster St., in Oakland. For details, go to www.stopwaste.org/proposedhhwfee.
Hi Elvia,
Thank you for your statement.

However, oppositions must be in writing. Please print and either mail it or drop this letter of protest off to our office before 12 pm on March 26, 2014.


c. The protest must be in writing. Protests submitted by e-mail or facsimile, as well as verbal protests, will not be considered by the Board of Directors to determine whether a majority of the owners of the identified parcels or households subject to the fee have submitted protests. All members of the public are entitled to make comments at the public hearing whether or not they choose to submit a written protest or own property that would be subject to the proposed ordinance.
d. All written protests must be submitted before the conclusion of the noticed public hearing. The Executive Director shall not accept or consider any protest that is received after the conclusion of the public hearing.
e. Written protests must identify the affected property (by assessor’s parcel number), the number of residential units on the parcel, and must include the original signature of the person submitting the protest. The person signing the protest shall identify him or herself as an owner of the parcel as shown on the last equalized secured property tax assessment roll.
f. One written protest per parcel, submitted by the owner of the parcel whose name appears on the last equalized property tax assessment roll, shall be counted. If one of the owners of a parcel that is owned by more than one person or entity submits a written protest, that protest shall be included in the calculation of whether there is a majority protest against the fee or charge. Under all circumstances, only one protest per parcel shall be counted.

From: Elvia Selby [mailto:elviaselby@sbcglobal.net]
Sent: Saturday, February 15, 2014 12:10 PM
To: hhwpject
Subject: PROPOSED FEE

PARCEL NUMBER: 077D-1429-015-00

OFFICIAL PROTEST AGAINST THE $9.55 PER YEAR TEN YEAR FEE TO SUPPORT LOCAL HOUSEHOLD HAZARDOUS WASTE.
MY RESIDENCE IS IN A TEN UNIT COMPLEX AND I HAVE NO CONTROL OVER THE OTHER NINE MEMBERS OF THE ASSOCIATION.

PLEASE INCLUDE MY OBJECTIONS AT YOUR MARCH 26, 2014 MEETING.
THANK YOU.
ELVIA M. SELBY
Matthew Kaser
4793 Ewing Road
Castro Valley CA 94546

To: Stop Waste
1537 Webster Street
Oakland
CA 94612

18th January 2014

Re: New Household Waste Collection and Management Fee
Parcel Number: 084D 1250 026 03

Sirs,

This is reply to the call for opinions from residents of Alameda County with regard to adoption of a New Household Waste Collection and Management Fee. I request that this letter be made part of the record of the Meeting of February 26th, 2014, at 1537 Webster Street, Oakland, CA 94612.

This is an entirely admirable proposal and should encourage more individuals and households to be able to dispose of household hazardous waste in a timely and efficient manner.

I have read as much of the materials disclosed online at www.stopwaste.org, but have been unable to find out how collection of household waste will be implemented.

Currently, it appears that the only way for an individual to have household hazardous waste disposed is to (i) look up online where he or she must deliver the waste to, which can be one of several locations scattered throughout Alameda County; (ii) look up online when that waste facility might be open, a limited number of weekday morning hours and Saturday mornings; (iii) determine when he or she is able to spend the time to drive (yes, drive) to that facility on a day and a time when that individual is able to take time off work; and (iv) spend time and energy bringing the waste to the facility, sometimes only to find that the facility is closed for the day due to some other circumstance.

This seems to me to be a rather inefficient means for disposal of waste at the environmental and community level, leading to use of energy (vehicle fuel), loss of productivity (time taken off work), and the occasional wasted journey.
My first immediate thoughts when I received the letter from Alameda County WMA (AMWMA) informing us of the New Household Waste Collection and Management Fee, was that this would instigate perhaps a monthly (or bi-weekly) curbside collection of household hazardous waste, much in the way that Waste Management of Alameda County (WMAC) collects waste. This would obviate all the excess energy used and time spent by an individual driving to an Alameda County Household Hazardous Waste facility to dispose of their waste and be replaced by a more ‘green-friendly’ system of regular collections from Alameda residencies. This, I believe, would be far more energy efficient and better use of community-wide resources in Alameda County. I called the ACWMA that day but was told by the helpful staff member that she was unaware whether this would be part of the collection cycle and she suggested I write to you. In addition, as I mentioned above, I have visited the ACWMA website and can find no mention of how ‘collection’ of waste would be implemented.

Although ACWMA might incur some costs to purchase and distribute containers for such waste, for example a small plastic box such as used by Safeway.com, this would be recouped by reducing the overall societal cost of dumping such waste in landfill, as well as the fuel saved by individuals driving to a waste facility. If the waste were to be picked up by a ACWMA vehicle on the same day as the regular trash day (WMAC) that would be even more efficient for the community.

My suggestions are based upon the study of ecology and how interdependent all individuals are within a certain environment/community and how to efficiently manage energy resources within that community. Please could the Authority, at the hearing on February 26th, 2014, consider this approach of collecting such waste?

Respectfully,

Matthew Kaser, D.Phil.
(510) 220-2444 (c)
(510) 537-2040 (w)
February 21, 2014

ALAMEDA COUNTY WASTE MANAGEMENT AUTHORITY

1537 WEBSTER STREET

OAKLAND, CA 94612

RE: PUBLIC HEARINGS

TO WHOM IT MAY CONCERN:

UNFORTUNATELY I AM UNABLE TO ATTEND YOUR MEETINGS ON THE HAZARDOUS WASTE PROPOSED FEE OF $9.95, BUT WOULD LIKE MY OPINION HEARD.

I DO NOT BELIEVE THIS FEE IS VALID DUE TO THE FACT THAT WE ALREADY PAY MANY UP FRONT WASTE DISPOSAL FEES, IE WHEN WE PURCHASE PAINT WE NOW HAVE TO PAY $.75 PER CAN FOR HAZARDOUS WASTE; WHEN WE GET OUR PETS VACCINATED, WE PAY A $4.95 HAZARDOUS WASTE FEE – WHICH IS OUTRAGEOUS! I KNOW THERE ARE PROBABLY OTHER AREAS WE GET CHARGED AN UP FRONT FEE AND NOW TO ADD AN ADDITIONAL $9.95 IS ABSURD.

WHEN WILL ALL THESE ADDED COSTS END? I AM A SENIOR, AND LIKE MANY SENIORS AM ON A VERY LIMITED INCOME. THIS NEW FEE WOULD JUST ADD YET ANOTHER STRAIN ON OUR INCOME.

REGARDS,

MARGARET WHEELER

35814 BLAIR PL

FREMONT, CA 94536
Mr. Taylor:

At last Wednesday's ACWMA Board meeting and "public hearing" of February 26, 2011, I was surprised to learn that my complaint was not made known, nor copies of, provided to all of the Board members. As you are aware, by my letter (e-mail) of February 6, 2014 mailed to the ACWMA Executive Director, Mr. Gary Wolff, I lodged with the Agency what clearly must be construed as a formal complaint and legal challenge to the proposed Household Hazardous Waste (HHW) tax (fee) and public balloting procedure implemented.

As the seventeen member Board is the legislative and governing body of the ACWMA it is imperative that it (they) be provided any and all material and or information regarding these issues and my legal challenge thereto. Furthermore, it must be assumed that Mr. Wolff has a clear and legal obligation to convey and provide said information and material to all board members and all other interested parties so designating themselves as such.

Additionally, as the issue was agendized as a "public hearing" (by which to lodge protests) my written objections to the procedure were necessarily and legally required to be made available at said meeting to the general public in attendance as well. Considering that the three (3) minute speaking time imposed by the agency is sorely inadequate it necessitates distribution of any and all written material constituting an objection (protest) to the proposal, whereby, in accordance with Cal. Const. Article XIIID, Section 6(a)(2): At the public hearing the agency shall consider all protests against the proposed fee or charge." Unquestionably, the law recognizes the need and acceptance of written objections as well as verbal and places no limit on either.

As the Agency failed to make available copies of my duly submitted objections, at the Public Hearing of February 26th, I am hereby requesting that copies be provided to all those in attendance, similarly as the Agency undertook in responding to those who wrote news articles. Or, in the alternative, post the objections on the ACWMA, WEB site.

THE LEGAL ISSUES

There appears to be two distinct issues and or questions:

1.) Does the ACWMA Joint Powers Authority have the express legal authority to tax or implement fees or conduct an election for same?

2.) Is the procedure for implementation by the ACWMA and assessment of the proposed fee (tax, charge) in compliance with the California Constitution, Article XIIID, (Proposition 218, November, 1996) or Government Code, sections 53750 - 53755 (Prop 218 Omnibus Implementation Act).
Regarding Number One - It is our information and position that the ACWMA Joint Powers Authority (JPA) lacks the required express legal authority to impose said Tax and or Fee. Public Resources Code, Section 41901 (cited in ACWMA Ordinance No. 2009-01, December 16, 2009) authorizes a "city" or "county" to impose such fees - but, not the JPA as claimed or maintained by that Ordinance. Further, the JPA fails to cite any controlling statute or law conveying or delegating those taxing "powers" to said Authority members as claimed.

Regarding Number Two - As your last e-mail notes, Proposition 218 (codified as Article XIIIC and XIIID of the California Constitution) is controlling. By Prop 218, specifically Article XIIID, Sections 1 through 6, there appears to be four separate issues - commencing with Section 6:

A.) Section 6. "Property Related Fees and Charges" - requires Voter Approval for new or increased fees and charges, (either by a majority of the property owners or a 2/3's vote by the electorate of the affected area - at the agency's option) except for fees or charges for "Sewer", "Water", and "Refuse Collection Services". Clearly, the proposed fees for the Household Hazardous Waste (HHW) program is not a Sewer, Water, or a Waste Collection Service, and consequently not exempted from a vote of the electorate or property owners by majority or by two thirds.

B.) Even in the event it were determined that the fee is permissible under "refuse collection services" and not subject to the majority or 2/2's vote, it nevertheless must still meet all five (5) Constitutional requirements of Section 6, subdivision (b)(1), (2), (3), (4), and (5).

Subdivision (b)(3) in particular, severely restricts the implementation of the proposed fee. "The amount of the fee or charge imposed upon any parcel or person ... shall not exceed the proportional cost of the service attributable to the parcel." In other words, the Agency must substantiate (prove) the actual cost of the service provided to each individual parcel on an individual parcel basis. (See, Silicon Valley Taxpayers Association v. Santa Clara County Open Space Authority, (2008) 44 Cal 4th 431.)

C.) And, also under (b)(5) - "In any legal action contesting the validity of a fee or charge, the burden shall be on the agency to demonstrate compliance with this Article." With this provision the onus is squarely on the Agency to prove there is an actual benefit to the parcel.

D.) Lastly, under Section 5, of "the 218 Proposition" (not the Constitutional provision) titled, Liberal Construction it is provided: "The provisions of this act shall be liberally construed to effectuate its purpose of limiting local government revenue and enhancing taxpayers consent." This provision is contrary to the usual scheme where the deference is generally given to the public agency. This also puts the onus on the Agency to clearly justify the process and legitimacy of its proposal.

Mr. Taylor, your recent e-mail cites Kern County Farm Bureau v. County of Kern and again you cite H & S Code, section 5470 et seq. As you are no doubt fully aware the Kern County decision was October 29, 1993, long prior to the voter's approval of the "Right To
Vote" initiative, Proposition 218, November 1996, overriding Kern County and many other previous court decisions.

If indeed, Kern County holds any validity at all it would only be on two fronts, (1) the landfill fee is a valid assessment under H & S sec. 5471 and (2), sec. 5471 permits special assessments for the funding of improvements to landfills. However, both findings are specifically limited to "landfills" and as a "special assessment" would certainly now, (under Prop 218) require a 2/3's vote. Clearly, Kern County is not on point and clearly distinguishable.

It is notable that the Santa Clara County Open Space (SCCOS) decision (noted above) from the Supreme court occurred on July 14, 2008. The next day, July 15, 2008 the Oakland City Council, by special secession, withdrew its plans to increase the Landscape and Lighting Assessment District (LLAD) fee, following a questionable vote and outrage from the public, and citing the adverse effect of the SCCOS decision.

Additionally, the City of Oakland, in its recent attempt to renew the Wildfire Prevention District Fee (Tax) opted not to utilize the same Prop 218 procedures, again, because of what it claimed to be a prohibition by "recent court rulings", clearly, the SCCOS decision. In short, the SCCOS Supreme Court findings and decision prohibits the ACWMA, HHW fee proposal.

The last issue - Who Votes! The "Procedural" Resolution, #WMA 2013-06 As Amended by Resolution # 2014-02, (Dec. 18, 2013 and Jan. 22, 2014 respectively) at paragraph # (5)(f) the Resolution provision so notes: "One written protest per parcel, submitted by the owner of the parcel ..., shall be counted." And, the last sentence of the same paragraph reads: "Under all circumstances, only one protest per parcel shall be counted."

Yet, at the meeting of February 26, 2013 it was apparent that many property owners with multiple living units received several protest ballots (supposedly, one per unit) and fully expect to cast as many, at their discretion - which appears to be contrary to the provisions of the procedural Resolution. After the meeting, when I questioned you and Mr. Wolff about this apparent discrepancy you directed my attention to paragraph (j), Section 1, Findings, of the Draft Ordinance, # 2014- (blank), Attachment A., as the reasoning. However, the language is far from being clear.

For starters, this Ordinance is a "draft" not yet of any effect, until (if) adopted by the Board on March 26, 2014, and quite frankly, the language of paragraph (j) is nonsensical. More importantly, one cannot make voting alterations, requirements or provisions retroactive. You clearly can not apply these requirements (whatever they are deemed to be) after the voting - as the first sentence reads: "Following the protest hearing..." In this regard, the proposal is fatally flawed and must immediately be withdrawn.

Once again, your attention to this matter is greatly appreciated,

David E. Mix
Mr. Taylor and ACWMA Board Members:

Unfortunately, you haven’t responded to my last correspondence of February 13, 2014 challenging your contention that the Health & Safety Code, section 5470(f) provides the necessary authority for the Alameda County Waste Management Authority to impose the subject (HHW) tax.

Clearly, as I pointed out in my reply, H & S, section 5470(f) does not provide the necessary authority to conduct a "majority protest" election (mail ballot procedure). Nor, does that section or any other statute under California law allow the ACWMA to avoid the 2/3 vote requirements of the California Constitution.

When I first spoke to the Executive Director, Mr. Gary Wolff, regarding this matter he assured me that ACWMA had done its due diligence in researching the legality of the proposal. Unfortunately, he refused to provide any of the supposed research material, supporting documents, or reference to controlling laws or cases. (See e-mail letter of February 6, 2014.) Likewise, my inquiries with you have not been fruitful. YOU HAVE NOT provided any legal basis for the proposed HHW tax. As noted above, a plain reading of H & S sec. 5470(f) does not provide the required authority and it appears you are purposely avoiding citing any substantive statutes or case law in support of your position. It must therefore be assumed - there simply isn't any.

As General Counsel, if you indeed have material or information supporting the legality of the tax proposal it would seem appropriate and incumbent on you to provide that information, not only to me but to the ACWMA Board as well. Once again, and in order to avoid what could be a costly and protracted legal action, please provide the information requested.

As requested previously, please provide copies of this correspondence to all Board Members and all other interested parties.

David E. Mix
Councilman Kalb:

This is a follow-up to my previous letter. Again, due to the Agency lacking an e-mail service I ask that you forward a copy to the Executive Director and that he provide copies for the Board.

D.E. Mix

Re: The Alameda County Waste Management Authority proposed Tax (fee)

This is not about the merits or the need for recycling but foremost, about the Right To Vote! Unfortunately the voting scheme and election process chosen by the, Alameda County Waste Management Authority (ACWMA) to implement this Tax is unarguably a sham. It is not an election at all and the stench of it is worse than months of fermented garbage.

It is termed a "Majority Protest". It was used recently by many cities to substantially increase their "Sewer Fees" - Oakland's have now increased to a dramatic $515 annually (see property tax and water bills). That is more than Oakland's Measure Y (violence prevention); Measure Q (library); the AC Transit tax; the Hills Wildfire Assessments; and the LLAD tax, combined.

The way it works is simple - the majority of property owners must vote No! (protest) or it passes. If you don't vote, your non-vote is counted as a Yes. You could actually be a deceased owner of record, and your non-vote would be counted as yes. All non votes are yes's, family trust, corporate ownership, bank foreclosure, etc. The notices (ballots) are sent to the owners of record under the County, many go to the mortgage companies, the bank, etc., or for a multitude of reasons, they never get there.

Additionally, "renters" can't vote, they are not property owners. And lastly, only one vote is allowed per occupied residential parcel. You could have a dozen registered voters living under one roof, but allowed only "one" vote. There are dozens of other disparities, commercial businessses, private schools, churches, hospitals, care facilities, cemeteries, country clubs, swim and tennis clubs, restaurants, etc. etc. They all pay the tax but are not permitted to vote.
The tax is clearly a "shoe-in" for the agency - that is exactly why the ACWMA selected it. Unarguably, the "majority protest" voting procedure is by far the most insidious and undemocratic voting scheme found in California law books.

Additionally, the so-called public Hearing scheduled for March 26th, is not a hearing at all. It is merely a deadline for the voting at which time the (previously tallied) results are announced. Considering all protests is a complete farce - in reality (and by law) it is no more than counting the No's (protest votes) and finding that they fail to meet the criteria of a "majority protest".

The scheme is further tainted by the absence of the regular election material, a sample ballot and arguments for and against, City auditor or City Attorney unbiased opinion, etc., and further compounded by using a "mail ballot" procedure which historically favors the public agency and with dramatically low participation. Oakland's recent mail ballot was barely 29% and the one before was a mere 23% while Piedmont's recent Feb. 4th election came in a little over 30%. Mail Ballots coupled with the odd election dates virtually beg for low participation. Further, there are no FPPC campaign reporting requirements should money be spent for promotion.

However, and much more importantly, the ACWMA does not have the legal authority to either conduct an election nor collect a tax. Whether it be termed a "fee" or a tax, or a "majority protest" or an election - the Agency clearly lacks legal authority. A close read of their enabling Ordinance and draft Resolution reveals the poignant and woeful absence of the necessary code and state statute citations. The Executive Director, Gary Wolff by his recent letter to the editor notes Proposition 218 (1996 Right to Vote Act) but their General Counsel, R. Taylor, fails to expand on Wolff's notion and limits his comments to critiquing a previous writer's reference to the 14th Amendment.

To be clear, the ACWMA lacks the legal authority. It is a Joint Powers Agency (JPA) comprised of the 14 Alameda County cities and two sanitary districts. The Alameda County Source Reduction and Recycling Board (Recycling Board) created in 1990 is a separate entity. "Stop Waste" is yet another layer of bureaucracy, formed by combining the two boards. That entity under that connotation acts as one public agency - their ability to act under the combined boards is speculative and questionable.

The "Stop Waste" entity created the recently mailed, brown and green hard cardboard, (with turning wheel) to all residents - termed the "Benchmark Service". The fee, as noted on the back is $1.81 (more for larger containers) collected with your garbage bill - all without public knowledge or voter approval. Consequently, you may "opt out" if done by March 31st, (see back cover).

Notably, the ACWMA has absolutely nothing to do with "Waste Management of Alameda County" - the private company who is contracted to pick up and dispose of our garbage. Nor, does ACWMA have anything to do with Waste Management's recycling programs (grey bens, green bins, little kitchen waste pails, regular garbage, etc.) Nor, does it have anything to do with disposal of electronic equipment, TV's, computers, etc.

The ACWMA is strictly a governmental regulatory agency - it doesn't pick-up or dispose of anything.
Lastly, the proposed fee is solely for the Household Hazardous Waste program (HHW), specifically, "paint", "solvents", and "pesticides" and not in support of the "recycling" programs operated by Waste Management (the Garbage Company). Under the law the fee must exclusively be used for the HHW program, there can be no mixing of funds. The Alameda County Environmental Health Department operates the HHW facilities, however, the financing for actual operations is not terribly clear due to many different factors.

Please note, while I hardly support recycling, free, fair and open election are paramount to all government sponsored programs, regardless of how commendable they may be.

David E. Mix
Oakland Native

Ph (510) 339 1519

1133 Glencourt Drive
Oakland, CA 94611
From: Darline Mix <de.louise@att.net>
Date: February 6, 2014 at 4:31:58 PM PST
To: "dkalb@oaklandnet.com" <dkalb@oaklandnet.com>, "cbs@acgov.org" <cbs@acgov.org>, 
"supervisorcarson@acgov.org" <supervisorcarson@acgov.org>, "council@oaklandnet.com" 
<council@oaklandnet.com>, "dsantana@oaklandnet.com" <dsantana@oaklandnet.com>
Cc: "martz@bayareanewsgroup.com" <martz@bayareanewsgroup.com>
Subject: Alameda County Waste Management Authority - prosed fee ("TAX")
Reply-To: Darline Mix <de.louise@att.net>

Councilman Kalb:

Because you are a board member representing the City of Oakland on the 
Waste Management Authority and the Authority does not have "e-mail" I am 
directing this correspondence to your office. I will forward a copy by U.S. Mail 
to the Executive Director, Mr. Gary Wolff and by this letter ask that he, as 
Director of the Authority, provide copies to all board members and any and all 
other interested parties. Also, because it is a County-wide proposal and 
Oakland is party to the JPA I am CC ing Oakland City Council and City 
Administrator Santana.

February 6, 2014

Mr. Gary Wolff, Executive Director
Alameda County
Waste Management Authority
1537 Webster Street
Oakland, CA 94612-3355

Re: Proposed Household Hazardous Waste Collection and Disposal Fee

Dear Mr. Wolff:

As you will recall I spoke to you recently by phone concerning the above 
captioned matter. Firstly, there are a couple of housekeeping issues. (1.) I never 
received a so-called ballot regarding the proposed fee and as reported by 
several other people. And despite my request, I have not been provided one. (2.) The phone number listed in the material (1-877-786-7927) 
continually rings "busy". It clearly does no good to list an "information" number 
and never pick it up - a complaint expressed by several other people. (3.) The
two different dates, February 26, 2014 and March 26, 2014, is confusing again, a common complaint by several others.

The Proposed Fee: As you will recall, during our conversation I took the position that the Alameda County Waste Management Authority (ACWMA) lacked the required legal authority to either ballot for (conduct an election) or impose any such fee. Your position was and I presume still is, to the contrary. During our conversation you were insistent that the matter and the particular issues were thoroughly reviewed and approved by legal counsel. You also insisted that the proposal is by the authority and under the provisions of particular California State Statutes and applicable laws.

However, when I asked that you provide copies of the material and documents supporting your position, you blatantly refused. Further, neither the enabling Ordinance, No. 2014, nor the Resolution # WMA 2013-06 (and as amended by Resolution #WMA 2014-02) cite any such legal authority, state statutes, laws, or codes.

The only codes cited in the material are Government Code, section 6254, dealing with "public records", section 6066, concerning "notice publication", and CEQA Regulations, section 15378(b)(4), and 15308, "project exemption".

We therefore take the position that the ACWMA lacks any and all legal authority to either, ballot the Alameda County electorate, residents, citizens, taxpayers, property owners, or otherwise, in order to impose a tax, fee, assessment, charge, or otherwise, or to "impose" (regardless of the outcome of a vote or an election) a fee, tax, assessment, charge, or other remuneration under the guise of a "Household Hazardous Waste Collection and Disposal Fee."

Please take notice that this correspondence is a formal complaint and notification that we seek immediate termination of the ACWMA proposal and of our intent to take whatever action deemed necessary in order to adequately protect our interest.

Your immediate attention to this matter is greatly appreciated.

David E. Mix

Ph (510) 339 1519

1133 Glencourt Drive
Oakland, CA 94611
April 2014
Meetings Schedule

Alameda County Waste Management Authority, The Energy Council, & Source Reduction and Recycling Board
(Meetings are held at StopWaste unless otherwise noted)

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