



#### **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.

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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 Option¹ 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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<sup>&</sup>lt;sup>1</sup> Gary Wolff, Executive Director, StopWaste.Org, "Household Hazardous Waste (HHW) Services and Funding", Staff Report to the Authority Board, July 18, 2013.

Mr. Gary Wolff October 4, 2013 Page 2 of 15

- 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.



Mr. Gary Wolff October 4, 2013 Page 3 of 15

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<sup>2</sup>, 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.<sup>3</sup> 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.<sup>4</sup> The Review was intended as a first step towards determining how best to address the long-term funding issue, beginning with an

<sup>&</sup>lt;sup>2</sup> See Attachment 2; current and past fiscal year budget data from Program staff..

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Robert Hilton, Peter Deibler, HF&H Consultants, LLC, "HHW Productivity Review – Final Report", February 13, 2012. The summary of key results was presented to the Authority Board in late 2011.



Mr. Gary Wolff October 4, 2013 Page 4 of 15

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.



Mr. Gary Wolff October 4, 2013 Page 5 of 15

**Table 1 Program Service Levels** 

		ram Service Levels Program Options	
Service Metric	Proposed System Expansion	Austerity	Current
Number of Households/Year; Annual Tons	<ul> <li>72,000 households + 6,000 households for one-day events;</li> <li>2501 tons per year</li> </ul>	<ul><li>About 20,000 households;</li><li>643 tons per year</li></ul>	<ul><li>45,000 households;</li><li>1443 tons per year</li></ul>
Weekly Schedule	<ul> <li>Oakland and Fremont open Wednesday thru Saturday</li> <li>Hayward and Livermore open Friday, Saturday</li> </ul>	<ul> <li>Hayward Oakland and Livermore facilities operating 3 days per week on rotating basis one facility at a time</li> <li>Fremont facility likely to reduce operating days and or hours</li> </ul>	<ul> <li>Oakland and Fremont Facilities open every week</li> <li>Hayward and Livermore alternating weekly</li> </ul>
Household Hours	<ul> <li>5.5 hours per open weekday</li> <li>Three facilities (other than Fremont) open 7 hours on Saturdays, Fremont facility open 8 hours on Saturday</li> </ul>	4 hours per open day, fewer open days	<ul> <li>Three facilities (other than Fremont): 4 hours/open day</li> <li>Fremont facility: 5.5 hrs weekdays 8 hrs Saturdays</li> </ul>
Total Facility- Days/Month (4 weeks)	<ul> <li>48 household days</li> <li>12-16 business days including drop-in days</li> </ul>	24 household days; 6 business days	<ul><li>40 household days</li><li>10 business day; including drop-in days</li></ul>
Total Days Per Year	621 household days; 48 business days	147 household days; 84 business days	399 household days; 124 business days
Enhancements	<ul> <li>12 one-day drop-off events</li> <li>2-4 additional business drop-in days</li> <li>County facilities accepting E-Waste</li> <li>Enhanced outreach to support higher participation rates</li> <li>Point-of-Purchase Program to increase product user awareness</li> </ul>	None	None

Mr. Gary Wolff October 4, 2013 Page 6 of 15

**Table 2 Program Staffing Levels** 

	Number	of FTE Positions Program	Options
Staffing Category	Proposed System Expansion	Austerity	Current
Supervisor	1.0	1.0	1.0
Senior Hazmat			
Specialist	3.0	1.0	2.0
Hazmat Specialist	3.0	0.0	1.0
Technician	3.0	1.0	3.0
County Staff Laborer	2.4	2.0	1.2
Contract Staff			
("Temporary") Laborer	4.0	1.0	4.0
Annual Budget			
Overtime Hours	0.5 FTE	0.5 FTE	0.5 FTE
TOTALS	16.9 FTE	6.5 FTE	12.7 FTE

#### **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.

Mr. Gary Wolff October 4, 2013 Page 7 of 15

- 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.<sup>5</sup> 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.
- 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

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<sup>&</sup>lt;sup>5</sup> 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.

Mr. Gary Wolff October 4, 2013 Page 8 of 15

> 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:

- 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. <u>Local Collection Programs:</u> Local city-sponsored lamp and battery collection programs will need to be cut back or eliminated.
- 3. <u>Retail Collection:</u> Hardware store collection programs will no longer be free for hardware stores, and most will discontinue collection.
- 4. <u>Small Businesses:</u> Availability of appointments for small businesses will be severely reduced, and drop-in hours may be curtailed or eliminated.
- 5. <u>Hotline and Referral Service:</u> 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.
- 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.

Mr. Gary Wolff October 4, 2013 Page 9 of 15

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

Mr. Gary Wolff October 4, 2013 Page 10 of 15

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.<sup>6</sup> 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.<sup>7</sup> 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

<sup>&</sup>lt;sup>6</sup> See further discussion of PaintCare later in this report.

<sup>&</sup>lt;sup>7</sup> We have assumed that "management staff" includes the Supervisor and Senior Hazmat Specialist positions.



Mr. Gary Wolff October 4, 2013 Page 11 of 15

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.



Mr. Gary Wolff October 4, 2013 Page 12 of 15

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:

- 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 31<sup>st</sup>, 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

Mr. Gary Wolff October 4, 2013 Page 13 of 15

- 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.



Mr. Gary Wolff October 4, 2013 Page 14 of 15

#### **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<sup>8</sup>. 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.
- 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.
- 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<sup>9</sup>.

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.

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<sup>&</sup>lt;sup>8</sup> See State Department of Finance, Table E-5 at

http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php

<sup>&</sup>lt;sup>9</sup> Jason Guo, Alameda County Auditor's Office, Tax Analysis, email to Garry Wolff, StopWaste, October 2, 2013.



Mr. Gary Wolff October 4, 2013 Page 15 of 15

**Table 3 Proposed Funding Levels** 

	Progran	n Options
	Proposed System Expansion	Austerity
New Annual Fee	\$9.55	n/a
Number of Residential Units	Single-Family 371,407 units	n/a
	Multi-Family 159,717 units	
Resulting Average Annual	\$5,072,038	n/a
Revenue		
Fund Balance at Close of FY 19-20	\$30,296	\$(400,629)

Very truly yours,

HF&H CONSULTANTS, LLC

Rallert of Dilton

Robert D. Hilton, CMC

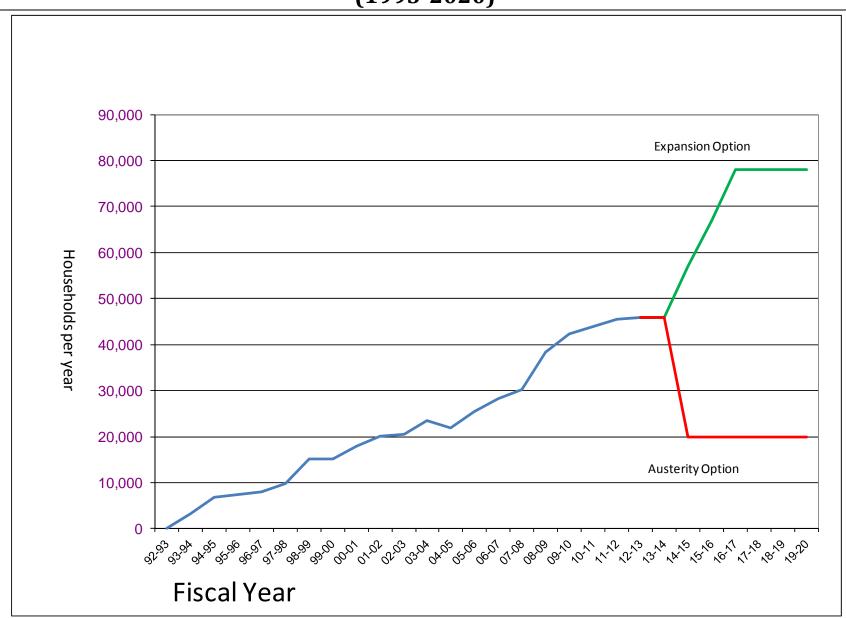
President

Peter M. Deibler

Senior Project Manager

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# ATTACHMENT 1 HHW SYSTEM HOUSEHOLD PAST, AND PROJECTED PARTICIPATION (1993-2020)



### ATTACHMENT 2 SYSTEM EXPANSION - PROJECTED REVENUE GENERATION

		Cumulative		Revenue						System Expenses					_	umulative
Year (FY)			Current Tip Fee (\$2.15/ton)		Other Ongoing Revenue		New Revenue Required to Fund Program		Three Facilities		Fund Transfer for Fremont Facility		Annual Net Balance		System End Balance	
2011-12	\$	5,182,362	\$	2,264,221	\$	84,350	\$	-	\$	2,967,856	\$	355,250	\$	(974,535)	\$	4,207,827
2012-13	\$	4,207,827	\$	2,119,900	\$	194,350	\$	-	\$	3,398,610	\$	360,295	\$	(1,444,654)	\$	2,763,173
2013-14	\$	2,763,173	\$	1,984,450	\$	94,350	\$	-	\$	3,500,350	\$	448,915	\$	(1,870,464)	\$	892,709
2014-15	\$	892,709	\$	1,849,000	\$	94,350	\$	5,072,038	\$	5,056,908	\$	669,287	\$	1,289,193	\$	2,181,902
2015-16	\$	2,181,902	\$	1,713,550	\$	94,350	\$	5,072,038	\$	5,992,399	\$	689,056	\$	198,484	\$	2,380,385
2016-17	\$	2,380,385	\$	1,578,100	\$	94,350	\$	5,072,038	\$	6,146,670	\$	709,319	\$	(111,501)	\$	2,268,885
2017-18	\$	2,268,885	\$	1,442,650	\$	94,350	\$	5,072,038	\$	6,304,798	\$	730,089	\$	(425,848)	\$	1,843,037
2018-19	\$	1,843,037	\$	1,307,200	\$	94,350	\$	5,072,038	\$	6,466,878	\$	751,378	\$	(744,668)	\$	1,098,368
2019-20	\$	1,098,368	\$	1,171,750	\$	94,350	\$	5,072,038	\$	6,633,011	\$	773,199	\$	(1,068,072)	\$	30,296
<u>Total</u>																
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

Year	Annual Percentage Increase* [1]	Salaries & Employee Benefits	Services & Supplies [2] [3] [4]	Transportation & Disposal Contract	County- Provided Services (ISF) [5]	PaintCare Savings	Overhead [6]	County Auditor Processing Cost	Subtotal Expenses	Net Fremont Transfer [7]	Total System Expenses
FY 12-13	n/a	\$ 1,195,465	\$ 488,651	\$ 1,088,776	\$ 261,581	\$ -	\$ 364,137	\$ -	\$ 3,398,610	\$ 360,295	\$ 3,758,905
FY 13-14	2.5%	\$ 1,225,352	\$ 750,867	\$ 1,115,995	\$ 268,121	\$ (263,225)	\$ 403,240	\$ -	\$ 3,500,350	\$ 448,915	\$ 3,949,265
FY 14-15											
July 1-December 31, 2014	2.5%	\$ 804,479	\$ 465,282	\$ 571,948	\$ 137,412	\$ (131,612)	\$ 237,494	\$ 42,392	\$ 2,127,395	\$ 334,643	\$ 2,462,038
January 1-June 30, 2015 [8]	2.5%	\$ 987,059	\$ 618,536	\$ 902,897	\$ 186,806	\$ (131,612)	\$ 323,436	\$ 42,392	\$ 2,929,514	\$ 334,643	\$ 3,264,157
FY 14-15 <i>Total</i>		\$ 1,791,539	\$ 1,083,818	\$ 1,474,845	\$ 324,218	\$ (263,225)	\$ 560,930	\$ 84,783	\$ 5,056,908	\$ 669,287	\$ 5,726,195
FY 15-16 [9]	2.5%	\$ 1,998,490	\$ 1,304,876	\$ 1,828,088	\$ 378,225	\$ (263,225)	\$ 661,161	\$ 84,783	\$ 5,992,399	\$ 689,056	\$ 6,681,455
FY 16-17	2.5%	\$ 2,048,452	\$ 1,337,498	\$ 1,873,790	\$ 387,681	\$ (263,225)	\$ 677,690	\$ 84,783	\$ 6,146,670	\$ 709,319	\$ 6,855,989
FY 17-18	2.5%	\$ 2,099,664	\$ 1,370,936	\$ 1,920,634	\$ 397,373	\$ (263,225)	\$ 694,633	\$ 84,783	\$ 6,304,798	\$ 730,089	\$ 7,034,886
FY 18-19	2.5%	\$ 2,152,155	\$ 1,405,209	\$ 1,968,650	\$ 407,307	\$ (263,225)	\$ 711,999	\$ 84,783	\$ 6,466,878	\$ 751,378	\$ 7,218,256
FY 19-20	2.5%	\$ 2,205,959	\$ 1,440,339	\$ 2,017,867	\$ 417,490	\$ (263,225)	\$ 729,799	\$ 84,783	\$ 6,633,011	\$ 773,199	\$ 7,406,211

<sup>\*</sup> 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

			Revenue						System Expenses						_	umulative
Year (FY)  Beginning Bala			Current Tip Fee (\$2.15 per ton)		Other Ongoing Revenue		New Revenue Required to Fund Program			County Program		Fund Transfer for Fremont Facility		Annual Net Balance		ystem End Balance
2011-12	\$	5,182,362	\$	2,264,221	\$	84,350	\$	-	\$	2,967,856	\$	355,250	\$	(974,535)	\$	4,207,827
2012-13	\$	4,207,827	\$	2,119,900	\$	194,350	\$	-	\$	3,398,610	\$	360,295	\$	(1,444,654)	\$	2,763,173
2013-14	\$	2,763,173	\$	1,984,450	\$	94,350	\$	-	\$	3,500,350	\$	189,915	\$	(1,611,464)	\$	1,151,709
2014-15	\$	1,151,709	\$	1,849,000	\$	94,350	\$	-	\$	1,611,368	\$	135,300	\$	196,682	\$	1,348,391
2015-16	\$	1,348,391	\$	1,713,550	\$	94,350	\$	-	\$	1,653,163	\$	138,683	\$	16,055	\$	1,364,446
2016-17	\$	1,364,446	\$	1,578,100	\$	94,350	\$	-	\$	1,696,003	\$	142,150	\$	(165,702)	\$	1,198,744
2017-18	\$	1,198,744	\$	1,442,650	\$	94,350	\$	-	\$	1,739,914	\$	145,703	\$	(348,617)	\$	850,126
2018-19	\$	850,126	\$	1,307,200	\$	94,350	\$	-	\$	1,784,923	\$	149,346	\$	(532,719)	\$	317,408
2019-20	\$	317,408	\$	1,171,750	\$	94,350	\$	-	\$	1,831,057	\$	153,080	\$	(718,036)	\$	(400,629)
<u>Total</u>																
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

Year	Annual Percentage Increase* [1]	Salaries & Employee Benefits [2]	Services & Supplies [2] [3]	Transportation & Disposal Contract	County- Provided Services (ISF) [4]	PaintCare Savings	Overhead [5]	Subtotal Expenses	Net Fremont Transfer [6]	Total System Expenses	
FY 12-13	n/a	\$ 1,195,465	\$ 488,651	\$ 1,088,776	\$ 261,581	\$ -	\$ 364,137	\$ 3,398,610	\$ 360,295	\$ 3,758,905	
FY 13-14	2.5%	\$ 1,225,352	\$ 750,867	\$ 1,115,995	\$ 268,121	\$ (263,225)	\$ 403,240	\$ 3,500,350	\$ 189,915	\$ 3,690,265	
FY 14-15	2.5%	\$ 805,936	\$ 184,500	\$ 256,250	\$ 246,000	\$ (60,441)	\$ 179,122	\$ 1,611,368	\$ 135,300	\$ 1,746,668	
FY 15-16	2.5%	\$ 826,085	\$ 189,113	\$ 262,656	\$ 252,150	\$ (60,441)	\$ 183,600	\$ 1,653,163	\$ 138,683	\$ 1,791,846	
FY 16-17	2.5%	\$ 846,737	\$ 193,840	\$ 269,223	\$ 258,454	\$ (60,441)	\$ 188,190	\$ 1,696,003	\$ 142,150	\$ 1,838,153	
FY 17-18	2.5%	\$ 867,905	\$ 198,686	\$ 275,953	\$ 264,915	\$ (60,441)	\$ 192,895	\$ 1,739,914	\$ 145,703	\$ 1,885,618	
FY 18-19	2.5%	\$ 889,603	\$ 203,653	\$ 282,852	\$ 271,538	\$ (60,441)	\$ 197,718	\$ 1,784,923	\$ 149,346	\$ 1,934,269	
FY 19-20	2.5%	\$ 911,843	\$ 208,745	\$ 289,923	\$ 278,326	\$ (60,441)	\$ 202,660	\$ 1,831,057	\$ 153,080	\$ 1,984,137	

#### \* INPUT

#### <u>Notes</u>

- 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.