

**DATE:** March 27, 2024

TO: Waste Management Authority (WMA) Board

**FROM:** Pat Cabrera, Administrative Services Director

**SUBJECT:** Household Hazardous Waste (HHW) Program and Fee Analysis

#### **SUMMARY**

As required by the HHW fee ordinance, a funding analysis was conducted to determine if the HHW fee needs to be revised beginning in FY 2025. At the March 27, 2024, WMA board meeting, staff will provide the results of this analysis with the recommendation that the WMA board set the HHW fee at \$7.80 per year per residential unit. The annual fee would remain the same for the next five years.

#### **DISCUSSION**

#### Household Hazardous Waste Program

The HHW program is designed to allow residents to properly dispose of household hazardous waste and keep that waste out of the landfill. The County of Alameda and City of Fremont provide HHW collection/disposal services to Alameda County residents through drop-off centers in Oakland, Hayward, Livermore, and Fremont and one-day disposal events at various locations around the county. These services are funded by fees collected by the Waste Management Authority (WMA).

#### Current HHW Fee Structure

The HHW program is primarily funded by two fees – a per-ton fee on solid waste, and a collection and disposal fee collected in connection with property tax payments.

The per-ton fee, established in 1990, is set at \$2.15 per ton and is collected for all solid waste tons disposed within Alameda County or transferred through a county solid waste facility but disposed out-of-county. The fee is also collected on solid waste that is direct-hauled or under a franchise agreement and disposed of out-of-county.

With increased demand for HHW disposal services and anticipated declining revenues from the per-ton fee, the WMA in 2012 began evaluating options for the future of the program. To avoid a drastic cut in services the WMA approved Ordinance 2014-1 on May 28, 2014. The ordinance established a household hazardous waste collection and disposal fee capped at \$9.55 per household per year. The household fee was established to supplement the \$2.15 per ton fee to support the four countywide HHW facilities and one-day collection events. The ordinance required that the household fee be adjusted each year to account for revenues from the per-ton fee and the PaintCare program (an industry-run extended producer responsibility program that collects unused paint for reuse and proper disposal). The ordinance included a sunset provision effective June 20, 2024. The ordinance requires annual approval by the WMA to place the fee on the property tax roll, which for FY 2024 was approved by the Board on June 28, 2023.

Beginning in FY 2017 the fee was adjusted as required and then "reset" back to the \$9.55 for the next year's calculation. Based on this formula, the fee dropped to \$8.60 in FY 2017, \$8.46 in FY 2018, \$7.40 in FY 2019, and \$6.64 in FY 2020. The annual fee calculation was cumbersome, and the annual change (although lower) was potentially confusing for residents.

Recognizing both the need for ongoing funding for the HHW program as well as the need to streamline the funding calculation and stabilize the fee, staff worked with a consultant to analyze various funding scenarios and determined that an annual fee of \$6.64 per residential unit would be sufficient to fund the program for several years. On September 25, 2019, the WMA adopted Ordinance 2019-01 amending Ordinance 2014-1 to remove the sunset provision and establish an annual fee of \$6.64 per residential unit through June 30, 2024. The ordinance requires an analysis of the HHW program's operational and funding needs be conducted no later than March 31, 2024, and every five years thereafter to determine whether the fee needs to be adjusted, provided that the fee may not exceed the original annual fee of \$9.55 per residential unit. (The fee may be increased beyond the \$9.55 but doing so would require a new property owner protest proceeding under Proposition 218.)

In preparing this first five-year review, staff discussed the HHW program with the WMA Board at its October 25, 2023 meeting (Attachment 1). The Board approved staff's recommendation to conduct the HHW fee financial analysis based on current service levels to determine if there was a need to adjust the fee beginning in FY 2025. Staff engaged the consulting services of Crowe LLP to provide this analysis (Attachment 2).

The analysis considered the fee amount needed to maintain a fund balance to support two years, 1.5 years, one year, and six months of operations under a range of possible scenarios. It also evaluated the effect of maintaining the fee at its current level under those scenarios. The scenarios track three of the scenarios used in the fiscal forecast that the Agency uses for planning and budgeting:

- Best Case which assumes no reduction in fees from the per-ton charge and a 2% increase in ongoing expenditures (closely aligns with scenario B in the Agency's fiscal forecast)
- Mid-point which assumes a 2% drop in per-ton fees and a 3% increase in ongoing expenditures (closely aligns with scenario C in the Agency's fiscal forecast)
- Worst case which assumes a 4% drop in per-ton fees and a 6% increase in expenditures (closely aligns with scenario F in the Agency's fiscal forecast)

Additionally, each scenario included a 0.50% increase in residential units per year, based on the average growth countywide over the last ten years. The consultant also met with County and City of Fremont staff to discuss their projected expenditures, including both one- time costs such as the fire suppression system and hazmat storage shed and ongoing expenditures.

The tables below are based on the following assumptions:

Scenario 1: Best Case (+2% Expenditures, 0% Tonnage)
Scenario 2: Mid-point (+3% Expenditures, -2% Tonnage)
Scenario 3: Worst Case (+5% Expenditures, -4% Tonnage)
Scenarios 4 to 6: Maintain \$6.64 per Residential Unit Fee

The tables show that to maintain a fund balance equivalent to two years of operating costs, the fee would need to be increased beyond the \$9.55 per year fee under the best case, mid-point, and worst-case calculations. The fee would range from \$9.92 per year to \$12.64. Lowering the fund balance threshold to 1 year or less would require a smaller fee increase.

Scenarios 1 to 3 – Calculated HHW Fees, per Residential Unit

Scenario and	Target Ending Fund Balance (FY 2029)							
Expenditure Escalation Level	2 Year	1.5 Year	1 Year	0.5 Year				
1. Best Case (+2% / 0%)	\$9.92	\$8.48	\$7.04	\$5.62				
2. Mid-Point (+3% / -2%)	\$10.88	\$9.34	\$7.80	\$6.30				
3. Worst-Case (+5% / - 4%)	\$12.64	\$10.88	\$9.12	\$7.44				

The analysis also included calculating fund balance levels should the fee remain unchanged (\$6.64 per year) for the new five years as shown below.

Scenarios 4 to 6 (No Fee Change) – Calculated Fund Balance Levels

Scenario and Expenditure Escalation Level	Ending Fund Balance (\$) (FY 2029)	Ending Fund Balance (Years) (FY 2029)
4. Best Case (+2% / 0%)	\$7,533,221	0.9 (11 months)
5. Mid-Point (+3% / -2%)	\$5,690,458	0.6 (7 months)
6. Worst-Case (+5% / -4%)	\$2,735,394	0.3 (4 months)

As in past analyses, staff focused on the mid-point scenario to determine if and at what level the fee should be adjusted. The fee then would range from \$10.88 per year with a two-year fund balance threshold to \$7.80 with a one-year fund balance threshold, and should the fee remain at \$6.64, the fund balance at the end of FY 2029 would be equivalent to approximately 7.2 months of annual operating costs.

#### Staff Findings and Options for Board Consideration

Staff recommends no longer maintaining the two-year fund balance threshold. This threshold was included in the amended ordinance to ensure adequate funding should the Board decide to rescind the fee. That action seems highly unlikely to occur, at least not during the following five years when it is evident that HHW services will still be needed. Moreover, language can be added to the agreements with the County and the City of Fremont to allow ample lead time to adjust operations in the event the fee is rescinded. Based on the Crowe analysis it does not seem reasonable to set the fee at the higher levels projected simply to plan for the possibility that the program will be discontinued, particularly when there are other strategies that can be used.

Therefore, based on the mid-point analysis and assuming the ordinance is amended to remove the two-year fund balance requirement, the two options for Board consideration are:

- Maintain the fee at \$6.64 per year resulting in a fund balance sufficient to cover approximately seven month's operating costs, or
- Raise the fee to \$7.80 per year (a \$1.16 per year increase that remains \$1.75 less than the \$9.55 maximum fee) resulting in a fund balance sufficient to cover approximately one year's operating costs.

With respect to leaving the fee at \$6.64, the major concern is if costs escalate beyond what was projected, resulting in the program exhausting the fund balance before the next fee analysis in five years. One significant unknown that could impact the forecast is the disposal cost. While an adjustment factor was included in the

analysis, there is still uncertainty as to the disposal costs moving forward. Assuming that the midpoint is accurate, the fund balance at the end of the FY 2029 would be equivalent to approximately 7.2 months of an annual operation budget; in the worst-case calculation the ending funding would be equivalent to approximately 3.6 months of an annual budget. Even the best-case calculation results in an ending fund balance of less than one year (approximately 10.8 months).

Consistent with Board direction, it is important to maintain current service levels at the HHW facilities, in part because there is additional risk of illegal dumping and/or improper HHW disposal if services are reduced.

Raising the fee to \$7.80 results in an annual increase of \$1.16 and provides a reasonable cushion if costs exceed projections and/or revenue declines more than estimated. Based on a CPI adjustment beginning in 2019, the \$6.64 fee would have gone to \$7.95, so the proposed fee closely matches inflationary increases. The \$7.80 fee is also close to the fee in 2018 (\$7.60) and is \$1.75 per year less than when it was first established in 2014.

The small increase in the fee should ensure that the program continues to provide residents with a robust HHW collection program in the most cost-effective and efficient manner.

#### **RECOMMENDATION**

That the WMA Board approve the annual HHW disposal and collection fee of \$7.80 per residential unit for the five years beginning in FY 2025 and direct staff to present the Board with an ordinance to remove the fund balance requirement and negotiate amendments to the MOUs with the County and City of Fremont based on maintaining the same level of service through FY 2029.

#### Attachments:

Attachment 1: October 25, 2023, WMA board memo

Attachment 2: Crowe Report

Attachment 3: March 2024 Fiscal forecast, P&A and PC&RB memo

#### **ATTACHMENT 1**



**DATE:** October 25, 2023

TO: Waste Management Authority (WMA) Board

**FROM:** Pat Cabrera, Administrative Services Director

**SUBJECT:** Household Hazardous Waste (HHW) Program and Fee Analysis

#### **SUMMARY**

The HHW program is designed to keep household hazardous waste out of the landfill. The County of Alameda and City of Fremont provide collection/disposal services to Alameda County residents. These services are funded by fees collected by the Waste Management Authority (WMA). Pursuant to the HHW fee ordinance amended on October 25, 2019, a funding analysis is required to determine if the fee needs to be adjusted beginning in FY 2025. At the October 25, 2023 WMA Board meeting, staff will provide an overview of the HHW program and seek input from the Board in preparation of the fee analysis.

#### **DISCUSSION**

#### Household Hazardous Waste Program

Because household hazardous waste cannot be disposed of in landfills, the County of Alameda and City of Fremont provide HHW disposal services to Alameda County residents through a network of drop-off centers and one-day disposal events at various locations around the county. This program is funded by fees collected by the WMA, discussed in more detail below. The WMA has separate agreements with the County of Alameda and City of Fremont for implementing the program and the allocation of revenues.

#### Current HHW Fee Structure

The HHW program is primarily funded by two fees – a per-ton fee on solid waste, and a collection and disposal fee collected primarily on the property tax roll.

The per-ton fee, established in 1990, is set at \$2.15 per ton and is collected for all solid waste tons disposed within Alameda County or transferred through a county solid waste facility but disposed out-of-county. The fee is also collected on solid waste that is direct-hauled or under a franchise agreement and disposed of out-of-county. The fee was intended to support the then three Alameda County HHW facilities, with the Hayward and Livermore facilities opening in 1993 and the Oakland facility opening in 1996. A fourth facility, located in Fremont, opened in 2008.

With increased demand for HHW disposal services and anticipated declining revenues from the per-ton fee, the WMA evaluated options for the future of the program beginning in 2012. The WMA determined that the per-ton fee alone would not support the program without a drastic cut in services. On May 28, 2014, the WMA approved Ordinance 2014-1, which established a household hazardous waste collection and disposal fee capped at \$9.55 per household per year. The household fee was established to supplement the \$2.15 per ton fee to support the four countywide HHW facilities and one-day collection events. The ordinance required that the household fee be adjusted each year to take into account revenues from the per-ton fee and the PaintCare

program (an industry-run extended producer responsibility program that collects unused paint for reuse and proper disposal). The ordinance also included a sunset provision effective June 20, 2024.

The fee adopted by the WMA in FY 2015 was set at \$9.55 per residential unit and remained in effect through FY 2016. Consistent with the ordinance, beginning in FY 2017, the fee was adjusted based on a formula that took into account the per-ton fee revenue and PaintCare statewide industry stewardship program offsets. When those amounts exceeded the annual thresholds outlined in the ordinance, the fee was reduced for the following year then "reset" back to \$9.55 for the next year's calculation. Based on this formula, the fee dropped to \$8.60 in FY 2017, \$8.46 in FY 2018, \$7.40 in FY 2019, and \$6.64 in FY 2020. The annual fee calculation was cumbersome, however, and the annual change (although lower) was potentially confusing for residents.

As such, staff engaged the services of HF&H Consultants to analyze various funding scenarios and determined that the annual fee of \$6.64 per residential unit would be sufficient to fund the program for several years. On September 25, 2019, the WMA adopted Ordinance 2019-01 amending Ordinance 2014-1, which removed the sunset provision and established an annual fee of \$6.64 per residential unit through June 30, 2024. The ordinance requires an analysis of the HHW program's operational and funding needs be conducted no later than March 31, 2024, and every five years thereafter to determine whether the fee needs to be adjusted, either lower or higher, provided that the fee does not exceed the original annual fee of \$9.55 per residential unit. The amended ordinance also requires annual approval by the WMA to place the fee on the property tax roll, which for FY 2024 was approved by the Board on June 28, 2023.

The WMA maintains Memorandums of Understanding (MOUs) with both the County and the City of Fremont. These agreements were updated in 2020 and include operational requirements and reimbursement limits per fiscal year. The MOUs remain in effect contingent upon the respective parties complying with the terms including any revisions to the reimbursement limits resulting from the analysis discussed above. An overview of the agreements is as follows:

#### MOU with County of Alameda

Oakland Facility	Hayward Facility	Livermore Facility						
Household Program								
Wed-Fri 9-2:30	Thurs-Fri 9-2:30	Thurs-Fri 9-2:30						
Sat 9-4:00	Sat 9-4:00	Sat 9-4:00						
Accept E-Waste	Accept E-Waste	Accept E-waste						
	Small Business program							
Tuesdays (excluding holidays)	Wednesdays generally 2x	Wednesday generally 2x per month						
9am – noon	per month 9am -noon	9 am -noon						
Residential landlord program (no fee for residential rental	Residential landlord program	Residential landlord program						
properties)	Drop in for universal waste/latex paint, other	Drop in for universal waste/latex paint, other materials by appointment						
Drop in for universal waste/latex paint, other materials by appointment	materials by appointment							

Small businesses that qualify as Conditionally Exempt Small Quantity Generators (CESQGs) as defined in the Health and Safety Code section 258.18.1 and the code of Federal Regulations 40, Section 261.5, may also use the HHW facilities for a fee (with the exception of residential rental properties as noted above).

In addition to the operations of the facilities described in the table, the County is required to host at least eight one-day events per year.

#### MOU with City of Fremont

The City of Fremont contracts with BLT Enterprises to provide transfer station/recyclables processing services at the Fremont Transfer Station, which includes an HHW drop off center. The center is convenient to residents of Fremont, Union City, and Newark and is available to all Alameda County residents. The HHW operational parameters for the Fremont Facility are listed below:

#### **Fremont Facility**

Open to households

Wed-Fri: 8:30 am -2:30 pm

Sat: 8 am-4:30 pm E-Waste Accepted

Small Businesses including Residential Landlord Program:

Tuesdays between 9 am and 2 pm

Drop in for Universal Waste & Latex paint, other materials by appointment

#### Participation and Outreach

StopWaste provides outreach and promotional services for the three County-run programs including Spanish translation on our website. It is noteworthy that the HHW program is the most visited page on our website.

The participation goal for the three County facilities is 60,000 households per year. While household participation increased steadily from approximately 33,000 in FY 2014 to approximately 54,000 in FY 2021, there were declines over the past two years, with household participation totaling approximately 39,000 in FY 2023.

Fremont has consistently met or exceeded its goal of serving 13,000 households per year. In particular, Fremont exceeded participation by approximately 1,100 transactions in FY 2020 compared to FY 2019 (totaling over 18,000 household transactions), as it remained open as an essential service during the pandemic and accommodated users that would have normally used one of the County facilities. This fiscal year household participation including electronic waste drop off totaled over 16,800 household transactions (see Attachment 1 - page 2 of the City of Fremont's annual report).

In addition to collecting HHW at county facilities, the County also held eight one day events at different locations throughout the County, which totaled approximately 3,800 participants, plus a one-day Dublin event (included in its franchise agreement) that hosted 403 participants. The total number of households participating in one-day events plus utilizing HHW drop-off at the County facilities is approximately 43,000 household participants for the year. Based on statewide trends (Attachment 2, page 6 of the County's annual report), which tracks cumulative waste quantities collected by all HHW programs, there has been an overall statewide decrease, which aligns with County participation data.

The County and StopWaste are taking several steps designed to increase program participation. The County removed the online appointment scheduler which was put in place as a safety measure during the COVID-19 Shelter in Place order to manage drop-offs and is no longer needed. StopWaste continues to assess its ongoing outreach efforts to increase participation this fiscal year. This includes employing more local media to reach residents - including local ads in Nextdoor and Patch and this year, contracting El Timpano to conduct outreach via text messages to Spanish-speaking residents. Staff is also utilizing the online RE:Source guide to direct people to the facilities as well as combining waste prevention messaging to help reduce consumers' reliance on

harmful HHW products. Local platforms such as Nextdoor have helped to drive people to the HHW website home page. A paid editorial and e-blast in local news outlet Cityside (for both Berkeley and Oakland) resulted in over 5,000 article views. When cities have added their own promotion, staff has seen higher participation at one day events. Union City staff even included outreach through the school district newsletter. Staff will continue to monitor these efforts and make adjustments as needed.

Even with lower participation the past two years, the program for both the County and City of Fremont served over 60,000 households in FY 2023 and continues to receive positive feedback from residents.

#### <u>Curbside collection and other ways to transport HHW to facilities</u>

Most jurisdictions in the County have some type of HHW curbside collection as part of their respective franchise agreements (see Attachment 3). Batteries, cell phones, motor oil and filters, and electronic waste are common items either collected during normal service dates or through a scheduled bulky pickup.

In addition, section 7 of AB 2481, the Household Hazardous Waste facilities legislation adopted in 2022 (see Attachment 4), allows another person to transport waste from an individual who is unable to do so "for reasons including, but not limited to death, illness or disability." Staff plans to include reference to this provision in its outreach moving forward.

On-call HHW pick up of other HHW items (pesticides, cleaning supplies, solvents, etc.) is not offered in the County. Adding an on-call service was discussed when the collection and disposal fee was proposed in 2014, however the cost and operational considerations prevented the service from being added as part of the County or Fremont programs. Providing on-call service would require that the County contract with a collection company and develop and implement the logistics to ensure responsiveness and efficiency. Further analysis would be needed to determine the costs associated with such a service, but staff estimates that the additional cost per parcel would be \$3-\$5 per year per residential unit.

Given that Alameda County has four HHW facilities and up to eight one day events per year, plus that state law allows another person to transport HHW materials on behalf of an individual who is unable to do so, and also considering the cost and cost/benefit, providing a County-administered on-call service is not recommended at this time.

#### **Ordinance Requirement**

Ordinance 2019-01 requires a financial analysis of the HHW program no later than March 2024 and in 5-year increments thereafter to determine if the fee needs to be adjusted for the next five years. Depending on the analysis, the fee could stay the same, be lowered, or be raised provided that it does not exceed the original fee of \$9.55 per residential unit. The Agency, the County and the City of Fremont are committed to providing residents with a robust HHW collection program in the most cost-effective and efficient manner.

Based on discussions with both County and City of Fremont staff, and the success of the HHW program overall, staff recommends maintaining program operations for purposes of the upcoming analysis. Staff will engage the services of Crowe consulting to perform this analysis.

#### **RECOMMENDATION**

That the WMA Board direct staff to conduct the Household Hazardous Waste Fee financial analysis based on current program design to determine if there is a need to adjust the fee beginning in FY 2025.

#### Attachments:

Attachment 1: City of Fremont Annual Report

Attachment 2: County Annual Report

Attachment 3: Curbside Collection per Jurisdiction

Attachment 4: AB 2481

## **Fremont Household Hazardous Waste Facility Report**

#### **Fiscal Year 2022/2023**

#### Fremont HHW Facility Overview

The Fremont Household Hazardous Waste Drop-off Facility is co-located at the Fremont Recycling & Transfer Station Facility. BLT Enterprises operates the site under contract with the City of Fremont. The facility is in operation year-round, excepting materials from Alameda County residents, apartment owners and managers, and small quantity commercial generators. Electronic waste items are also collected.

Notable for FY 22/23 was that overall household HHW delivery transactions declined by 1,639 from FY 21/22 levels.

#### **Fremont - Hours of Operation**

Tuesday	By Appointment (between	CESQG Program		
	9:00 AM to 2:00 PM)			
Wednesday	8:30 AM – 2:30 PM	Residential Programs		
Thursday	8:30 AM – 2:30 PM	Residential Programs		
Friday	8:30 AM – 2:30 PM	Residential Programs		
Saturday	8:00 AM – 4:30 PM	Residential Programs		



## **Fremont Facility Transactions**

Household HHW Transactions in FY 22/23	FY 22/23
Fremont	9,774
Newark	1870
Union City	1097
Alameda	10
Albany	1
Berkeley	10
Castro Valley	63
Dublin	36
Emeryville	0
Hayward	421
Livermore	26
Oakland	56
Piedmont	2
Pleasanton	73
San Leandro	67
San Lorenzo	18
Other - Alameda County	6
Total of Household HHW Transactions	13,530

## **E-Waste Only Deliveries**

Electronic Waste Only Drop-off Transactions	3312

## **CESQG's Served**

Total CESQG's Served in FY 22/23	156
Fremont	120
Newark	19
Union City	3
Other Alameda County Jurisdictions	14

## **Total Fremont HHW Facility Transactions**

All Transactions (incl. E-Waste & CESQG's)	16,998

## Residential/Landlord User Breakdown

SFD Owners	15928
SFD Renters	914
Multi-Family Landlord	0
Multi-Family Renter – 2 to 4 Units	0
Multi-Family Renter – 5 or More Units	0

## **Summary of HHW Facility Expenses & Revenues**

Administrative Overhead	\$42,000
Operating Supplies & Expenses	\$139,089
Labor & Benefits	\$575,013
Disposal Expenses	\$458,549
Revenue Offset (CESQG)	(\$27,748)
Revenue Offset (E-waste, Batteries)	(\$633)
Revenue Offset – PaintCare Reuse	(\$746)
Estimated PaintCare Paint Disposal Offset	(\$151,010)

## **Operating Expenses**

Net Operating Expenses = \$1,185,525

Net Cost per Transaction = \$69.74/transaction

Net Cost per Pound/Transaction = \$1.03/Pound

## **Summary of Materials Received and Processed**

Fremont HHW Facility Total Pounds = 1,148,282 lbs.

Percentage Recycled = 82.77%



Alameda County Household Hazardous Waste Program, 1131 Harbor Bay Parkway, Mail Stop 51701, Alameda, California 94502-6540 PH 510/670-6460

## Alameda County Household Hazardous Waste Program Fiscal Year 2022 - 2023 Annual Report

#### Household Hazardous Waste Program Overview at Its 30 Year Anniversary

Since 1993, the Waste Management Authority (Authority) in partnership with Alameda County's Department of Environmental Health (DEH) has provided hazardous waste disposal service to County residents at three Permanent Household Hazardous Waste (HHW) collection facilities in Haward, Livermore and Oakland. Services by these sites was augmented with the opening of a HHW facility by the City of Fremont at the Fremont Recycling and Transfer Station in 2008, and the implementation of Temporary Household Hazardous Waste Collection Facility events (One-Day events) starting in 2015. California law requires that jurisdictions provide household hazardous waste collection and disposal services to their residents. The services the Authority has funded have made it increasingly easy for residents to dispose of hazardous products and waste from their home over the thirty-year history of the program. In total, over 1.1 million drop off visits have been made and over 41 thousand tons of hazardous wastes have been managed safely. The Authority under terms of successive MOUs with DEH and the City of Fremont has been an essential partner in providing this outstanding service to County residents.

Each of the four HHW facilities serves residents from the entire county for disposal of their household hazardous waste and accepts waste from agencies, organizations and small businesses in the county which generate Universal Wastes or qualify as Very Small Quantity Generators (VSQGs). The four sites operate as a single program from the perspective of a resident or business.

#### **Funding History**

From inception, HHW services have been funded through a landfill tipping fee established by the Authority in 1992 at \$1.25/ton. In the late 90's the Authority foresaw a funding shortfall which led the Authority Board to vote to increase the tipping fee to \$2.15 in 2000.

In 2009 analysis of tipping fee trends predicted a funding shortfall within 6 years. The Authority then explored options to address longer term funding for operation of the four HHW facilities. On May 28<sup>th</sup>, 2014, the Authority adopted a fee ordinance authorizing funding from a Household Hazardous Waste Fee per residential unit collected via the property tax roll. The fee prevented a funding shortfall and supported expansion HHW program services. The fee went

Fee Year	FY	FY	FY	FY	FY	FY	FY	FY	Net
	2016	2017	2018	2019	2020	2021	2022	2023	Savings
Fee	\$ 9.54	\$ 8.60	\$ 8.46	\$ 7.40	\$6.64	\$6.64	\$6.64	\$6.64	
Annual Change	NA	-\$0.96	-\$1.08	-\$ 2.14	-\$0.76	\$0.00	\$0.00	\$0.00	-30% from 2016 fee

into effect July 1, 2014 and is capped at an annual maximum of \$ 9.54 per residential unit. After two years the fee was adjusted annually through a formula that accounts for tipping fees and savings from product stewardship programs with ongoing program costs. In FY 16-17 the HHW fee was lowered to \$8.60. In FY17-18 the fee was again lowered, to \$8.46. In FY 18-19 the fee was lowered to \$7.40, a reduction of 22.4% from the original baseline \$9.54 fee.

In 2018 the Authority completed a study of projected trends and found that the fee could be reduced further. To stabilize funding for the long-term and reduce cost of re-analyzing program funding on an annual basis the Authority promulgated Ordinance 2019-01 which revised the 2014 expansion plan and adopted a fee of \$6.64 per household, with fee amount reviewed every 5 years, and with no fixed sunset date. Five-year review of funding and program costs will be completed in 2025.

#### Convenience of HHW Service to Residents – at Facilities and One-Day Events

From 1993 to 1999 County HHW facilities in Hayward, Livermore and Oakland operated with one facility open per week on a rotating basis. Waste was accepted by appointment. Starting in FY 2000 the facilities accepted waste deliveries with no appointment. From 1999 to 2007, waste was accepted with no appointment needed and one facility was open each week. In 2007, staffing was increased to allow two facilities to be open each week. The centrally located Hayward facility was open every week, with the Livermore and Oakland facilities open alternating weeks. With the opening of the Fremont facility in 2008, the schedule was adjusted such that the Oakland and Fremont facilities were open weekly while Hayward and Livermore facilities were open alternating weeks, matching participation at the sites. Since 2015 all four facilities have been open every week.

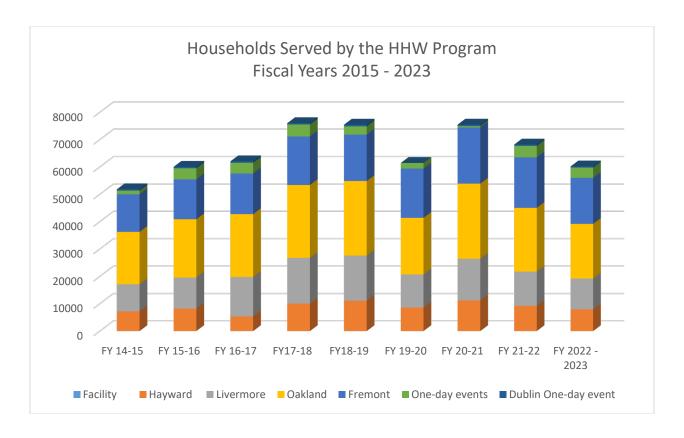
For reporting fiscal year 2022-2023 the County facilities continued operating under the expanded schedule begun with Authority approval in May 2018. Alameda County residents now have access to all four facilities every week. The Oakland and Fremont facilities are open each Wednesday, Thursday and Friday from 9:00AM to 2:30PM and on Saturdays from 9:00AM to 4:00PM. The Livermore and Hayward facilities are open each Thursday and Friday from 9:00AM to 2:30PM and on Saturdays from 9:00AM to 4:00PM. During pandemic years 2020, 2021 and 2022 sites in Hayward, Livermore and Oakland accepted waste by appointment. Since March 2023 with the end of the COVID Emergency Health Declaration no appointment is needed for a resident to deliver wase. The Authority was instrumental in rolling out a highly efficient on-line appointments system that most residents found easy to use, provides residents with important safety information as well as assures prompt service. This appointments system is now used only for One-Day events.

#### **Temporary "One-Day" Household Hazardous Waste Collection Events**

An element of the 2014 expansion plan is to serve communities geographically further from permanent HHW facilities through temporary, or one-day, HHW collection events. During FY 2022-2023 the County held eight One-Day events, seeing good rates of participation from most of the communities served. One-Day events are only possible due to collaboration between the host city or agency recycling programs, a host site owner, disposal vendors, HHW program staff, product stewardship organizations and oversight by a CUPA. Siting an event depends on the availability of a paved site that is vacant during the scheduled weekend. Sites must be large enough to park several tractor-trailer trucks and cordon off several thousand square feet of hazardous waste handling "Hot Zone" and allow for traffic to gueue from 50 to 100 cars. Events are sited where local roads can safely handle traffic of 500 cars in 4 hours. A typical event takes 12 hours from setup to clean up, with some equipment left on site before and after the event. Planning events starts 3 to 9 months in advance to file for a Temporary HHWCF Permit and arrange for advertising in the target area. Temporary collection events are scheduled during Q1 and Q4, from late March through early October, to avoid rainy weather. Some events are concurrent with other city sponsored events such as textile collection and compost giveaway at the Castro Valley event.

#### **HHW Program Participation**

Resident use of the HHW program during FY 2022-2023 continued to be impacted by aftereffects of the pandemic. Sites have seen participation numbers lower than the years immediately before the pandemic and during the pandemic work-from-home period. The program has returned to a full schedule of One-Day HHW collection events in FY 2022-2023 many of which were cancelled in FYs 2020 and 2021 due to pandemic restrictions. The Fremont HHW facility continued to accept waste from residents on its established schedule and saw continued robust participation, predominantly from residents of Fremont and the other Tri-Cities.



	HHW Program Participation Trend										
HHW Facility	FY 2015	FY 2016	FY 2017 <sup>(1)</sup>	FY 2018	FY 2019	FY 2020 <sup>(2)</sup>	FY 2021	FY 2022	FY 2022- 2023	FY 22-23 vs. FY 22	FY 22-23 vs. 5 Yr. Avg.
Hayward	7,198	8,211	5,331	10,039	11,092	8,578	11,201	9,218	7,918	-14%	-21%
Livermore	9,891	11,347	14,419	16,718	16,478	12,083	15,221	12,501	11,255	-10%	-23%
Oakland	19,148	21,295	22,984	26,622	27,273	20,710	27,467	23,299	7,918	-66%	-68%
Fremont	13,739	14,599	14,854	18,763	16,957	18,025	20,528	18,481	16,842	-9%	-9%
1-Day events	1,348	4,071	3,926	4,376	3,014	2,056	495	4,190	3,755	-10%	33%
Dublin event	485	505	523	476	593	0	546	481	403	-16%	-4%
Totals	51,810	60,028	62,037	75,993	75,407	61,452	75,460	68,173	60,162	-12%	-16%

In 2017 the Hayward facility was closed for 5 months due to a pipe failure

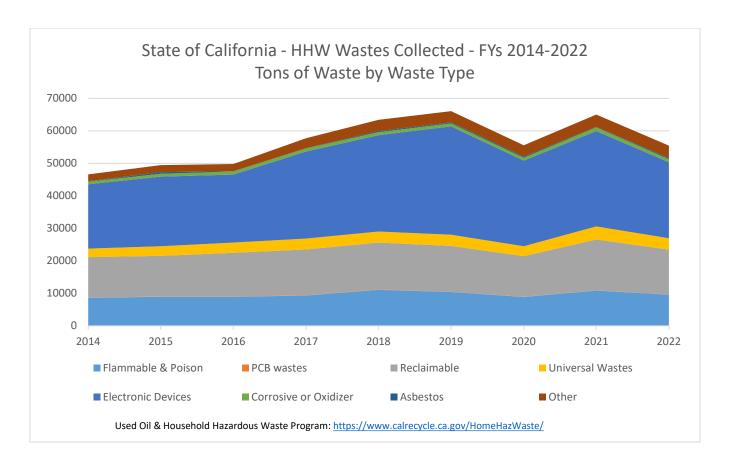
In 2020 Hayward, Livermore and Oakland sites were closed for 3 months due to Health Emergency Declaration

## One-Day Events Held in FY 2022-2023

	Temporary E	Events Held During	FY 2022- 2023	
Event Site	Date	Day	Households served	Comment
Oakland Coliseum	7/17/2022	Sunday	167	
Castro Valley	7/23/2022	Saturday	704	Textile Collection, Compost Give-away
Albany GGF	7/31/2022	Sunday	540	
Union City	9/11/2022	Sunday	416	Mattress Collection
Albany GGF	10/2/2022	Sunday	384	
Oakland Marine flares	11/6/2022	Sunday	37	
San Leandro	5/7/2023	Sunday	409	
Pleasanton	5/21/2023	Sunday	580	
Albany GGF	6/25/2023	Sunday	518	
Dublin	6/3/2023	Saturday	403	Performed by Amador Valley Industries as a part of the Dublin Franchise agreement
		Total	4,158	

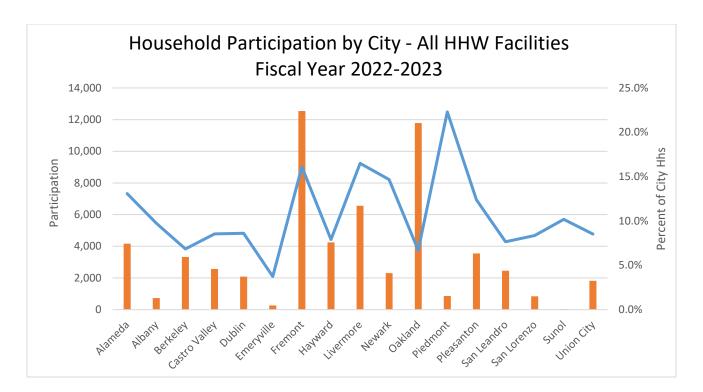
#### **Comparison to Statewide Trends**

For comparison with Statewide HHW participation trends, the following graph shows cumulative waste quantities collected by all HHW Programs, reported annually to CalRecycle on "Form 303". State-wide waste quantities collected are used as an analog for participation data as CalRecycle does not make household participation data available.



#### **Participation by City Within Alameda County**

Comparing the city of origin of HHW participants with the number of households in each city (data from the California Department of Finance E5 table, households per city, 1/1/23) shows variation in participation between communities. Overall, in FY 2023-2023 participation in HHW program services equaled 9.8% of the number of occupied housing units in the county. During FY 2022-23 several cities, including Alameda, Fremont, Livermore, Piedmont, Newark and Pleasanton approach or exceed the 12-14 percent-of-households goal outlined in the expansion plan. In contrast, Oakland, Berkeley, Emeryville, Hayward and San Leandro saw lower per-household participation. Increasing participation from these jurisdictions was targeted by holding a number of one-day events closer to the jurisdictions.

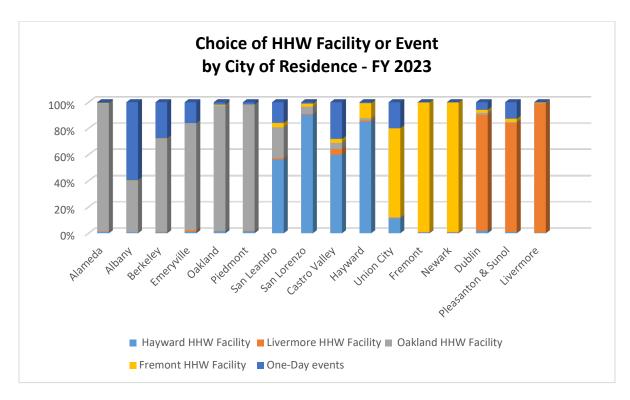


Participation by City as a Percent of Housholds

Participation by City as a Pe	rcent of mousholds		
City	FY 22-23 Participants by City	FY 22-23 Ppt. as % of Hh Units	Occupied Hh units (2023 DOF E-5 & city- data.com)
Alameda	4,169	13.1%	31,846
Albany	735	9.7%	7,541
Berkeley	3,329	6.8%	48,644
Castro Valley	2,574	8.5%	30,158
Dublin	2,087	8.6%	24,238
Emeryville	270	3.7%	7,220
Fremont	12,541	16.1%	77,920
Hayward	4,248	7.9%	53,749
Livermore	6,558	16.5%	39,775
Newark	2,302	14.7%	15,689
Oakland	11,780	6.7%	175,640
Piedmont	859	22.3%	3,852
Pleasanton	3,549	12.4%	28,674
San Leandro	2,458	7.7%	32,104
San Lorenzo	841	8.4%	10,060
Sunol	36	10.2%	354
Union City	1,826	8.5%	21,412
Totals	59,759	9.8%	608,875

#### Use of HHW Facilities by Resident's City of Origin

Although County residents may deliver waste to any of the four HHW facilities, each facility predominantly serves residents in its local geographical area.

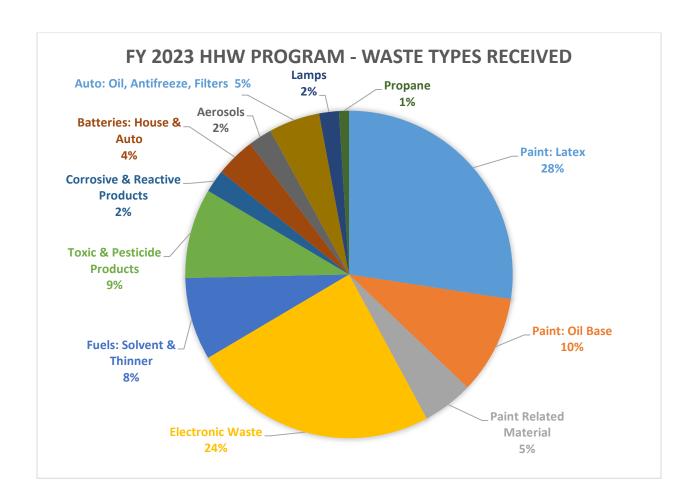


#### **Waste and Materials Received**

Paints and paint related materials continue to be the products delivered in greatest quantity to HHW facilities and one day events - comprising 43% of total weight of materials received by the program. Electronic waste is the second largest volume category at over 900 thousand pounds in FY 2023, or 24% of the total. Batteries and lamps comprise another large category at about 4% of total. Discarded household products that are toxic, flammable or corrosive add up to about 11% of all waste and include garden products, cleaners and pool chemicals, lead paint chips, mercury, PCB-containing lamp ballasts, road flares and contaminated soil. Auto service waste, including used oil, comprises 5% of HHW waste collected, reflecting the many other oil disposal options. Paint thinner, gasoline and other waste products that can be turned into fuel add up to about 9% of total. Amounts and relative proportion of waste types for the permanent HHW facilities and temporary collection events are reflected in the graph below.

#### Waste Received from Service to Businesses, Organizations and Agencies

Businesses, agencies and organizations (Businesses) deliver hazardous waste to HHW facilities through a number of service offerings. Waste collected from a Business is managed together with waste received from residents and comprises about 5% of all waste collected at permanent HHW facilities. Details of these services and participation by community Businesses are in a section below.



Waste Received by the H	HW Program	
Waste Type	Quantity, Lbs.	% of Total
Paint: Latex	1,015,821	28%
Paint: Oil Base	360,031	10%
Paint Related Material	185,162	5%
Electronic Waste	902,871	24%
Fuels: Solvent & Thinner	302,223	8%
Toxic & Pesticide Products	328,669	9%
Corrosive & Reactive Products	83,282	2%
Batteries: House & Auto	145,005	4%
Aerosols	86,995	2%
Auto: Oil, Antifreeze, Filters	186,669	5%
Mercury-Containing Lamps	72,123	2%
Propane	36,489	1%

#### **HHW Program Budget**

Program costs include staffing and administration by Alameda County Department of Environmental Health as well as costs for contractors providing transportation, waste recycling and disposal services and supplies and labor to manage wastes and materials.

	HHW Progr	am Budget, FY	2022-2023		
Agency	S & E B	S & S + Disposal	Overhead	ISF	Total
Alameda County PHHWCFs & THHWCFs	\$2,069,977	\$1,992,288	\$370,000	\$644,738	\$5,077,003
WM Authority			\$294,075		\$294,075
Fremont PHHWCF	\$575,013.30	\$597,638.00	\$42,000.00		\$1,214,651
				Total Cost	\$6,585,730
Revenue - County HHWs					-\$111,842
Revenue - Fremont HHW					-\$29,127
				Net Program Cost	\$6,444,761

S&EB = Salaries and Employee Benefits,

**S&S** = Services and Supplies including transportation and Disposal of waste.

**ISF** = County infrastructure, Utilities and maintenance.

Overhead = Departmental overhead for county facilities, Fixed overhead @ Fremont;

WM Authority = Expenses of WMA for outreach, program oversight, direct billing and county tax efforts

#### Revenue

HHW facilities charge for the cost of waste disposal to organizations and businesses that dispose of waste through HHW Business Hazardous Waste Services. The HHW program also receives payments from battery recyclers. In addition, the HHW program makes use of several Product Stewardship and advanced disposal fee initiatives that credit against costs or offset costs of recycling several waste types. Recycling and stewardship program revenue and cost off-setting efforts are discussed more fully below.

Revenue Sources FY 2022-2023	vsqg	Batteries etc.	Paint Care	Paint Sales	0 -\$111,842 A -\$29,127
County HHWs	-\$101,898	-\$9,944	\$0	\$0	-\$111,842
Fremont HHW	-\$26,086	-\$633	-\$746	N/A	-\$29,127
				Total Revenue	-\$140,969

## **Services Provided and Costs**

нн	W Program Serv	ices and Cost	Trend			
County Permanent Collection Facilities	Households Served	Waste Collected (Lbs.)	County FTE	Cost		
2014-15	36,237	2,393,328	13	\$3,455,841		
2015-16	40,853	2,702,779	15	\$3,324,918		
2016-17	46,137	3,306,316	14.8	\$3,642,050		
2017-18	53,378	3,451,640	16.9	\$3,622,879		
2018-19	54,843	3,453,214	20.6	\$4,052,090		
2019-20	41,371	2,701,134	16.5	\$5,017,493		
2020-21	53,889	3,892,683	18.6	\$3,820,457		
2021-22	45,018	3,210,603	18.5	\$4,447,352		
2022-2023	39,162	2,353,245	20.9	\$4,623,789		
<b>County Temporary</b>						
<b>Collection Events</b>						
2014-15	1,339	125,030	N/A	\$48,787		
2015-16	4,071	353,815	N/A	\$167,954		
2016-17	3,926	327,899	N/A	\$223,246		
2017-18	4,376	394,906	N/A	\$276,306		
2018-19	3,042	292,591	N/A	\$211,525		
2019-20	2,056	150,869	N/A	\$121,525		
2020-21	495	43,297	N/A	\$63,180		
2021-22	4,193	357,302	N/A	\$89,779		
2022-2023	3,755	271,201	N/A	\$341,372		
Fremont Permanent Collection Facility						
2014-15	13,365	1,195,343	N/A	\$859,818		
2015-16	14,599	1,084,913	N/A	\$799,314		
2016-17	14,854	1,111,883	N/A	\$944,266		
2017-18	18,763	1,279,095	N/A	\$1,039,271		
2018-19	16,957	1,290,288	N/A	\$986,565		
2019-20	18,025	1,339,479	N/A	\$1,046,216		
2020-21	20,530	1,403,990	N/A	\$1,154,580		
2021-22	18,481	1,283,846	N/A	\$1,196,197		
2022-2023	16,842	1,148,282	N/A	\$1,185,525		

<sup>1)</sup> Costs includes all program overhead

In 2022-2023 the number of residents served by the program as-a-whole was significantly lower than in recent years – about 15% below the previous five-year average. The amount of waste collected by the program as-a-whole showed an event more significant drop - about 23% below the previous five-year average. These trends follow general patterns for all HHW Programs in the state per data collected by CalRecycle statewide.

#### **Program Cost and Productivity Metrics**

Metrics for H	HW Program		
County Permanent Collection Facilities	Cost/HH	Cost/LB	Tons/FTE
2015	\$95.37	\$1.44	92.1
2016	\$81.39	\$1.23	90.1
2017	\$78.94	\$1.10	111.7
2018	\$67.87	\$1.05	102.1
2019	\$73.89	\$1.17	83.8
2020	\$121.28	\$1.86	81.9
2021	\$70.89	\$0.98	104.7
2022	\$98.79	\$1.39	86.6
2022-2023	\$120.04	\$2.00	56.4
County Temporary Collection Events			
2015	\$36.44	\$0.39	N/A
2016	\$41.26	\$0.47	N/A
2017	\$56.86	\$0.68	N/A
2018	\$63.14	\$0.70	N/A
2019	\$69.53	\$0.72	N/A
2020	\$59.11	\$0.81	N/A
2021	\$127.64	\$1.46	N/A
2022	\$21.41	\$0.25	N/A
2022-2023	\$70.33	\$0.97	N/A
Fremont Permanent Collection Facility			
2015	\$62.44	\$0.72	N/A
2016	\$55.00	\$0.74	N/A
2017	\$63.56	\$0.85	N/A
2018	\$58.50	\$0.81	N/A
2019	\$58.18	\$0.76	N/A
2020	\$58.04	\$0.78	N/A
2021	\$56.24	\$0.82	N/A
2022	\$64.73	\$0.93	N/A
2022-2023	\$69.74	\$1.03	N/A

Permanent HHW facilities and temporary events operated on a full schedule in this fiscal year. The pandemic continued to affect participation and productivity in unpredictable ways. County HHW facilities had fewer employees due to delays in the hiring process. More contractor labor was used resulting in more workers being employed overall. Contractor workers turnover was high and inexperienced contractor workers were less efficient. The pandemic also affected waste shipment and disposal which resulted in delays in billing that have pushed some cost for disposal of waste shipped during 2021-22 into the 2022-2023 fiscal year.

#### **HHW Service to Small Businesses, Agencies and Organizations**

For a business, organization or agency (Business) to use services offered by the HHW program the Business must meet criteria imposed by California law. A Business delivering hazardous waste must qualify as a Very Small Quantity Generator (VSQG), generating less than the threshold amount of 100 Kg of hazardous waste in any month. Businesses delivering only Universal Waste can use HHW services regardless of quantity of Universal Waste generated. Services specific to types of generator are described below. VSQG qualification and whether waste types are acceptable is determined during the application and inventory review process. Businesses needing to deliver hazardous waste do so by appointment made by a phone call to HHW office staff. Phone contact for a VSQG complies with California regulatory requirements for pre-notification of each delivery to confirm that each waste shipment is acceptable and to communicate safe transportation instructions. Businesses delivering only Universal Wastes may deliver these wastes to HHW facilities in Hayward, Livermore and Oakland on days when business waste is accepted without an appointment. Waste is accepted from Businesses every week on Tuesdays at the Oakland and Fremont facilities and every other week on alternating Wednesdays at the Hayward and Livermore sites.

#### Small Business & Organization (VSQG) Transactions by Facility

		Sma	all Busine	ss & Orga	nization	(VSQGs) Tran	sactions by F	IHW Facility		
Fiscal Year	Hayward	Livermore	Oakland	Fremont	Total	Landlords Served	Revenue Forgone 1	Revenue AlCo	Revenue Fremont	Total Revenue
2012	156	108	216	192	564	NA	NA	\$71,853	\$23,972	\$95,825
2013	155	114	279	188	726	NA	NA	\$73,116	\$24,594	\$97,710
2014	128	107	268	198	691	NA	NA	\$89,606	\$30,483	\$120,089
2015	181	123	311	211	816	5	(\$9,601)	\$115,188	\$24,518	\$139,695
2016	163	148	381	214	906	40	(\$78,851)	\$129,520	\$29,420	\$158,940
2017	77	165	471	208	921	27	(\$28,821)	\$94,527	\$33,349	\$127,876
2018	114	205	479	220	1019	23	(\$24,421)	\$102,292	\$35,190	\$137,480
2019	124	184	366	211	885	11	(\$1,614)	\$106,906	\$35,153	\$142,059
2020	125	270	112	190	697	13	(\$3,147)	\$84,559	\$25,801	\$110,360
2021	161	150	354	166	831	29	(\$5,949)	\$114,771	\$27,856	\$142,626
2022	152	150	320	165	787	14	(\$2,029)	\$110,678	\$25,189	\$135,867
2022-2023	167	190	308	156	821	11	(\$2,260)	\$101,898	\$27,748	\$126,646

1) Value of revenue foregone resulting from disposal service provided free of charge to residential landlords disposing of waste from rental properties

In FY 2022-23 the program added 63 new business and organization customers and continued to see robust use of the HHW facilities by local businesses. 665 different businesses, agencies and organizations used HHW facilities for waste disposal making a total of 821 deliveries. This includes 20 separate local public agencies that saved money by using the HHW program for disposal of small volumes of hazardous waste.

#### **Residential Landlord Program**

In the spring of 2015, the HHW service to small businesses began to accept waste from residential landlords free-of-charge. This allows the owner of a residential property to easily dispose of hazardous waste left behind by a tenant or waste generated maintaining the residence within the parameters of the HHW Small Business Waste Service. In 2022-23 the program accepted hazardous waste from residential landlords 18 times, serving 11 separate owners representing 1359 units managed, and saving owners an estimated \$2,260 in disposal charges.

#### **Waste Collection and Acceptance Partnerships**

#### **Abandoned waste**

The HHW program has partnerships with local agencies to dispose of waste abandoned on public rights-of-way. In FY 2022-23 a total of about 4300 lbs. of abandoned waste was accepted from the cities of Albany, Piedmont, San Leandro, Union City and Hayward Recreation and Parks District. In 2018 Cal. EPA DTSC determined that the definition of "CESQG" (the regulatory term was updated in 2020 to "Very Small Quantity Generator" - VSQG) did not include governmental agencies such that delivery of abandoned waste by an agency was outside the framework of what could be accepted at a HHW program. This interpretation therefore required agencies to use a hazardous waste hauler and hazardous waste manifest to ship waste. The Department of Environmental Health responded to the challenge through legislative means and supported passage of SB 726 (Caballero 2019) which clarified that an agency can be defined as a "CESQG". The law came into effect in January 2020 and agencies returned to delivering abandoned waste at no cost to the Agency.

Abandoned Waste C	ollection	Partners	hips FY 2022-202	23
	Agency	Visits/ Year	Waste Weight, Lbs.	Est. Savings
City of Albany		3	597	\$830
City of Piedmont		1	38	\$53
City of San Leandro		4	1300	\$1,807
City of Union city		6	1678	\$2,332
Hayward Rec. & Park District		2	563	\$783
	Totals	16	4176	\$5,805

#### **Community Collection Partners for Batteries and Fluorescent Lamps**

Since 2006 the HHW program has partnered with local city recycling programs which collect batteries and lamps and transport them to the HHW program. The recycling partners are not charged for recycling of these Universal Wastes (UW). The HHW program provides collection kits consisting of pre-labeled plastic and cardboard collection containers, instructional posters, training and identification booklet, collection logs and Bill of Lading for transport. Recycling Coordinators arrange for placement of collection containers in public buildings, monitor the collections and when appropriate, transport the batteries and lamps to the HHW facility. The Cities of Alameda, and Berkeley do not have curbside battery recycling but have particularly active battery and lamp collection programs - collecting over 50,000 lbs. of batteries and lamps at local drop-off sites. Hardware stores and several large multifamily residential buildings have been added to the Community Collection partners and now provide residents easy drop-off options and collect significant quantities of batteries and lamps.

Universal Waste Collected by Local City and Retail Collection Partners	Visits	Batteries, Lbs.	Compact Lamps, Lbs.	Lamp Tubes Lbs.	Smoke Detectors, Ct.	Cost Offset
Alameda County Property and Salvage	3	2,572	0	7,923	0	\$2,626.00
Berkeley Recycling Center	39	15,750	2,981	6,072	0	\$36,837.00
City of Alameda	25	6,841	538	1,851	0	\$12,156.50
Hardware store & apartment partners	29	6,072	1,921	5,452	0	\$22,738.00
Total	96	31,235	5,440	21,298	0	\$74,357.50

Summary of Services to Agencie	es, Businesses, L	andlords and Organizations
	Entities Served	Deliveries
Public Agencies Served	20	62
Agency Abandoned Waste	5	16
VSQG Businesses	291	585
Drop In Businesses Served	198	247
UW Collection Partners	7	96
Residential Landlords	11	18
New VSQGs signed up	63	NA
Total		951

#### Cost Reduction, Waste Diversion and Extended Producer Responsibility

#### Material Reuse – The "Swap Sheds"

HHW facilities have offered usable products collected by the program to residents for free in each facility's "Swap Shed". Each HHW facility has a Reuse Area where usable products are offered to the public for free. This material reuse supports sustainability goals, avoids disposal costs and is popular with the public. In Fiscal Year 2022-2023 the County-run reuse program was closed as sites grappled with ways to assure "Swap Shed" users could safely follow health orders. Emergency Health Restrictions have been lifted. The Fremont resumed Material Reuse in Mid 2022-2023, County-operated HHW facilities will re-start this service in FY 2024.

#### **Paint Sales**

Much of the paint collected by the program is in useable condition. Most paint is shipped to PaintCare contractors who make re-blended paint and other related products. At County-run HHW facilities white latex paint is consolidated and shipped to a local paint manufacturer that filters, colors and remixes, then packages paint in 5-gallon pails for return to the county. The program charges \$25 per 5-gallon pail to the public to partially offset handling cost. In FY 22-23 no paint was distributed due to delays in delivery of re-blended paint from the recycling contractor. The HHW program continues to seek local agency partners that can use this type of paint.

#### Product Stewardship and Advance Disposal Fee Program Participation

The HHW program participates in several product stewardship or extended producer responsibility programs in which cost or responsibility for recycling is borne by the product manufacturers. These programs include: California's electronic waste recycling system, programs for collection of mercury thermostats, rechargeable batteries, auto batteries, mattresses and, most notably, architectural paint. Since 2019 implementation of the Alameda County Safe Medicine and Sharps Disposal ordinance has resulted in increasing numbers of convenient locations for residents to drop off medications and sharps (needles).

#### **Architectural Paint - Product Stewardship Program**

PaintCare is the nonprofit entity established by paint manufacturers to operate California's paint product stewardship program. Funded by a manufacturer-imposed fee on paint sales, the program supports free disposal of architectural oil base and latex paint, stains, coatings and other related material authorized by AB1343 in 2012. PaintCare provides packaging material and disposes of eligible collected materials free of charge to collectors which include retail paint stores and HHW facilities. PaintCare eligible products are a subset of the universe of paint and paint related materials typically received at the HHW program. Paint and paint related materials outside the scope of PaintCare eligible products include industrial paints and coatings, thinners and reducers, roof coatings, automotive paints, marine paint, fabric paint and fine arts paints. These materials are all accepted by the HHW program and incur significant costs unreimbursed by PaintCare. For fiscal year 2022-2023 all four facilities and the Temporary event participated in the PaintCare program. This product stewardship program offset costs at HHW program as-a-whole by approximately \$ 628,000.

#### Electronic Waste (E-Waste) – Advance Disposal Fee Program

E-Waste is discarded electric and electronic devices presumed to contain hazardous constituents - including heavy metals such as mercury, lead, copper or zinc - in concentrations great enough to be classified as hazardous waste. E-Wastes that have a video display screen are defined as "Covered Devices" under California's 2003 E-Waste laws, SB20/50. In California, recycling of E-Waste Covered Devices is an Advance Disposal Fee program that is administered by CalRecycle which receives a fee for each Covered Device sold in the state. Collection of Covered Devices is reimbursed by CalRecycle. Other E-Waste collected by the HHW program that are not Covered Devices include computer peripherals, CPUs, audio equipment, microwave ovens, toasters and hair dryers. This type of E-Waste has a little or no scrap value and results in a cost the program. The fraction of Covered Devices accepted by E-Waste programs is typically much less than 50% of the total E-Waste collected. In FY 2022-2023 the cost-offset value of SB20/50 Covered Devices collected by Alameda County permanent facilities and temporary events was \$32,800.

#### **Lead Acid and Rechargeable Batteries**

Since 1989 State law requires dealers of lead acid automotive, transportation and backup power batteries to accept spent batteries for exchange from the consumer in a sale transaction. While not a formal product stewardship program, lead's considerable scrap value, ease of recycling and continuing industrial demand ensures that about 95% of lead-acid batteries are recycled. The HHW program receives payment at the market rate for the value of auto and other rechargeable batteries from recyclers. Alameda County uses Call2Recycle to manage rechargeable household batteries, and increasingly all household battery types. Credits received from recycling of lead-acid, nickel cadmium, nickel metal hydride and lithium-ion batteries amounted to about \$45,580 in FY 2022-2023.

#### Medication and Home-Use Sharps Stewardship in Alameda County

Implementation of Alameda County's Safe Drugs and Consumer-Generated Sharps Ordinance now offers 97 pharmacies and other locations where residents can safely drop off drugs. 50 of these locations also accept sharps in FDA cleared sharps containers. This stewardship program

benefits the public by reducing the likelihood that un-needed medications will be misused, and benefits the HHW program by covering costs for disposal of sharps collected from the public. County-run HHW facilities no longer collect medications from the public, however, One-Day events provide services for residents to dispose of both medications and sharps with costs covered by the stewardship organization.

#### **Mattress Recycling at One-Day Events**

The HHW program works in agreement with the Mattress Recycling Council (MRC) to provide mattress collection at many One-Day HHW events. Mattress collection is at no cost to the HHW program as MRC provides labor, transportation and recycling services, with the HHW program arranging for space and traffic control. Mattresses were collected during the Temporary event in Union City in FY 2022-2023.

#### Pandemic and Other Extraordinary Circumstances in 2022-2023

The continued public health threat of the COVID pandemic has led to changes in the HHW program that benefits county residents. Protocols implemented at HHW facilities aligned with guidance from OSHA, State and Alameda County Department guidance to protect staff and the public. During late FY 2019-20 HHW facilities made several improvements that remain in place after the Emergency Health Declaration was lifted. Residential transaction information is now recorded using a hand-held driver's license scanner, providing a quick, no-touch means of recording transaction and improve customer service. Implementation of the scanners improves data completeness and accuracy and enhances data security. The scanners increase efficiency of recordkeeping and save over 600 pounds of paper a year.

Starting in 2020 County-run HHW facilities accepted waste from residents by appointment. When the declaration was lifted in March no more appointments are taken for residents delivering waste to a permanent HHW facility. Appointments are used for Temporary one-day events. Waste Management Authority staff continue to be instrumental in dynamically updating websites and other outreach information as well as providing and hosting the easy-touse web-based appointments system. These resources give residents the information they need to safely use the HHW program.

HHW program staff continue to address customer needs by phone. The on-line appointments system has prompted numerous positive in-person and e-mail comments from residents. Rapid adoption of on-line appointments and other improved web services resulted in better informed HHW program customers. The improved online information and instructions frees HHW program staff to dedicate time to customers that call in with needs for in-person service.

The HHW sites continue to respond to logistics, labor and supplies uncertainties. Staff have responded by maximizing available waste storage space, organizing and minimizing equipment to allow increased stocking of PPE, packaging and operations supplies. Sites will continue to comply with State and County guidelines to assure staff and public safety including Site Specific Protection Plans, staff training, re-arrangement of site traffic flow and posting of signs to communicate safety information to the public.

#### **Future Efforts for FY 2023-2024**

- Continue to use driver's license scanners to collect and input customer information. Continuing effort to assure reduced data collection time and effort and provide the Authority needed demographic information on participant or household location and survey questions.
- Collaborate with the Authority to focus outreach on under-served areas as identified by transaction data. Resume more wide-spread public outreach as health risks and operational uncertainties decrease.
- Conduct a full schedule of One-Day events. Recent events were held safely and efficiently with attendance higher than in years past. We look forward to collaborating with Recycling Coordinators to schedule and promote these events.
- Seek multiple alternatives for recycling and reuse of collected material. Examples include recycling of printer cartridges and used cooking oil. Explore collaboration with organizations to re-distribute usable material in accordance with SB 726 guidelines.
- Use inter-departmental and inter-jurisdiction resources and other outreach to promote HHW Small Business Waste Services to agencies, landlords and other businesses and organizations.

## Cart-side Pick-up of Residential Hazardous & Other Waste by Jurisdiction

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Items	Þ	iameda	Dany B	erkeley	astro Va	abin E	meryvill	emont	ayward	ayward	vermor's	s Semark	akland	edmon	easanto	on Lean	an Lean	an Lorer	rincorps	nion City
E-Waste	В	В		В	В	В	В	В	В	В	В	В	S, B	В	В	В	В	В	В	
Batteries - Household - Rechargeable (up to 5 lbs)	S	S		S	S	S		S	S	S	S		S	S	S	S	S	S	S	
Batteries - Household - Single-Use	S	S		S	S	S		S	S	S	S	S	S	S	S	S	S	S	S	
Cell Phones - Non-working	В	S		В	В	В	В	S	В	S	В	В	S	S	В	В	В	В	S	
Cooking Oil/Grease/Fats	S			S																
Light Bulbs - CFLs		S				S							S							
Light Bulbs - Fluorescent Tubes						S														1
Motor Oil	S	S		S	S	S	S	S	S	S	S	S		S	S	S	S	S	S	1
Oil Filters	S	S		S	S	S	S	S	S	S	S	S		S	S	S	S	S	S	1
Textiles	В			S, B	S					S										1
Christmas Trees	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	

#### Key

B = Bulky Pickup

S = Special Item Action: Item is picked up curbside, but requires a special action (see below)

Items residents place NEXT to carts: motor oil & filters (in a bag), sealed containers of cooking oil, textiles, trees, & boxed e-waste Items residents put in clear bag & place on TOP of cart: batteries, cell phones, CFLs

Data is pulled from RE:Source. To note, cities also use the Special Item Action designation in RE:Source to share collection events and drop-off locations of hazardous items. These are not included in this table.



# Bill Text: CA AB2481 | 2021-2022 | Regular Session | Chaptered California Assembly Bill 2481

Bill Title: Household hazardous waste: facilities: transportation and acceptance.

**Spectrum:** Partisan Bill (Republican 1-0)

Status: (Passed) 2022-09-23 - Chaptered by Secretary of State - Chapter 499, Statutes of 2022. [AB2481 Detail]

**Download:** California-2021-AB2481-Chaptered.html

#### Assembly Bill No. 2481

#### CHAPTER 499

An act to amend Sections 25163, 25217.2, 25217.2.1, 25218.3, 25218.5, and 25218.8 of the Health and Safety Code, relating to hazardous waste.

[ Approved by Governor September 23, 2022. Filed with Secretary of State September 23, 2022. ]

#### LEGISLATIVE COUNSEL'S DIGEST

AB 2481, Smith. Household hazardous waste: facilities: transportation and acceptance.

Under existing law, the Department of Toxic Substances Control generally regulates the management and handling of hazardous waste and hazardous materials. Existing law authorizes certain entities to operate household hazardous waste collection facilities, as defined, under permits issued by the department, and specifies conditions for the transportation of household hazardous waste. Existing law requires a person engaged in the transportation of hazardous waste to be registered with the department and to either have a legible copy of the paper manifest, provided by the generator, in their possession while transporting the hazardous waste or have an electronic manifest accessible during transportation. Existing law allows certain of those facilities to accept recyclable latex paint and oil-based paint, and other waste in specified amounts from a very small quantity generator (VSQG) of the waste, as defined, if the facility complies with certain requirements. A violation of the hazardous waste control laws is a crime.

This bill would revise and recast various requirements and conditions related to the transportation of hazardous waste and the operation of household hazardous waste collection facilities. The bill, among other things, would, to the extent consistent with federal law, allow the transporting of waste to a household hazardous waste collection facility from another household hazardous waste collection facility, as specified, with a shipping paper instead of a manifest. The bill would allow household hazardous waste to be transported in a leased vehicle. The bill also would allow, under certain circumstances, household hazardous waste to be transported to a household hazardous waste collection facility by a person who did not generate the waste. The bill would allow a household hazardous waste collection facility authorized to accept hazardous waste from a very small quantity generator to take several actions, including, but not limited to, accepting hazardous waste from a VSQG in the same area and at the same time as residential household hazardous waste and allowing the facility to accept more than 100 kilograms of hazardous waste from a VSQG at a single time as long as it accepts no more 1,200 kilograms from that VSQG in a calendar year. The bill would authorize a household hazardous waste collection facility to allow people to exit their vehicles in waste acceptance areas only under specified conditions. The bill would specify that volume limitations placed on a facility in accepting hazardous waste from a VSQG do not apply to latex and oil-based paints, as provided, and would impose other volume and weight limitations on wastes transported by public agencies under existing authority to transport, or oversee the transport of, illegally disposed of hazardous waste. The bill would also make nonsubstantive changes, including by deleting obsolete provisions, and would make clarifying and conforming changes.

To the extent this bill changes the conduct that constitutes the crime of violating the hazardous waste control laws, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

#### **Digest Key**

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

#### **Bill Text**

#### THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

#### **SECTION 1.** (a) The Legislature finds and declares both of the following:

- (1) By facilitating the proper disposal of hazardous waste by households and small businesses, there could be an increase the amount of waste accepted by local household hazardous waste programs, which could increase costs for the sponsoring agency.
- (2) The Legislature intends to recognize the existing authority for local agencies to charge fees for costs incurred in managing these hazardous wastes and balance that authority with the need to keep costs low to ensure proper disposal of hazardous waste.
- (b) It is the intent of the Legislature to do all of the following:
  - (1) Clarify and resolve ambiguities and inconsistencies between conflicting sections of existing law.
  - (2) Facilitate proper disposal of hazardous waste and household hazardous waste by residential and very small quantity generators.
  - (3) Reduce administrative burdens and costs on local agencies that manage household hazardous waste collection programs as a public service to protect public health, safety, and the environment.
  - (4) Preserve existing flexibility with respect to the types and quantities of hazardous wastes accepted by local household hazardous waste collection programs.

#### **SEC. 2.** Section 25163 of the Health and Safety Code is amended to read:

- **25163.** (a) (1) Except as otherwise provided in subdivisions (b) to (f), inclusive, it is unlawful for a person to carry on, or engage in, the transportation of hazardous waste unless the person holds a valid registration issued by the department, and it is unlawful for a person to transfer custody of a hazardous waste to a transporter who does not hold a valid registration issued by the department. A person who holds a valid registration issued by the department pursuant to this section is a registered hazardous waste transporter for purposes of this chapter. A registration issued by the department to a transporter of hazardous waste is not transferable from the person to whom it was issued to any other person.
  - (2) A person who transports hazardous waste in a vehicle shall have a valid registration issued by the department in the person's possession while transporting the hazardous waste. The registration certificate shall be shown upon demand to any representative of the department, officer of the Department of the California Highway Patrol, any local health officer, or any public officer designated by the department.
  - (3) The hazardous waste information required and collected for registration pursuant to this subdivision shall be recorded and maintained in the management information system operated by the Department of the California Highway Patrol.
- (b) A person transporting only septic tank, cesspool, seepage pit, or chemical toilet waste that does not contain hazardous waste originating from other than the body of a human or animal and who holds an unrevoked registration issued by the health officer or the health officer's authorized representative pursuant to Article 1 (commencing with Section 117400) of Chapter 4 of Part 13 of Division 104 is exempt from the requirements of subdivision (a).
- (c) Except as provided in subdivisions (e) and (f), a person transporting hazardous waste to a permitted hazardous waste facility for transfer, treatment, recycling, or disposal, which waste does not exceed a total volume of five gallons or does not exceed a total weight of 50 pounds, is exempt from the requirements of subdivision (a) and from the requirements of paragraph (1) of subdivision (d) of Section 25160 requiring possession of a manifest while transporting hazardous waste, upon meeting all of the following conditions:
  - (1) The hazardous waste is transported in closed containers and packed in a manner that prevents the containers from tipping, spilling, or breaking during transport.
  - (2) Different hazardous waste materials are not mixed within a container during the transporting.
  - (3) If the hazardous waste is extremely hazardous waste or acutely hazardous waste, the extremely hazardous waste or acutely hazardous waste was not generated in the course of any business, and is not more than 2.2 pounds.
  - (4) The person transporting the hazardous waste is the producer of that hazardous waste, and the person produces no more than 100 kilograms of hazardous waste in any month.
  - (5) The person transporting the hazardous waste does not accumulate more than a total of 1,000 kilograms of hazardous waste onsite at any one time.
- (d) A person authorized to collect solid waste, as defined in Section 40191 of the Public Resources Code, who unknowingly transports hazardous waste to a solid waste facility, as defined in Section 40194 of the Public Resources Code, incidental to the collection of solid waste is not subject to subdivision (a).

- (e) A person transporting household hazardous waste or a very small quantity generator transporting hazardous waste to an authorized household hazardous waste collection facility pursuant to Section 25218.5 or 25218.5.1 is exempt from subdivision (a) and from paragraph (1) of subdivision (d) of Section 25160 requiring possession of a manifest while transporting hazardous waste.
- (f) (1) To the extent consistent with federal law, the transport of household hazardous waste to a household hazardous waste collection facility is exempt from subdivision (a) and from paragraph (1) of subdivision (d) of Section 25160 requiring possession of the manifest if the transport is from another household hazardous waste collection facility, a permanent household hazardous waste collection facility, a temporary household hazardous waste collection facility, a recycle-only household hazardous waste collection facility, or a solid waste load checking program operating under an agreement with a household hazardous waste collection facility.
  - (2) A shipment of household hazardous waste described in paragraph (1) shall use a shipping paper that contains all the information set forth in Subpart C (commencing with Section 172.200) of Part 172 of Subchapter C of Chapter I of Subtitle B of Title 49 of the Code of Federal Regulations. The shipping paper for the shipment shall be retained for a minimum of three years. For purposes of this subdivision, "shipping paper" may include a bill of lading or a manifest as required by federal law.
- **SEC. 3.** Section 25217.2 of the Health and Safety Code is amended to read:
- **25217.2.** (a) Recyclable latex paint may be accepted at any location, including, but not limited to, a permanent household hazardous waste collection facility in accordance with subdivision (b), if all of the following conditions are met:
  - (1) The location manages the recyclable latex paint in accordance with all applicable latex paint product management procedures specified by federal, state, or local law or regulation that include, at a minimum, that the recyclable latex paint is stored and handled in a manner that minimizes the chance of exposing the handler and the environment to potentially hazardous constituents that may be in, or have been incidentally added to, the recyclable latex paint.
  - (2) The recyclable latex paint is still in liquid form and is in its original packaging or is in a closed container that is clearly labeled.
  - (3) Any latex paint that is accepted as recyclable by the location and that is later discovered to be nonrecyclable shall be deemed to be a waste generated at the location where the discovery is made and the latex paint shall be managed as a waste in accordance with this chapter.
  - (4) If the recyclable latex paint is not excluded or exempted from regulation under Chapter I (commencing with Section 1.1) of Title 40 of the Code of Federal Regulations, the location meets all applicable federal requirements.
  - (5) The recyclable latex paint is stored for no longer than 180 days.
- (b) (1) For purposes of this subdivision the following definitions shall apply:
  - (A) "Permanent household hazardous waste collection facility" has the same meaning as defined in subdivision (h) of Section 25218.1.
  - (B) "VSQG" means a very small quantity generator, as specified in subdivision (q) of Section 25218.1.
  - (2) A permanent household hazardous waste collection facility that is authorized to accept hazardous waste from a VSQG pursuant to Section 25218.3 may accept recyclable latex paint from any generator in accordance with this article if the permanent household hazardous waste collection facility does all of the following:
    - (A) Complies with subdivision (a).
    - (B) Sends the recyclable latex paint, for recycling, to a latex paint recycling facility operating pursuant to this article.
    - (C) Maintains a monthly log of the volume of latex paint collected from each generator and submits that information annually with the report submitted pursuant to Section 25218.9 for household hazardous waste collected from household hazardous waste generators.
  - (3) A permanent household hazardous waste collection facility that takes the actions specified in paragraph (2) is not subject to the weight and volume limits on the amount of recyclable latex paint that may be accepted, pursuant to subdivision (b) of Section 25218.3.
  - (4) A permanent household waste collection facility may take the action specified in paragraph (2) notwithstanding a permit condition imposed upon the facility, a regulation adopted by the department to ensure a household hazardous waste collection facility does not accept hazardous waste from a commercial generator other than a VSQG, or the status of the generator.
- **SEC. 4.** Section 25217.2.1 of the Health and Safety Code is amended to read:
- **25217.2.1.** (a) A location that accepts recyclable latex paint pursuant to Section 25217.2 may also accept oil-based paint if all of the additional following conditions are met:
  - (1) The collection location is established under an architectural paint stewardship plan approved by the Department of Resources Recycling and Recovery pursuant to the architectural paint recovery program established pursuant to Chapter 5 (commencing with Section 48700) of Part 7 of Division 30 of the Public Resources Code.
  - (2) The collection location receives oil-based paint only from either of the following:

- (A) A person who generates oil-based paint incidental to owning or maintaining a place of residence.
- (B) A very small quantity generator.
- (3) The oil-based paint is still in liquid form and is in its original packaging or is in a closed container that is clearly labeled.
- (4) The location manages the oil-based paint in accordance with the requirements in Section 25217.2.
- (5) The collection location operates pursuant to a contract with a manufacturer or paint stewardship organization that has submitted an architectural paint stewardship plan that has been approved by the Department of Resources Recycling and Recovery and the collected paint is managed in accordance with that approved architectural paint stewardship plan.
- (6) The oil-based paint is stored for no longer than 180 days.
- (b) Oil-based paint initially collected at a collection location shall be deemed to be generated at the consolidation location for purposes of this chapter, if all of the following apply:
  - (1) The collection location is established under an architectural paint stewardship plan in accordance with the requirements of paragraph (1) of subdivision (a).
  - (2) The oil-based paint is subsequently transported to a consolidation location that is operating pursuant to a contract with a manufacturer or paint stewardship organization under an architectural paint stewardship plan that has been approved by the Department of Resources Recycling and Recovery pursuant to the architectural paint recovery program established pursuant to Chapter 5 (commencing with Section 48700) of Part 7 of Division 30 of the Public Resources Code.
  - (3) The oil-based paint is non-RCRA hazardous waste, or is otherwise exempt from, or is not otherwise regulated pursuant to, the federal act.
- (c) A permanent household hazardous waste collection facility that accepts recyclable latex paint pursuant to and in compliance with Section 25217.2 and that accepts oil-based paint is not subject to the weight and volume limits on the amount of oil-based paint that may be accepted, pursuant to subdivision (b) of Section 25218.3.
- **SEC. 5.** Section 25218.3 of the Health and Safety Code is amended to read:
- **25218.3.** (a) The department may authorize a household hazardous waste collection facility to accept hazardous waste from a VSQG.
- (b) (1) A household hazardous waste collection facility that is authorized to accept hazardous waste from a VSQG pursuant to subdivision (a) shall not accept more than 100 kilograms of hazardous waste, or 1 kilogram of extremely hazardous waste, from any one VSQG in a calendar month. Calculations of quantity under this subdivision shall not include universal wastes managed pursuant to the requirements of Chapter 23 (commencing with Section 66273.1) of Division 4.5 of Title 22 of the California Code of Regulations.
  - (2) Notwithstanding paragraph (1), a household hazardous waste collection facility may accept more than 100 kilograms of hazardous waste from a VSQG at a single time as long as it accepts a total of no more than 1,200 kilograms of hazardous waste from that VSOG in a calendar year.
  - (3) The limits specified in this subdivision do not apply to recyclable latex paint or oil-based paint accepted by a household hazardous waste collection facility that accepts recyclable paint pursuant to Section 25217.2 or oil-based paint pursuant to Section 25217.2.1.
- (c) A public agency, or its contractor, that accepts hazardous waste from a VSQG pursuant to this section may charge the VSQG a fee for the cost incurred in handling their hazardous waste.
- (d) The department may adopt and revise regulations for household hazardous waste collection facilities, including those that are authorized to accept hazardous waste from a VSQG. The regulations shall provide for all of the following:
  - (1) Promoting the reduction, reclamation, and recycling of hazardous waste over other hazardous waste management alternatives.
  - (2) Ensuring the safe transport of household hazardous waste and hazardous waste to authorized collection programs.
  - (3) Ensuring the compliance of participating VSQGs with the monthly quantity limitations specified in Section 262.13 of Title 40 of the Code of Federal Regulations.
- (e) Notwithstanding any other law, a household hazardous waste collection facility may authorize a person delivering waste at the acceptance area of the facility to exit their vehicle only if the facility determines that the person is required to exit the vehicle in order to provide access to the household hazardous waste being delivered. After providing the required access, the facility shall ensure that the person immediately returns to their vehicle.
- (f) Notwithstanding any other law, a household hazardous waste collection facility may accept hazardous waste from a VSQG in the same area and at the same time that the facility accepts residential household hazardous waste.
- **SEC. 6.** Section 25218.5 of the Health and Safety Code is amended to read:
- **25218.5.** (a) (1) Except as provided in paragraph (2), hazardous waste transported to a household hazardous waste collection facility shall be transported by any of the following:
  - (A) The individual or VSQG who generated the waste.

- (i) Another person may transport the waste to the household hazardous waste collection facility on behalf of an individual who generated the waste, provided the individual who generated the waste is unable or unavailable to transport the waste, for reasons including, but not limited to, death, illness, or disability.
- (ii) The person transporting waste on behalf of an individual pursuant to clause (i) shall provide a certification or signed statement to the household hazardous waste collection facility at the time of delivery attesting to the circumstances under which the person is delivering the other person's waste. The person shall also verify that the person is not receiving compensation for their services, and is not employed by an organization, whether for profit or not for profit, that provides a household hazardous waste transportation service.
- (iii) A person transporting waste on behalf of an individual pursuant to clause (i) is subject to the same transportation limits that otherwise apply to the household.
- (B) A curbside household hazardous waste collection program.
- (C) A mobile household hazardous waste collection facility, a temporary or permanent household hazardous waste collection facility, or a recycle-only household hazardous waste collection facility.
- (D) A door-to-door household hazardous waste collection program.
- (E) A household hazardous waste residential pickup service.
- (F) A registered hazardous waste transporter carrying hazardous waste generated by a VSQG.
- (G) A public agency, contractor of a public agency, or a registered hazardous waste transporter carrying hazardous waste from a solid waste facility or operation, including, but not limited to, a solid waste landfill loadcheck program or a transfer station loadcheck program, under agreement with the household hazardous waste collection facility.
- (H) A public agency, contractor of a public agency, or a registered hazardous waste transporter, under agreement with the household hazardous waste collection facility, operating under a contract with a public agency to transport hazardous wastes that were disposed of in violation of this chapter, and that are being removed by, or are being removed under the oversight of, the public agency, provided no more than 55 gallons or 500 pounds are being transported, and the hazardous wastes were not originally disposed of in violation of this chapter by that public agency.
- (2) Spent batteries that are received and transported pursuant to Section 25216.1 may be transported to a household hazardous waste collection facility from a collection location or an intermediate collection location.
- (3) Notwithstanding Section 25218.4, a registered hazardous waste transporter or mobile household hazardous waste collection facility transporting hazardous waste to a household hazardous waste collection facility shall comply with subdivision (f) of Section 25163.
- (b) An individual transporting household hazardous waste generated by that individual and a VSQG transporting hazardous waste generated by the VSQG to a household hazardous waste collection facility shall meet all of the following conditions:
  - (1) (A) Except as provided in subparagraphs (B) and (C) and Section 25218.5.1, the total amount of household hazardous waste transported by an individual or hazardous waste transported by a VSQG to a household hazardous waste collection facility shall not exceed a total liquid volume of five gallons or a total dry weight of 50 pounds. If the hazardous waste transported is both liquid and nonliquid, the total amount transported shall not exceed a combined weight of 50 pounds.
    - (B) Subparagraph (A) does not apply to spent batteries that are collected by a collection location or intermediate collection location pursuant to Section 25216.1 and transported to a household hazardous waste collection facility.
    - (C) A VSQG may transport up to 27 gallons or 220 pounds, but not more than 100 kilograms, per month to a household hazardous waste collection facility, if all of the following conditions are met:
      - (i) The hazardous waste being transported was generated by that VSQG.
      - (ii) The VSQG contacts the household hazardous waste collection facility before each delivery to confirm that the facility will accept the hazardous waste.
      - (iii) The household hazardous waste collection facility provides oral, written, or electronic instructions to the VSQG before each delivery on proper packing for the safe transportation of the specific hazardous waste being transported.
      - (iv) The VSQG or employees of the VSQG transport the hazardous waste in a vehicle owned or leased and operated by the VSQG.
    - (D) The limits in this subdivision do not apply to recyclable latex paints or oil-based paints transported to a household hazardous waste collection facility.
  - (2) The household hazardous waste and VSQG hazardous waste that is transported shall be in closed containers and packed in a manner that prevents the containers from tipping, spilling, or breaking during transport.
  - (3) Different household hazardous wastes or different VSQG hazardous wastes shall not be mixed within a container before or during transport.

- (4) If the hazardous waste is an extremely hazardous waste or an acutely hazardous waste, the total amount transported by a VSQG shall not exceed 2.2 pounds.
- (c) (1) Except as provided in paragraph (2), the total combined volume or weight of used oil filters and antifreeze transported to a recycle-only household hazardous waste collection facility by any one individual shall not exceed a total liquid volume of 10 gallons or a total dry weight of 100 pounds. Up to two spent lead-acid batteries may be transported at the same time and not more than 20 gallons of used oil may be transported in the same vehicle if the volume of each individual container does not exceed five gallons.
  - (2) Paragraph (1) does not apply to spent batteries that are collected by a collection location or intermediate collection location pursuant to Section 25216.1 and transported to a household hazardous waste collection facility.
- (d) A curbside household hazardous waste collection program shall meet all of the following conditions:
  - (1) Not more than a total combined weight of 10 pounds of used oil filters shall be collected from a single residence at one time.
  - (2) Not more than five gallons of used oil shall be collected from a single residence at one time, and the volume of each individual container collected shall not exceed five gallons.
  - (3) The volume of each individual container of architectural paint collected shall not exceed five gallons.
  - (4) Hazardous waste containing mercury shall not be collected by a curbside household hazardous waste collection program unless the waste is contained in secure packaging that prevents breakage and spillage.
  - (5) Fluorescent light tubes that are four feet or greater in length shall not be collected by a curbside household hazardous waste collection program.
  - (6) The transported household hazardous waste shall be in closed containers and packed in a manner that prevents the containers from tipping, spilling, or breaking during transport.
  - (7) Different household hazardous wastes shall not be mixed within a container before or during transport.
- (e) A door-to-door household hazardous waste collection program or household hazardous waste residential pickup service shall meet all of the following conditions:
  - (1) The transported household hazardous waste shall be in closed containers and packed in a manner that prevents the containers from tipping, spilling, or breaking during transport.
  - (2) Different household hazardous wastes shall not be mixed within a container before or during transport.
  - (3) (A) A door-to-door household hazardous waste collection program or household hazardous waste residential pickup service is exempt from the requirements of Section 25160 regarding the use of a manifest when transporting household hazardous waste collected from individual residences to an authorized hazardous waste collection facility. In lieu of a manifest, a receipt shall be issued for the household hazardous waste collected from an individual residence, and a copy of the receipt shall be retained by the public agency for a period of at least three years.
    - (B) If household hazardous waste is transported to a hazardous waste facility, as defined in Section 66260.10 of Title 22 of the California Code of Regulations, the consolidated manifesting procedures specified in Section 25160.8 shall be used by the public agency or its contractor.
- (f) Notwithstanding Section 25218.4, a permanent household hazardous waste collection facility, a mobile household hazardous waste collection facility, a temporary household hazardous waste collection facility, a recycle-only household hazardous waste collection facility, or a solid waste load checking program operating under an agreement with a household hazardous waste collection facility that transports household hazardous waste from the collection facility to a household hazardous waste collection facility pursuant to subdivision (a) shall comply with subdivision (f) of Section 25163 and paragraph (1) of subdivision (d) of Section 25160.
- (g) (1) Except as provided in paragraph (2), a door-to-door household hazardous waste collection program or household hazardous waste residential pickup service shall not be deemed to be a household hazardous waste collection facility for purposes of this chapter if it is operated in conjunction with an authorized household hazardous waste collection facility.
  - (2) A door-to-door household hazardous waste collection program or household hazardous waste residential pickup service, under which household hazardous waste is collected from households in one jurisdiction and transported to an authorized household hazardous waste collection facility in another jurisdiction, shall be deemed a household hazardous waste collection facility for purposes of this chapter and shall submit the notification required in Section 25218.2 to each Certified Unified Program Agency in whose jurisdiction the household hazardous waste is collected.
- **SEC. 7.** Section 25218.8 of the Health and Safety Code is amended to read:
- **25218.8.** (a) Except as provided in subdivision (b), a hazardous waste facilities permit shall be obtained for the operation of a household hazardous waste collection facility.
- (b) A hazardous waste facilities permit is not required for the operation of a recycle-only household hazardous waste collection facility if all of the following conditions are met:
  - (1) The facility accepts only the following recyclable household hazardous waste materials for subsequent transport to an authorized recycling facility:

- (A) Latex paint.
- (B) Used oil.
- (C) Used oil filters.
- (D) Antifreeze.
- (E) Spent lead-acid batteries.
- (F) Household hazardous waste that is designated as a universal waste pursuant to this chapter or the regulations adopted by the department.
- (G) Oil-based paint accepted pursuant to the requirements in Section 25217.2.1.
- (2) No hazardous wastes or other materials are handled at the facility other than the materials specified in paragraph (1).
- (3) The materials are transported to the collection facility by either of the following:
  - (A) The person who generated the material.
    - (i) Another person may transport the waste to the household hazardous waste collection facility on behalf of an individual who generated the waste, provided the individual who generated the waste is unable or unavailable to transport the waste, for reasons including, but not limited to, death, illness, or disability.
    - (ii) The person transporting waste on behalf of an individual pursuant to clause (i) shall provide a certification or signed statement to the household hazardous waste collection facility at the time of delivery attesting to the circumstances under which the person is delivering the other person's waste. The person shall also verify that the person is not receiving compensation for their services, and is not employed by an organization, whether for profit or not for profit, that provides a household hazardous waste transportation service.
    - (iii) A person transporting waste on behalf of an individual pursuant to clause (i) is subject to the same transportation limits that otherwise apply to the household.
  - (B) The authorized curbside household hazardous waste collection program or other household hazardous waste programs and sources, including load checking sources.
- (4) The materials transported to the facility are transported in accordance with Section 25218.5.
- (5) The materials collected are not stored at the facility for more than 180 days, except that less than one ton of spent lead-acid batteries may be stored at the facility for up to one year. More than one ton of spent lead-acid batteries shall not be stored at the facility for more than 180 days.
- (6) The materials collected are managed in accordance with the hazardous waste labeling, containerization, emergency response, and personnel training requirements of this chapter.
- (7) The facility is in compliance with Section 25218.2.
- **SEC. 8.** No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.



# Household Hazardous Waste Fee Analysis

# February 28, 2024

### Submitted to:

Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board, and the Energy Council (StopWaste) 1537 Webster Street Oakland, CA 94612





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### 1. Background and Scenarios

Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board, and the Energy Council's (StopWaste or the Agency) will determine whether an adjustment to the Household Hazardous Waste fee (HHW Fee) should be made beginning July 1, 2024 (FY 2025) and, if so, what is the appropriate per residential unit fee for the next five fiscal years through the end of FY 2029. The goal of this HHW Fee analysis is to provide options for the HHW Fee per residential unit for the next five fiscal years given a range of expenditure levels and targeted fund balance scenarios.

The HHW program was initially funded through a landfill tipping fee established in 1992, but due to a funding shortfall, in 2014 the Agency implemented a HHW Fee per residential unit (Ordinance 2014-01). In 2019, the Agency adopted Ordinance 2019-01 that revised Ordinance 2014-01, which removed the requirement that the Agency sunset the fee by June 30, 2024. Therefore, the Agency can update the HHW Fees again starting July 1, 2024 (FY 2025). As the HHW Fee per residential unit is due for revision, the Agency is analyzing the HHW program's fund balance and financial condition for the next five years.

Overall, the HHW program is comprised of three facilities operated by Alameda County, one facility operated by the City of Fremont, and Agency charges related to supporting the HHW program. Most of a facility's expenditures are for labor and benefits for staff that operate the facilities, third-party disposal services, supplies, rental equipment, other services, utilities, insurance, and general business operations. HHW program revenues are currently comprised of a \$6.64 HHW Fee per residential unit, making up 63% of total HHW Fee revenue, and a \$2.15 per landfill ton fee, making up 37% of total HHW Fee revenue.

The HHW program ending fund balance as of fiscal year 2023 was \$17 million, which is equivalent to roughly two years of fund balance. A goal of the fee for fiscal years 2025 to 2029 is whether it should maintain the two-year fund balance, or to target a lower fund balance at the end of fiscal year 2029.

This analysis included three scenarios (Scenarios 1-3) including 1) a best case to represent a 2% per year expenditure increase (equal to the average inflation of the lowest 5 years in the last 10 years), paired with no change in tonnage; 2) a mid-point to represent a 3% per year expenditure increase (equal to the average inflation rate in the last 10 years), paired with a 2% per year tonnage decrease; and 3) a worst case to represent a 5% per year expenditure increase (equal to the average of the last three years of above average inflation rates), paired with a 4% per year tonnage decrease. We also included three additional scenarios (Scenarios 4-6) based on maintaining the current \$6.64 per unit fee. Scenarios 4-6 provide a range of projected HHF program fund balances based on different cost-of-living increases.

Crowe modeled four sets of fund balance levels, ranging from maintaining a two-year fund balance at the end of FY 2029, down to a half-year fund balance at the end of FY 2029. This provides a total of four fund balance levels, representing a broad array of options. In higher fund balance options, the projected fee levels are higher than lower fund balance options. As part of this analysis, Crowe developed an updated HHW Excel-based model using data provided by the Agency.

**Exhibit 1** provides the annual expenditure and revenue changes for each of the six scenarios. In Scenarios 1 to 3, Crowe calculated HHW Fee levels for a 2-year, 1.5-year, 1-year, and 0.5-year fund balance level at the end of FY 2029. In Scenarios 4 to 6, by maintaining the current \$6.64 per unit fee, Crowe calculated a high, medium, and low fund balance level at the end of FY 2029. Below provides a summary of the best case, mid-point, and worst case scenarios:

- Best case Scenario (1, 4): expenditures increase 2% annually; tonnage stays flat.
- Mid-point Scenario (2, 5): expenditures increase 3% annually; tonnage decreases 2% annually.
- Worst case Scenario (3, 6): expenditures increase 5% annually; tonnage decreases 4% annually.

Exhibit 1 HHW Program Residential HHF Fee Scenarios Parameters and Annual Changes

			Į.	Annual Changes	
Scenario Name	Fee Levels	Projected Fund Balance Levels	Annual Expenditure Change	Number of Residential Units	Tonnage Change
1. Best Case	High, Medium, Low	2-year, 1.5 year, 1 year, 0.5 year	2%	+0.5%	-0%
2. Mid-Point	High, Medium, Low	2-year, 1.5-year, 1-year, 0.5-year	3%	+0.5%	-2%
3. Worst Case	High, Medium, Low	2-year, 1.5-year, 1-year, 0.5-year	5%	+0.5%	-4%
4. Best Case (maintain \$6.64)	Maintain \$6.64 per unit	High	2%	+0.5%	-0%
5. Mid-Point (maintain \$6.64)	Maintain \$6.64 per unit	Medium	3%	+0.5%	-2%
6. Worst Case (maintain \$6.64)	Maintain \$6.64 per unit	Low	5%	+0.5%	-4%

### 2. Fee Calculations

Using data provided by StopWaste, Crowe calculated HHW Fees across the six scenarios and four fund balance levels. The calculations represent a range of potential HHW Fee levels given varying degrees of expenditure escalations (2%, 3%, 5%), tonnage decreases (0%, -2%, -4%), and fund balance levels (0.5, 1, 1.5, and 2 years). In **Exhibit 2**, we provide the range of calculated HHW Fees. In **Exhibit 3**, we provide calculated fund balance levels by maintaining the existing \$6.64 per residential unit level through the end of FY 2029. The fee calculations indicate the following:

### Scenario 1 – Best Case (+2% Expenditures, 0% Tonnage)

- Increase in the HHW Fee per residential unit from \$6.64 to \$9.92 per unit to maintain a two-year fund balance at the end of FY 2029.
- o Increase in the HHW Fee per residential unit from \$6.64 to \$7.04 per unit for a one-year fund balance at the end of FY 2029. The ending fund balance decreases each year.

### • Scenario 2 – Mid-point (+3% Expenditures, -2% Tonnage)

- Increase in the HHW Fee per residential unit from \$6.64 to \$10.88 per unit to maintain a twoyear fund balance at the end of FY 2029.
- o Increase in the HHW Fee per residential unit from \$6.64 to \$7.80 per unit for a one-year fund balance at the end of FY 2029. The ending fund balance decreases each year.

### Scenario 3 – Worst Case (+5% Expenditures, -4% Tonnage)

- Increase in the HHW Fee per residential unit from \$6.64 to \$12.64 per unit to maintain a twoyear fund balance at the end of FY 2029.
- Increase in the HHW Fee per residential unit from \$6.64 to \$9.12 per unit for a one-year fund balance at the end of FY 2029. The ending fund balance decreases each year.

### • Scenarios 4 to 6 - Maintain \$6.64 per Residential Unit Fee

By maintaining the \$6.64 HHW Fee per residential unit, the projected fund balance at the end of FY 2029 ranges from \$2.7 million (0.3 year) for the worst-case scenario, \$5.7 million (0.6 year) for the mid-point scenario, and \$7.5 million (0.9 year) for the best case scenario.

Exhibit 2
HHW Program
Scenarios 1 to 3 – Calculated HHW Fees, per Residential Unit

Scenario and	Target Ending Fund Balance (FY 2029)										
Expenditure Escalation Level	2 Year	1.5 Year	1 Year	0.5 Year							
1. Best Case (+2% / 0%)	\$9.92	\$8.48	\$7.04	\$5.62							
2. Mid-Point (+3% / -2%)	\$10.88	\$9.34	\$7.80	\$6.30							
3. Worst-Case (+5% / -4%)	\$12.64	\$10.88	\$9.12	\$7.44							

Exhibit 3
HHW Program
Scenarios 4 to 6 (No Fee Change) – Calculated Fund Balance Levels

Scenario and Expenditure Escalation Level	Ending Fund Balance (\$) (FY 2029)	Ending Fund Balance (Years) (FY 2029)
4. Best Case (+2% / 0%)	\$7,533,221	0.9
5. Mid-Point (+3% / -2%)	\$5,690,458	0.6
6. Worst-Case (+5% / -4%)	\$2,735,394	0.3

Below we provide a series of supporting charts and tables:

- Exhibit 4 Projected ending balance under Scenario 1 (base case) between FY 2024 and FY 2029.
- Exhibit 5 Projected ending balance under Scenario 2 (mid-point) between FY 2024 and FY 2029.
- Exhibit 6 Projected ending balance under Scenario 3 (worst case) between FY 2024 and FY 2029.
- Exhibit 7 Projected ending balance under Scenarios 4, 5, and 6 (best case (2% expenditure growth, no change in tonnage), mid-point (3% expenditure growth, -2% tonnage decline), and worst case (5% expenditure growth, -4% tonnage decline)) between FY 2024 and FY 2029.
- **Exhibit 8** A 10-year projected fund condition for Scenario 1 (best case) by maintaining the current two-year fund balance through the end of FY 2029.
- Exhibit 9 A 10-year projected fund condition for Scenario 1 (best case) by targeting a one-year fund balance at the end of FY 2029.
- **Exhibit 10** A 10-year projected fund condition for Scenario 2 (mid-point) by maintaining the current two-year fund balance through the end of FY 2029.
- Exhibit 11 A 10-year projected fund condition for Scenario 2 (mid-point) by targeting a one-year fund balance at the end of FY 2029.
- **Exhibit 12** A 10-year projected fund condition for Scenario 3 (worst case) by maintaining the current two-year fund balance at the end of FY 2029.
- Exhibit 13 A 10-year projected fund condition for Scenario 3 (worst case) by targeting a one-year fund balance at the end of FY 2029.
- Exhibit 14 A 10-year projected fund condition for Scenario 4 (best case) by maintaining the existing \$6.64 per unit fee.
- **Exhibit 15** A 10-year projected fund condition for Scenario 5 (mid-point) by maintaining the existing \$6.64 per unit fee.
- **Exhibit 16** A 10-year projected fund condition for Scenario 6 (worst case) by maintaining the existing \$6.64 per unit fee.

Exhibit 4
HHW Program Fee
Scenario 1 – Best Case (Exp 2%, Tons 0%)
Projected Ending Fund Balance

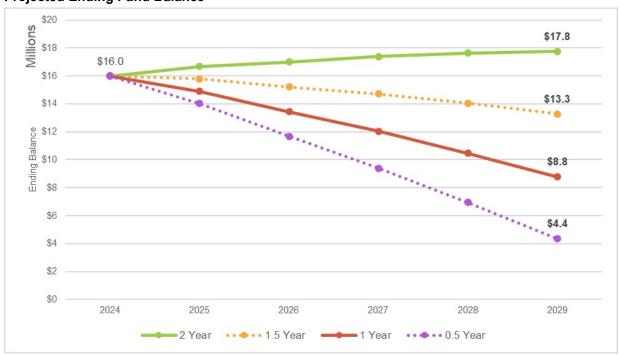


Exhibit 5 HHW Program Fee Scenario 2 – Mid-Point (Exp 3%, Tons -2%) Projected Ending Fund Balance

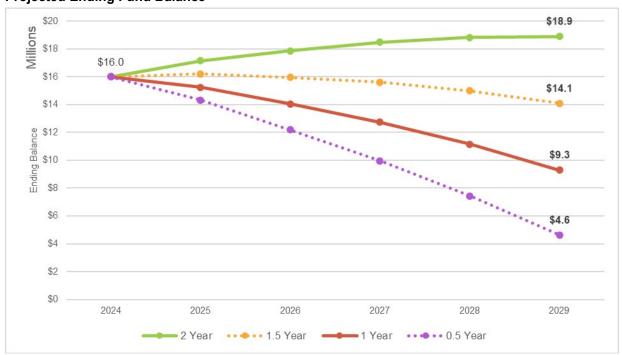


Exhibit 6 HHW Program Fee Scenario 3 – Worst Case (Exp 5%, Tons -4%) Projected Ending Fund Balance

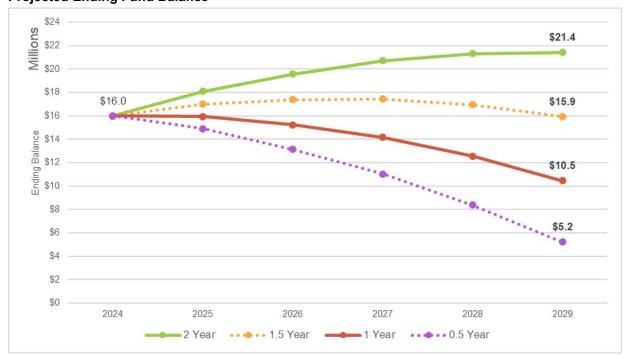


Exhibit 7 HHW Program Fee Scenarios 4, 5, 6 – Maintain \$6.64 per Unit Projected Ending Fund Balance

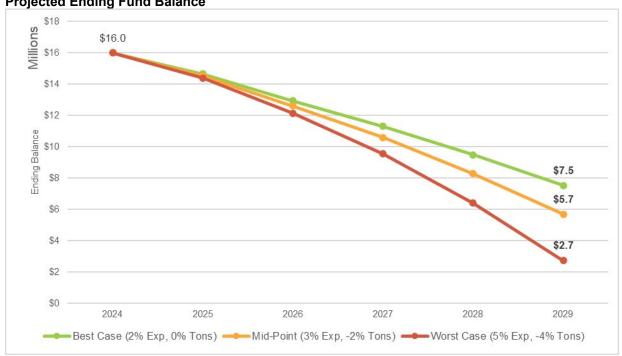


Exhibit 8
HHW Program Fee
Scenario 1 – Best Case (Exp 2%, Tons 0%)
Two-Year Fund Balance (FY 2029)

				Revenues				Е	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% ∆	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	%Δ	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	6,119,608	2,432,319	231,429	8,783,356	30.3%	6,132,350	1,369,926	590,161	8,092,437	5.0%	16,683,543	4.3%	690,919	2.0
2026	16,683,543	6,150,499	2,432,319	231,429	8,814,247	0.4%	6,481,551	1,413,225	601,964	8,496,740	5.0%	17,001,049	1.9%	317,507	2.0
2027	17,001,049	6,181,539	2,432,319	231,429	8,845,287	0.4%	6,410,643	1,425,271	614,003	8,449,917	-0.6%	17,396,418	2.3%	395,369	2.0
2028	17,396,418	6,212,737	2,432,319	231,429	8,876,485	0.4%	6,537,656	1,474,977	626,283	8,638,916	2.2%	17,633,987	1.4%	237,569	2.0
2029	17,633,987	6,244,094	2,432,319	231,429	8,907,842	0.4%	6,667,209	1,482,852	638,809	8,788,870	1.7%	17,752,959	0.7%	118,972	2.0
2030	17,752,959	6,275,610	2,432,319	231,429	8,939,358	0.4%	6,630,601	1,512,509	651,585	8,794,696	0.1%	17,897,622	0.8%	144,662	2.0
2031	17,897,622	6,307,285	2,432,319	231,429	8,971,032	0.4%	6,763,213	1,542,760	664,617	8,970,590	2.0%	17,898,064	0.0%	443	2.0
2032	17,898,064	6,339,118	2,432,319	231,429	9,002,866	0.4%	6,898,477	1,573,615	677,909	9,150,001	2.0%	17,750,929	-0.8%	(147,136)	1.9
2033	17,750,929	6,371,110	2,432,319	231,429	9,034,858	0.4%	7,036,447	1,605,087	691,467	9,333,001	2.0%	17,452,785	-1.7%	(298,144)	1.8
2034	17,452,785	6,403,271	2,432,319	231,429	9,067,018	0.4%	7,177,176	1,637,189	705,297	9,519,661	2.0%	17,000,142	-2.6%	(452,643)	1.8

Exhibit 9 HHW Program Fee Scenario 1 – Best Case (Exp 2%, Tons 0%) One-Year Fund Balance (FY 2029)

				Revenues				Е	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% Δ	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	4,342,948	2,432,319	231,429	7,006,695	4.0%	6,132,350	1,369,926	590,161	8,092,437	5.0%	14,906,882	-6.8%	(1,085,742)	1.8
2026	14,906,882	4,364,870	2,432,319	231,429	7,028,618	0.3%	6,481,551	1,413,225	601,964	8,496,740	5.0%	13,438,760	-9.8%	(1,468,122)	1.6
2027	13,438,760	4,386,899	2,432,319	231,429	7,050,646	0.3%	6,410,643	1,425,271	614,003	8,449,917	-0.6%	12,039,489	-10.4%	(1,399,271)	1.4
2028	12,039,489	4,409,039	2,432,319	231,429	7,072,787	0.3%	6,537,656	1,474,977	626,283	8,638,916	2.2%	10,473,360	-13.0%	(1,566,129)	1.2
2029	10,473,360	4,431,293	2,432,319	231,429	7,095,040	0.3%	6,667,209	1,482,852	638,809	8,788,870	1.7%	8,779,530	-16.2%	(1,693,830)	1.0
2030	8,779,530	4,453,659	2,432,319	231,429	7,117,407	0.3%	6,630,601	1,512,509	651,585	8,794,696	0.1%	7,102,241	-19.1%	(1,677,289)	0.8
2031	7,102,241	4,476,138	2,432,319	231,429	7,139,885	0.3%	6,763,213	1,542,760	664,617	8,970,590	2.0%	5,271,537	-25.8%	(1,830,704)	0.6
2032	5,271,537	4,498,729	2,432,319	231,429	7,162,477	0.3%	6,898,477	1,573,615	677,909	9,150,001	2.0%	3,284,012	-37.7%	(1,987,525)	0.4
2033	3,284,012	4,521,433	2,432,319	231,429	7,185,181	0.3%	7,036,447	1,605,087	691,467	9,333,001	2.0%	1,136,191	-65.4%	(2,147,821)	0.1
2034	1,136,191	4,544,257	2,432,319	231,429	7,208,004	0.3%	7,177,176	1,637,189	705,297	9,519,661	2.0%	(1,175,466)	-203.5%	(2,311,657)	(0.1)

Exhibit 10 HHW Program Fee Scenario 2 – Mid-Point (Exp 3%, Tons -2%) Two-Year Fund Balance (FY 2029)

				Revenues				Е	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% ∆	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	6,711,828	2,383,673	231,429	9,326,930	38.4%	6,191,228	1,383,116	595,947	8,170,291	6.0%	17,149,263	7.2%	1,156,639	2.0
2026	17,149,263	6,745,709	2,335,999	231,429	9,313,136	-0.1%	6,555,379	1,440,510	613,825	8,609,714	5.4%	17,852,685	4.1%	703,422	2.1
2027	17,852,685	6,779,752	2,289,279	231,429	9,300,460	-0.1%	6,572,114	1,467,348	632,240	8,671,702	0.7%	18,481,443	3.5%	628,758	2.1
2028	18,481,443	6,813,970	2,243,493	231,429	9,288,892	-0.1%	6,767,478	1,532,569	651,207	8,951,253	3.2%	18,819,082	1.8%	337,638	2.0
2029	18,819,082	6,848,362	2,198,622	231,429	9,278,413	-0.1%	6,968,702	1,556,710	670,743	9,196,155	2.7%	18,901,339	0.4%	82,258	2.0
2030	18,901,339	6,882,927	2,154,650	231,429	9,269,007	-0.1%	7,030,322	1,603,411	690,866	9,324,598	1.4%	18,845,748	-0.3%	(55,592)	2.0
2031	18,845,748	6,917,667	2,111,558	231,429	9,260,654	-0.1%	7,241,232	1,651,513	711,591	9,604,336	3.0%	18,502,065	-1.8%	(343,682)	1.9
2032	18,502,065	6,952,581	2,069,328	231,429	9,253,338	-0.1%	7,458,469	1,701,059	732,939	9,892,467	3.0%	17,862,937	-3.5%	(639,129)	1.8
2033	17,862,937	6,987,669	2,027,940	231,429	9,247,038	-0.1%	7,682,223	1,752,090	754,927	10,189,241	3.0%	16,920,735	-5.3%	(942,202)	1.6
2034	16,920,735	7,022,942	1,987,380	231,429	9,241,752	-0.1%	7,912,689	1,804,653	777,575	10,494,918	3.0%	15,667,568	-7.4%	(1,253,166)	1.5

Exhibit 11 HHW Program Fee Scenario 2 – Mid-Point (Exp 3%, Tons -2%) One-Year Fund Balance (FY 2029)

				Revenues				E	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% Δ	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	4,811,789	2,383,673	231,429	7,426,891	10.2%	6,191,228	1,383,116	595,947	8,170,291	6.0%	15,249,223	-4.6%	(743,400)	1.8
2026	15,249,223	4,836,078	2,335,999	231,429	7,403,506	-0.3%	6,555,379	1,440,510	613,825	8,609,714	5.4%	14,043,015	-7.9%	(1,206,209)	1.6
2027	14,043,015	4,860,484	2,289,279	231,429	7,381,192	-0.3%	6,572,114	1,467,348	632,240	8,671,702	0.7%	12,752,505	-9.2%	(1,290,510)	1.4
2028	12,752,505	4,885,015	2,243,493	231,429	7,359,937	-0.3%	6,767,478	1,532,569	651,207	8,951,253	3.2%	11,161,188	-12.5%	(1,591,316)	1.2
2029	11,161,188	4,909,671	2,198,622	231,429	7,339,722	-0.3%	6,968,702	1,556,710	670,743	9,196,155	2.7%	9,304,755	-16.6%	(1,856,433)	1.0
2030	9,304,755	4,934,452	2,154,650	231,429	7,320,531	-0.3%	7,030,322	1,603,411	690,866	9,324,598	1.4%	7,300,688	-21.5%	(2,004,067)	0.8
2031	7,300,688	4,959,357	2,111,558	231,429	7,302,344	-0.2%	7,241,232	1,651,513	711,591	9,604,336	3.0%	4,998,696	-31.5%	(2,301,992)	0.5
2032	4,998,696	4,984,387	2,069,328	231,429	7,285,144	-0.2%	7,458,469	1,701,059	732,939	9,892,467	3.0%	2,391,373	-52.2%	(2,607,323)	0.2
2033	2,391,373	5,009,542	2,027,940	231,429	7,268,911	-0.2%	7,682,223	1,752,090	754,927	10,189,241	3.0%	(528,956)	-122.1%	(2,920,329)	(0.1)
2034	(528,956)	5,034,830	1,987,380	231,429	7,253,639	-0.2%	7,912,689	1,804,653	777,575	10,494,918	3.0%	(3,770,235)	612.8%	(3,241,278)	(0.4)

Exhibit 12 HHW Program Fee Scenario 3 – Worst Case (Exp 5%, Tons -4%) Two-Year Fund Balance (FY 2029)

				Revenues				Е	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% Δ	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	%Δ	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	1.9
2025	15,992,624	7,797,565	2,335,025	231,429	10,364,019	53.8%	6,242,173	1,409,496	607,518	8,259,188	7.1%	18,097,455	13.2%	2,104,831	2.0
2026	18,097,455	7,836,926	2,241,624	231,429	10,309,980	-0.5%	6,703,754	1,495,871	637,894	8,837,520	7.0%	19,569,915	8.1%	1,472,460	2.1
2027	19,569,915	7,876,477	2,151,959	231,429	10,259,865	-0.5%	6,902,995	1,553,970	669,789	9,126,754	3.3%	20,703,026	5.8%	1,133,111	2.2
2028	20,703,026	7,916,230	2,065,881	231,429	10,213,540	-0.5%	7,245,145	1,652,868	703,279	9,601,291	5.2%	21,315,274	3.0%	612,249	2.1
2029	21,315,274	7,956,185	1,983,246	231,429	10,170,860	-0.4%	7,604,402	1,713,252	738,442	10,056,096	4.7%	21,430,038	0.5%	114,764	2.0
2030	21,430,038	7,996,342	1,903,915	231,429	10,131,686	-0.4%	7,890,194	1,798,914	775,365	10,464,472	4.1%	21,097,252	-1.6%	(332,786)	1.9
2031	21,097,252	8,036,702	1,827,758	231,429	10,095,889	-0.4%	8,284,703	1,888,860	814,133	10,987,696	5.0%	20,205,445	-4.2%	(891,807)	1.8
2032	20,205,445	8,077,263	1,754,647	231,429	10,063,340	-0.3%	8,698,939	1,983,303	854,839	11,537,081	5.0%	18,731,703	-7.3%	(1,473,741)	1.5
2033	18,731,703	8,118,027	1,684,461	231,429	10,033,917	-0.3%	9,133,885	2,082,468	897,581	12,113,935	5.0%	16,651,685	-11.1%	(2,080,018)	1.3
2034	16,651,685	8,159,006	1,617,082	231,429	10,007,517	-0.3%	9,590,580	2,186,591	942,461	12,719,632	5.0%	13,939,571	-16.3%	(2,712,115)	1.1

Exhibit 13 HHW Program Fee Scenario 3 – Worst Case (Exp 5%, Tons -4%) One-Year Fund Balance (FY 2029)

				Revenues				E	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% ∆	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	1.9
2025	15,992,624	5,626,092	2,335,025	231,429	8,192,545	21.6%	6,242,173	1,409,496	607,518	8,259,188	7.1%	15,925,981	-0.4%	(66,643)	1.8
2026	15,925,981	5,654,491	2,241,624	231,429	8,127,545	-0.8%	6,703,754	1,495,871	637,894	8,837,520	7.0%	15,216,006	-4.5%	(709,975)	1.7
2027	15,216,006	5,683,028	2,151,959	231,429	8,066,415	-0.8%	6,902,995	1,553,970	669,789	9,126,754	3.3%	14,155,667	-7.0%	(1,060,338)	1.5
2028	14,155,667	5,711,710	2,065,881	231,429	8,009,020	-0.7%	7,245,145	1,652,868	703,279	9,601,291	5.2%	12,563,396	-11.2%	(1,592,271)	1.2
2029	12,563,396	5,740,538	1,983,246	231,429	7,955,213	-0.7%	7,604,402	1,713,252	738,442	10,056,096	4.7%	10,462,514	-16.7%	(2,100,883)	1.0
2030	10,462,514	5,769,513	1,903,915	231,429	7,904,857	-0.6%	7,890,194	1,798,914	775,365	10,464,472	4.1%	7,902,898	-24.5%	(2,559,615)	0.7
2031	7,902,898	5,798,633	1,827,758	231,429	7,857,820	-0.6%	8,284,703	1,888,860	814,133	10,987,696	5.0%	4,773,022	-39.6%	(3,129,876)	0.4
2032	4,773,022	5,827,899	1,754,647	231,429	7,813,975	-0.6%	8,698,939	1,983,303	854,839	11,537,081	5.0%	1,049,916	-78.0%	(3,723,106)	0.1
2033	1,049,916	5,857,311	1,684,461	231,429	7,773,200	-0.5%	9,133,885	2,082,468	897,581	12,113,935	5.0%	(3,290,818)	-413.4%	(4,340,735)	(0.3)
2034	(3,290,818)	5,886,878	1,617,082	231,429	7,735,389	-0.5%	9,590,580	2,186,591	942,461	12,719,632	5.0%	(8,275,061)	151.5%	(4,984,243)	(0.7)

Exhibit 14 HHW Program Fee Scenario 5 – Best Case (Exp 2%, Tons 0%) Maintain \$6.64 per Unit

				Revenues				E	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% Δ	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	4,096,189	2,432,319	231,429	6,759,937	0.3%	6,132,350	1,369,926	590,161	8,092,437	5.0%	14,660,124	-8.3%	(1,332,500)	1.7
2026	14,660,124	4,116,866	2,432,319	231,429	6,780,614	0.3%	6,481,551	1,413,225	601,964	8,496,740	5.0%	12,943,997	-11.7%	(1,716,126)	1.5
2027	12,943,997	4,137,643	2,432,319	231,429	6,801,391	0.3%	6,410,643	1,425,271	614,003	8,449,917	-0.6%	11,295,471	-12.7%	(1,648,527)	1.3
2028	11,295,471	4,158,526	2,432,319	231,429	6,822,273	0.3%	6,537,656	1,474,977	626,283	8,638,916	2.2%	9,478,828	-16.1%	(1,816,642)	1.1
2029	9,478,828	4,179,515	2,432,319	231,429	6,843,262	0.3%	6,667,209	1,482,852	638,809	8,788,870	1.7%	7,533,221	-20.5%	(1,945,608)	0.9
2030	7,533,221	4,200,610	2,432,319	231,429	6,864,358	0.3%	6,630,601	1,512,509	651,585	8,794,696	0.1%	5,602,883	-25.6%	(1,930,338)	0.6
2031	5,602,883	4,221,812	2,432,319	231,429	6,885,559	0.3%	6,763,213	1,542,760	664,617	8,970,590	2.0%	3,517,852	-37.2%	(2,085,030)	0.4
2032	3,517,852	4,243,119	2,432,319	231,429	6,906,867	0.3%	6,898,477	1,573,615	677,909	9,150,001	2.0%	1,274,718	-63.8%	(2,243,134)	0.1
2033	1,274,718	4,264,533	2,432,319	231,429	6,928,281	0.3%	7,036,447	1,605,087	691,467	9,333,001	2.0%	(1,130,002)	-188.6%	(2,404,720)	(0.1)
2034	(1,130,002)	4,286,060	2,432,319	231,429	6,949,808	0.3%	7,177,176	1,637,189	705,297	9,519,661	2.0%	(3,699,856)	227.4%	(2,569,854)	(0.4)

Exhibit 15 HHW Program Fee Scenario 6 – Mid-Point (Exp 3%, Tons -2%) Maintain \$6.64 per Unit

	-			Revenues				E	xpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% Δ	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	2.0
2025	15,992,624	4,096,189	2,383,673	231,429	6,711,291	-0.4%	6,191,228	1,383,116	595,947	8,170,291	6.0%	14,533,624	-9.1%	(1,459,000)	1.7
2026	14,533,624	4,116,866	2,335,999	231,429	6,684,294	-0.4%	6,555,379	1,440,510	613,825	8,609,714	5.4%	12,608,204	-13.2%	(1,925,420)	1.5
2027	12,608,204	4,137,643	2,289,279	231,429	6,658,351	-0.4%	6,572,114	1,467,348	632,240	8,671,702	0.7%	10,594,853	-16.0%	(2,013,351)	1.2
2028	10,594,853	4,158,526	2,243,493	231,429	6,633,448	-0.4%	6,767,478	1,532,569	651,207	8,951,253	3.2%	8,277,047	-21.9%	(2,317,806)	0.9
2029	8,277,047	4,179,515	2,198,622	231,429	6,609,566	-0.4%	6,968,702	1,556,710	670,743	9,196,155	2.7%	5,690,458	-31.3%	(2,586,589)	0.6
2030	5,690,458	4,200,610	2,154,650	231,429	6,586,690	-0.3%	7,030,322	1,603,411	690,866	9,324,598	1.4%	2,952,549	-48.1%	(2,737,909)	0.3
2031	2,952,549	4,221,812	2,111,558	231,429	6,564,799	-0.3%	7,241,232	1,651,513	711,591	9,604,336	3.0%	(86,989)	-102.9%	(3,039,538)	(0.0)
2032	(86,989)	4,243,119	2,069,328	231,429	6,543,876	-0.3%	7,458,469	1,701,059	732,939	9,892,467	3.0%	(3,435,580)	3849.4%	(3,348,590)	(0.3)
2033	(3,435,580)	4,264,533	2,027,940	231,429	6,523,903	-0.3%	7,682,223	1,752,090	754,927	10,189,241	3.0%	(7,100,918)	106.7%	(3,665,338)	(0.7)
2034	(7,100,918)	4,286,060	1,987,380	231,429	6,504,870	-0.3%	7,912,689	1,804,653	777,575	10,494,918	3.0%	(11,090,966)	56.2%	(3,990,048)	(1.1)

Exhibit 16 HHW Program Fee Scenario 6 – Worst Case (Exp 5%, Tons -4%) Maintain \$6.64 per Unit

				Revenues				E	kpenditures						
Year	Starting Balance	Parcel Revenue	Tonnage Revenue	Interest	Total Revenue	% ∆	County	Fremont	Agency	Total Expenditures	% Δ	Ending Balance	% ∆	Annual Activity	Years
2024	\$16,963,967	\$4,075,619	\$2,432,318	\$231,429	\$6,739,366		\$5,887,784	\$1,244,337	\$578,589	\$7,710,710		\$15,992,624		\$(971,344)	1.9
2025	15,992,624	4,096,189	2,335,025	231,429	6,662,643	-1.1%	6,242,173	1,409,496	607,518	8,259,188	7.1%	14,396,079	-10.0%	(1,596,545)	1.6
2026	14,396,079	4,116,866	2,241,624	231,429	6,589,920	-1.1%	6,703,754	1,495,871	637,894	8,837,520	7.0%	12,148,479	-15.6%	(2,247,600)	1.3
2027	12,148,479	4,137,643	2,151,959	231,429	6,521,031	-1.0%	6,902,995	1,553,970	669,789	9,126,754	3.3%	9,542,756	-21.4%	(2,605,723)	1.0
2028	9,542,756	4,158,526	2,065,881	231,429	6,455,836	-1.0%	7,245,145	1,652,868	703,279	9,601,291	5.2%	6,397,300	-33.0%	(3,145,455)	0.6
2029	6,397,300	4,179,515	1,983,246	231,429	6,394,190	-1.0%	7,604,402	1,713,252	738,442	10,056,096	4.7%	2,735,394	-57.2%	(3,661,906)	0.3
2030	2,735,394	4,200,610	1,903,915	231,429	6,335,954	-0.9%	7,890,194	1,798,914	775,365	10,464,472	4.1%	(1,393,124)	-150.9%	(4,128,518)	(0.1)
2031	(1,393,124)	4,221,812	1,827,758	231,429	6,280,999	-0.9%	8,284,703	1,888,860	814,133	10,987,696	5.0%	(6,099,821)	337.9%	(4,706,697)	(0.5)
2032	(6,099,821)	4,243,119	1,754,647	231,429	6,229,196	-0.8%	8,698,939	1,983,303	854,839	11,537,081	5.0%	(11,407,707)	87.0%	(5,307,885)	(0.9)
2033	(11,407,707)	4,264,533	1,684,461	231,429	6,180,423	-0.8%	9,133,885	2,082,468	897,581	12,113,935	5.0%	(17,341,219)	52.0%	(5,933,512)	(1.4)
2034	(17,341,219)	4,286,060	1,617,082	231,429	6,134,571	-0.7%	9,590,580	2,186,591	942,461	12,719,632	5.0%	(23,926,279)	38.0%	(6,585,061)	(1.9)

# 3. Assumptions

This section provides key assumptions used for the HHW Fee analysis. Crowe gathered supporting documentation from StopWaste to identify the base year, FY 2024, inputs such as the starting balance, tonnage revenue, parcel revenue, and agency expenditures. For the City of Fremont and Alameda County, Crowe gathered actual expenditures for a portion of FY 2024 and conducted interviews with the city and county to determine expected expenditures for the remainder of the year.

Exhibit 17 provides the key inputs, projection method, and the data source.

Exhibit 17 HHW Program Fee Scenario Inputs

Input	Base Year (FY 2024)	Projection Method	Base Year Data Source
1. Starting fund balance	\$16,963,967		StopWaste
2. Parcel revenue	\$4,075,619 613,798 residential units × \$6.64/residential unit	+0.50% per year (average last 10 years)	StopWaste/ SCI Consulting/ County Assessor
3. Tonnage revenue	\$2,432,318 1,131,311 tons × \$2.15/ton	0%, -2%, -4% per year	StopWaste
4. Interest revenue	\$231,429	\$231,429 per year (flat)	StopWaste
5. Revenue total	\$6,739,366		Calculated
6. Alameda County expenditures <sup>1</sup>	\$5,887,784  (extrapolated from July–December 2023 actual expenditures)	CPI (2%, 3%, 5%) One-time costs: \$300K fire suppression system for two facilities (over 5 years); \$150K hazmat storage shed FY 2025	StopWaste/ Alameda County
7. City of Fremont expenditures <sup>1</sup>	\$1,244,337 (extrapolated from July–November 2023 actual expenditures)	CPI (2%, 3%, 5%)  One-time costs: \$15K oil collection tank FY 2026; \$20K floor recoating FY 2028; admin fee increase \$22K/year starting FY 2025	StopWaste/ City of Fremont
8. Agency expenditures	\$578,589 • \$385,322 expenditures • \$193,267 contingency	<ul> <li>CPI (2%, 3%, 5%)</li> <li>Reallocate \$70K/year from contingency to EPR-related professional services</li> </ul>	StopWaste
9. Expenditures total	\$7,710,710		Calculated
10. Ending fund balance	\$15,992,624		Calculated

<sup>&</sup>lt;sup>1</sup> A contingency of 1% is added to Alameda County and 6% for City of Fremont for additional labor and disposal increases.

### 4. Disclosures

As part of performing this HHW Fee Analysis work for StopWaste, Crowe assumed the following:

- StopWaste agreed to be responsible to make all management decisions and perform all
  management functions; designate an individual who possesses suitable skill, knowledge, and/or
  experience, preferably within senior management to oversee our services; evaluate the adequacy
  and results of the services performed; and accept responsibility for the results of the services.
- Our analyses and work product are intended for the benefit and use of StopWaste. This engagement
  was not planned or conducted in contemplation of reliance by any other party and is not intended to
  benefit or influence any other party. Therefore, items of possible interest to a third party may not be
  specifically addressed or matters may exist that could be assessed differently by a third party.
- StopWaste reviewed and approved the Excel forecasting model resulting from this work; and StopWaste (not Crowe) determined whether the model contains all factors that StopWaste deemed relevant and met StopWaste's needs.
- The information was developed based on historical client data only.
- Crowe may have relied on the information provided to the firm in connection with the project as accurate and complete without independently verifying the information provided.
- Other factors may influence the actual results of the HHW Fee Analysis. Crowe cannot control for these factors and Crowe relied on StopWaste provided data and information to identify these factors.

As a CPA firm the following statement is required: Crowe LLP is licensed by the California Board of Accountancy. Note also that Crowe and certain of its owners are licensed by the California State Board of Accountancy, but we are required by law to inform you that Crowe has owners not licensed by the California State Board of Accountancy who may provide services in connection with this engagement. If you have any questions regarding the personnel who will provide the services, please do not hesitate to contact Lisa Voeller.

The services were provided under AICPA Consulting Services only. These services and deliverables did not constitute an audit, review, compilation, agreed-upon procedures or an examination in accordance with standards established by the American Institute of Certified Public Accountants, accordingly Crowe in unable to express an opinion, conclusion, nor provide any assurance on the Deliverables provided for this project. StopWaste agreed that Crowe would not express an opinion, conclusion nor provide any assurance on the Deliverables. Crowe had no obligation to perform any services beyond those listed in the Scope of Work. If Crowe performed additional services beyond those listed, other matters might come to Crowe's attention that would be reported to the Agency. Crowe makes no representations as to the adequacy of the services or any Deliverables for Agency's purposes. It was understood that Crowe prepared the deliverables listed in the Scope of Work (the "Deliverables") reflecting findings of the services outlined in the Scope of Work for use by Agency.

### Appendix A:

# Fee Options and Considerations

This Appendix provides considerations and potential implications of fee calculations.

Below, we provide two key factors to consider when setting HHW Fee levels for the next five-year cycle:

- 1. Revenue stability In FY 2024, excluding interest, total HHW program revenue is comprised of 63% HHW residential per unit fee revenue and 37% tonnage revenue. HHW residential fee revenue is projected to grow at an average of 0.5% per year, based on the average parcel growth over the last 10 years. Tonnage revenue is projected to decline 2% per year, based on the mid-point scenario. Overall, total HHW program revenue is projected to slightly decline between -0.2% to -0.3% per year. Over time, the share of HHW program revenues from the per residential unit fee revenue is projected to continue increasing while the share of HHW program revenues from tonnage is expected to continue to decline. The result of these changes in revenue sources is that total HHW program revenues are projected to become more stable over time.
- 2. **Expenditure predictability** Expenditures in the last five years show that actual expenditures can be up to \$1.3 million higher than the previous year (up to \$1 million higher for Alameda County and up to \$300,000 higher for the City of Fremont). If expenditures are \$1.3 million higher each year for the next five years, the Agency would require a fund balance of \$6.5 million at the end of FY 2029 (or about \$7 million by factoring in a cost-of-living adjustment). A \$6.5 to \$7 million fund balance is equal to roughly 0.8 year of fund balance in FY 2029 for the mid-point scenario. This mostly aligns with keeping the existing \$6.64 per unit fee the same for the next five years using a mid-point expenditure growth of 3% per year.

We summarize likely HHW Fee per residential unit options for the Agency for FY 2025, as follows:

- 1. **Maintain a two-year fund balance** If the Agency decides to maintain a two-year fund balance at the end of FY 2029 (equaling \$18.9 million in the mid-point scenario), the Agency will need to increase the HHW Fee per residential unit by \$4.24 per unit to \$10.88 per unit (64% increase), which is higher than the cap of \$9.55 per unit specified in Ordinance 2014-01. Thus, a formal amendment to Ordinance 2014-01 that increases the per unit cap of \$9.55 would be required. This option would cause the most financial impact to residents with the highest increase to the fee. However, the HHW Fee level may be sufficiently low across all scenarios that even with a fee designed to maintain a two-year fund balance would not likely cause a significant financial hardship for most County residents. Considering a fee increase above the \$9.55 cap may be the biggest concern.
- 2. **Target a one-year fund balance** If the Agency decides to target a one-year fund balance at the end of FY 2029 (equaling \$9.3 million in the mid-point scenario), the Agency will need to increase the HHW Fee per residential unit by \$1.16 per unit to \$7.80 per unit (17% increase), well within the cap of \$9.55 per unit. This option would result in reducing the current two-year fund balance down to a one-year fund balance between FY 2025 and FY 2029. This option would cause minimal financial impact to residents as there would be a small increase to the fee.
- 3. **Maintain \$6.64 per unit** If the Agency decides to maintain the existing \$6.64 HHW Fee per residential unit fee, then the projected fund balance in the mid-point scenario would be 0.6 year of fund balance at the end of FY 2029, or \$5.7 million. This option would cause the least financial impact to residents as there would be no increase to the fee.
- 4. **Increase to \$9.55 per unit** If the Agency decides to increase the HHW Fee per residential unit to the cap of \$9.55 per unit, then the projected fund balance will be slightly above 1.5 years in the midpoint scenario. This option maintains the highest projected fund balance at the end of FY 2029 without requiring an increase above the cap of \$9.55 per unit.

### Appendix B:

### Supporting Revenue and Expenditure Data

This appendix provides additional detail supporting the revenue and expenditure totals for the HHW residential per unit fee calculations.

### **Parcel and Tonnage Revenue**

- Exhibit 18 provides the unit data for the parcel fee calculations, by single family and multi-family units.
- Exhibit 19 provides the tonnage data used for the tonnage revenue calculations.
- Exhibit 20 provides a chart showing the share of parcel (residential unit-based) and tonnage revenue at the end of FY 2029 for various fee levels between \$6.64 up to \$9.55 per residential unit for the mid-point scenario where tonnage decreases 2% per year.

### **Expenditure Categories**

- Exhibits 21, 22, and 23 provide the best case, mid-point, and worst case expenditures and tonnage by category for Alameda County for their three facilities.
- **Exhibits 24, 25,** and **26** provide the best case, mid-point, and worst case expenditures and tonnage by category for the City of Fremont for their one facility.
- Exhibits 27, 28, and 29 provide the best case, mid-point, and worst case expenditures and tonnage by category for StopWaste.

Exhibit 18 HHW Program Parcel Fee Revenue – Residential Unit Data

Fiscal Year	Single Family	Multi-Family	Units
2024	374,866	238,932	613,798
2025	376,758	240,138	616,896
2026	378,660	241,350	620,010
2027	380,571	242,568	623,139
2028	382,492	243,792	626,284
2029	384,423	245,022	629,445
2030	386,363	246,259	632,622
2031	388,313	247,502	635,815
2032	390,273	248,751	639,024
2033	392,243	250,007	642,249
2034	394,223	251,269	645,491

Exhibit 19 HHW Program Tonnage Fee Revenue – Landfill Tonnage Data

	Best C	ase	Mid-Po	int	Worst C	ase
Fiscal Year	Tonnage	%Δ	Tonnage	%Δ	Tonnage	%Δ
2024	1,131,311		1,131,311		1,131,311	
2025	1,131,311	0%	1,108,685	-2%	1,086,058	-4%
2026	1,131,311	0%	1,086,511	-2%	1,042,616	-4%
2027	1,131,311	0%	1,064,781	-2%	1,000,911	-4%
2028	1,131,311	0%	1,043,485	-2%	960,875	-4%
2029	1,131,311	0%	1,022,615	-2%	922,440	-4%
2030	1,131,311	0%	1,002,163	-2%	885,542	-4%
2031	1,131,311	0%	982,120	-2%	850,120	-4%
2032	1,131,311	0%	962,478	-2%	816,115	-4%
2033	1,131,311 0%		943,228	-2%	783,470	-4%
2034	1,131,311	0%	924,363	-2%	752,131	-4%

Exhibit 20 HHW Fund Revenue Sources Percentage of Total Revenue



Exhibit 21 HHW Program Alameda County Expenditures Best Case

Alameda County			Ве	st Case (2%	Ехр	, 0% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 2,227,012	\$ 2,271,552	\$	2,316,983	\$	2,363,323	\$ 2,410,589	\$ 2,458,801
Disposal	2,462,495	2,511,745		2,561,980		2,613,220	2,665,484	2,718,794
Supplies and services	315,506	321,816		328,252		334,817	341,514	348,344
Infrastructure charges	642,771	715,627		878,739		742,114	755,756	769,671
Overhead	370,000	377,400		384,948		392,647	400,500	408,510
Revenue offset	(130,000)	(132,600)		(135,252)		(137,957)	(140,716)	(143,531)
Contingency	-	66,810		145,901		102,479	104,529	106,619
<b>Net Projected Costs</b>	\$ 5,887,784	\$ 6,132,350	\$	6,481,551	\$	6,410,643	\$ 6,537,656	\$ 6,667,209

Exhibit 22 HHW Program Alameda County Expenditures Mid-Point

Alameda County			Mid	-Point (+3%	Ехр	, -2% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 2,227,012	\$ 2,293,822	\$	2,362,637	\$	2,433,516	\$ 2,506,521	\$ 2,581,717
Disposal	2,462,495	2,536,370		2,612,461		2,690,835	2,771,560	2,854,707
Supplies and services	315,506	324,971		334,720		344,762	355,104	365,758
Infrastructure charges	642,771	722,054		891,916		762,374	783,445	805,148
Overhead	370,000	381,100		392,533		404,309	416,438	428,931
Revenue offset	(130,000)	(133,900)		(137,917)		(142,055)	(146,316)	(150,706)
Contingency	-	66,810		99,029		78,374	80,725	83,147
<b>Net Projected Costs</b>	\$ 5,887,784	\$ 6,191,228	\$	6,555,379	\$	6,572,114	\$ 6,767,478	\$ 6,968,702

Exhibit 23 HHW Program Alameda County Expenditures Worst Case

Alameda County			Wo	rst Case (5%	Exp	o, -4% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 2,227,012	\$ 2,338,362	\$	2,455,280	\$	2,578,044	\$ 2,706,947	\$ 2,842,294
Disposal	2,462,495	2,585,620		2,714,901		2,850,646	2,993,179	3,142,837
Supplies and services	315,506	331,281		347,845		365,237	383,499	402,674
Infrastructure charges	642,771	734,910		918,655		804,088	841,293	880,357
Overhead	370,000	388,500		407,925		428,321	449,737	472,224
Revenue offset	(130,000)	(136,500)		(143,325)		(150,491)	(158,016)	(165,917)
Contingency	-	-		2,473		27,149	28,506	29,932
Net Projected Costs	\$ 5,887,784	\$ 6,242,173	\$	6,703,754	\$	6,902,995	\$ 7,245,145	\$ 7,604,402

Exhibit 24 HHW Program City of Fremont Expenditures Best Case

City of Fremont			Ве	st Case (2%	Ехр	, 0% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 595,139	\$ 607,042	\$	619,182	\$	631,566	\$ 644,197	\$ 657,081
Disposal	493,683	503,557		513,628		523,900	534,378	545,066
Supplies and services	127,992	130,552		133,163		135,826	138,543	141,314
Infrastructure charges	16,504	16,834		32,170		17,514	37,864	18,221
Overhead	42,000	66,000		67,320		68,666	70,040	71,441
Revenue offset	(30,981)	(31,600)		(32,232)		(32,877)	(33,535)	(34,205)
Contingency	-	77,543		79,994		80,676	83,489	83,935
<b>Net Projected Costs</b>	\$ 1,244,337	\$ 1,369,926	\$	1,413,225	\$	1,425,271	\$ 1,474,977	\$ 1,482,852

Exhibit 25 HHW Program City of Fremont Expenditures Mid-Point

City of Fremont			Mid	I-Point (+3%	Ехр	, -2% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 595,139	\$ 612,993	\$	631,383	\$	650,324	\$ 669,834	\$ 689,929
Disposal	493,683	508,493		523,748		539,461	555,644	572,314
Supplies and services	127,992	131,832		135,787		139,861	144,056	148,378
Infrastructure charges	16,504	16,999		32,509		18,034	38,575	19,132
Overhead	42,000	66,420		68,413		70,465	72,579	74,756
Revenue offset	(30,981)	(31,910)		(32,868)		(33,854)	(34,869)	(35,915)
Contingency	-	78,290		81,538		83,057	86,749	88,116
<b>Net Projected Costs</b>	\$ 1,244,337	\$ 1,383,116	\$	1,440,510	\$	1,467,348	\$ 1,532,569	\$ 1,556,710

Exhibit 26 HHW Program City of Fremont Expenditures Worst Case

City of Fremont			Woi	rst Case (5%	Exp	, -4% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 595,139	\$ 624,896	\$	656,140	\$	688,948	\$ 723,395	\$ 759,565
Disposal	493,683	518,367		544,285		571,500	600,075	630,078
Supplies and services	127,992	134,392		141,111		148,167	155,575	163,354
Infrastructure charges	16,504	17,329		33,195		19,105	40,060	21,063
Overhead	42,000	67,260		70,623		74,154	77,862	81,755
Revenue offset	(30,981)	(32,530)		(34,156)		(35,864)	(37,657)	(39,540)
Contingency	-	79,783		84,672		87,961	93,559	96,977
Net Projected Costs	\$ 1,244,337	\$ 1,409,496	\$	1,495,871	\$	1,553,970	\$ 1,652,868	\$ 1,713,252

Exhibit 27 HHW Program Agency Expenditures Best Case

Agency			В	est Case (2%	Ехр	o, 0% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 45,099	\$ 46,001	\$	46,921	\$	47,860	\$ 48,817	\$ 49,793
Disposal	-	-		-		-	-	-
Supplies and services	171,000	244,420		177,908		181,467	185,096	188,798
Infrastructure charges	119,000	121,380		123,808		126,284	128,809	131,386
Overhead	50,223	51,228		52,252		53,297	54,363	55,450
Revenue offset	-	-		-		-	-	-
Contingency	193,267	127,132		201,075		205,096	209,198	213,382
<b>Net Projected Costs</b>	\$ 578,589	\$ 590,161	\$	601,964	\$	614,003	\$ 626,283	\$ 638,809

### Exhibit 28 HHW Program Agency Expenditures Mid-Point

Agency			Mic	d-Point (+3%	Ехр	o, -2% Tons)		
Category	2024	2025		2026		2027	2028	2029
Salaries and benefits	\$ 45,099	\$ 46,452	\$	47,846	\$	49,281	\$ 50,760	\$ 52,282
Disposal	-	-		-		-	-	-
Supplies and services	171,000	246,130		181,414		186,856	192,462	198,236
Infrastructure charges	119,000	122,570		126,247		130,035	133,936	137,954
Overhead	50,223	51,730		53,282		54,880	56,527	58,222
Revenue offset	-	-		-		-	-	-
Contingency	193,267	129,065		205,037		211,188	217,523	224,049
<b>Net Projected Costs</b>	\$ 578,589	\$ 595,947	\$	613,825	\$	632,240	\$ 651,207	\$ 670,743

Exhibit 29 HHW Program Agency Expenditures Worst Case

Agency	Worst Case (5% Exp, -4% Tons)											
Category		2024		2025		2026		2027		2028		2029
Salaries and benefits	\$	45,099	\$	47,354	\$	49,722	\$	52,208	\$	54,818	\$	57,559
Disposal		-		-		-		-		-		-
Supplies and services		171,000		249,550		188,528		197,954		207,852		218,244
Infrastructure charges		119,000		124,950		131,198		137,757		144,645		151,878
Overhead		50,223		52,734		55,371		58,140		61,046		64,099
Revenue offset		-		-		-		-		-		-
Contingency		193,267		132,930		213,076		223,730		234,917		246,663
Net Projected Costs	\$	578,589	\$	607,518	\$	637,894	\$	669,789	\$	703,279	\$	738,442

### Appendix C:

## Supplemental Charts

This appendix provides supplemental charts for the HHW program revenue, expenditure, and fund balance projections.

### Scenarios 1 to 6 Charts - Years of Ending Fund Balance

- Exhibit 30 provides a chart showing years of ending fund balance for Scenario 1 through FY 2034.
- Exhibit 31 provides a chart showing years of ending fund balance for Scenario 2 through FY 2034.
- Exhibit 32 provides a chart showing years of ending fund balance for Scenario 3 through FY 2034.
- Exhibit 33 provides a chart showing years of ending fund balance for Scenarios 4 to 6 through FY 2034.

### Scenarios 1 to 3 Charts - Revenue, Expenditure, Fund Balance Totals

- Exhibit 34 provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 1 (best case) with a goal of a two-year ending fund balance at the end of FY2029.
- **Exhibit 35** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 1 (best case) with a goal of a one-year ending fund balance at the end of FY2029.
- Exhibit 36 provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 2 (mid-point) with a goal of a two-year ending fund balance at the end of FY2029.
- Exhibit 37 provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 2 (mid-point) with a goal of a one-year ending fund balance at the end of FY2029.
- **Exhibit 38** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 3 (worst case) with a goal of a two-year ending fund balance at the end of FY2029.
- **Exhibit 39** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 3 (worst case) with a goal of a one-year ending fund balance at the end of FY2029.

#### Scenarios 4 to 6 Charts – Revenue, Expenditure, Fund Balance Totals

- **Exhibit 40** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 4, best case, with maintaining the \$6.64 per residential unit fee through the end of FY 2029.
- **Exhibit 41** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 5, mid-point, with maintaining the \$6.64 per residential unit fee through the end of FY 2029.
- **Exhibit 42** provides a chart showing revenue, expenditure, and fund balance totals between FY 2024 to FY 2029 for Scenario 6, worst case, with maintaining the \$6.64 per residential unit fee through the end of FY 2029.

Exhibit 30 HHW Program Scenario 1 – Best Case Years of Ending Fund Balance through FY 2034

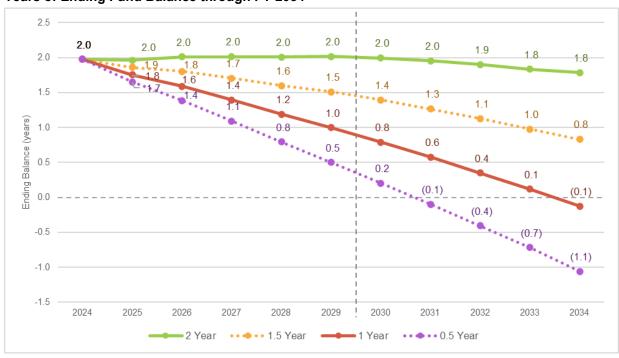


Exhibit 31
HHW Program
Scenario 2 – Mid-Point
Years of Ending Fund Balance through FY 2034

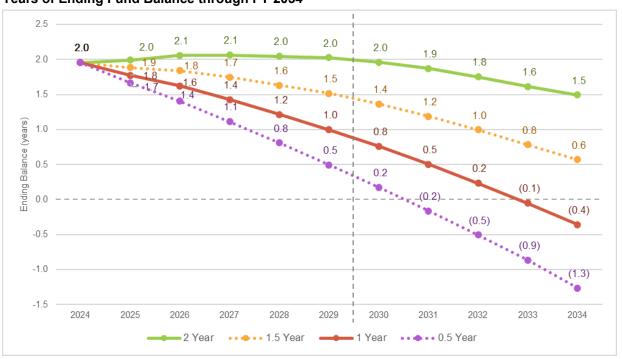


Exhibit 32 HHW Program Scenario 3 – Worst Case Years of Ending Fund Balance through FY 2034



Exhibit 33 HHW Program Scenarios 4, 5, 6 – Maintain \$6.64 per Unit Years of Ending Fund Balance through FY 2034

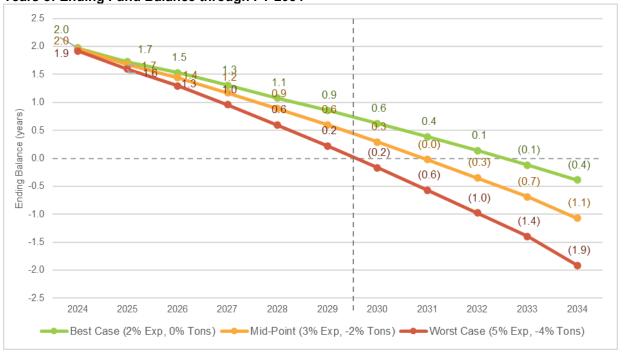


Exhibit 34 HHW Program Scenario 1 (Base Case) Two-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029



Exhibit 35 HHW Program Scenario 1 (Base Case) One-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029

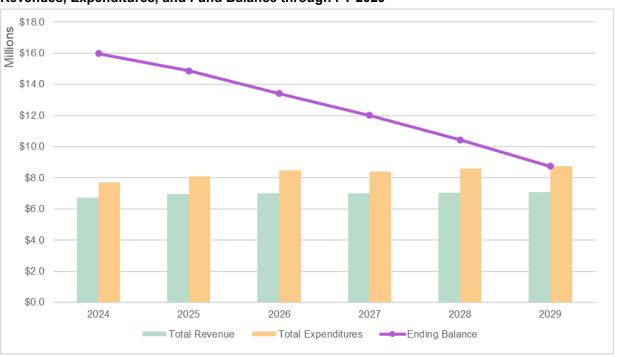
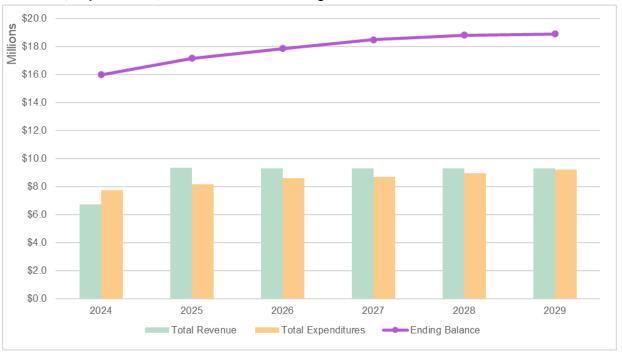


Exhibit 36 HHW Program Scenario 2 (Mid-Point) Two-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029



HHW Program Scenario 2 (Mid-Point) One-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029

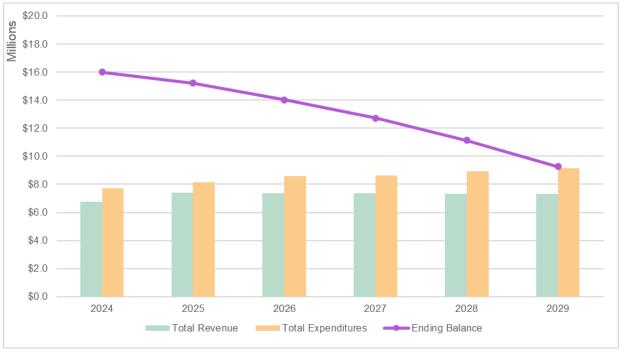


Exhibit 37 HHW Program Scenario 3 (Worst Case) Two-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029



Exhibit 38 HHW Program Scenario 3 (Worst Case) One-Year Fund Balance (FY 2029) Revenues, Expenditures, and Fund Balance through FY 2029

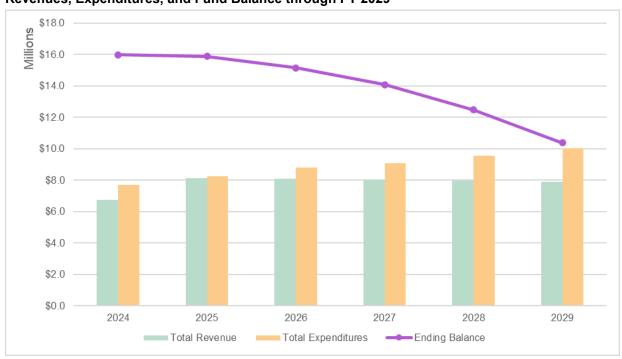


Exhibit 39 HHW Program Scenario 4 (Best Case) Maintain \$6.64 per Unit Revenues, Expenditures, and Fund Balance through FY 2029

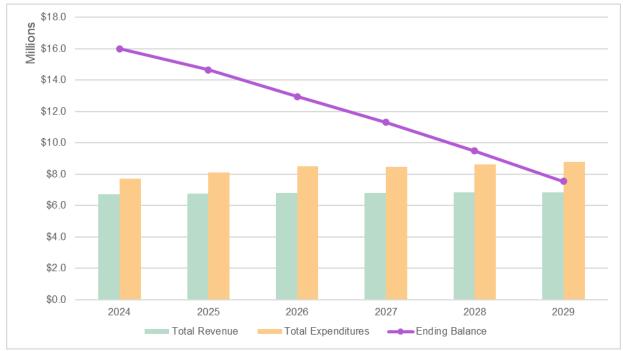


Exhibit 40 HHW Program Scenario 5 (Mid-Point) Maintain \$6.64 per Unit Revenues, Expenditures, and Fund Balance through FY 2029

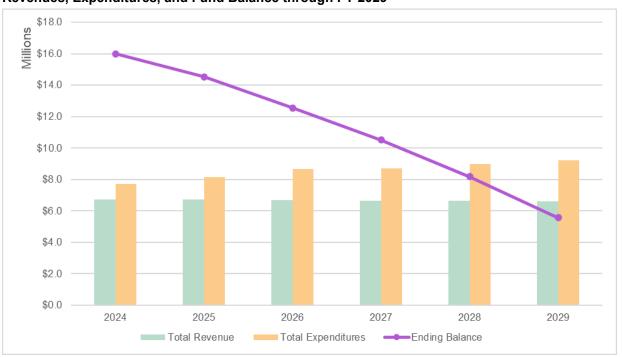
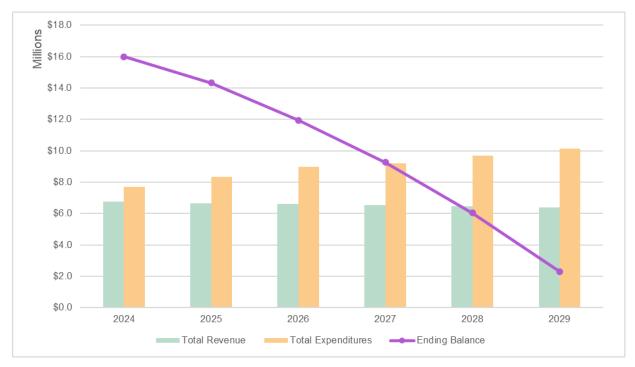


Exhibit 41 HHW Program Scenario 6 (Worst Case) Maintain \$6.64 per Unit Revenues, Expenditures, and Fund Balance through FY 2029



#### **ATTACHMENT 3**



**DATE:** March 14, 2024

**TO:** Programs & Administration Committee

Planning Committee/Recycling Board

FROM: Pat Cabrera, Administrative Services Director

**SUBJECT:** Multi-Year Fiscal Forecast

#### **SUMMARY**

In fiscal year 2022, the Agency engaged the consulting services of Crowe LLP to perform fiscal forecasts and an analysis of the Agency's fund balance and reserves. This analysis was to help determine an adequate or minimum funding level for those resources. The analysis focused on the Agency's fee-based revenue structure and projected expenditures. Landfill tonnage-based fees are the primary source of revenue for the Agency's discretionary budget (similar to a general fund). Crowe also developed a forecasting model, including seven scenarios, that staff uses to update the projections each year to help determine funding trends and associated fiscal measures to support the Agency's operations and mission. At the March 14 Programs & Administration and Recycling Board meetings, staff will present an overview of the latest analysis and annual fiscal forecast.

### **DISCUSSION**

Key to the Agency's mission is to accelerate progress toward a circular economy, including advancing upstream waste prevention as well as material reuse, repair, and recycling. Consistent with our mission and other broader economic factors, solid waste disposal and the associated revenue will decline over time. Under the current revenue structure, maintaining consistent expenditures will at some point be fiscally unsustainable. As revenues decrease, or even if revenues remain flat, consistent or increased expenditures would over time lead to a structural deficit. As such, some threshold of fund balance is needed to fill in budgetary gaps while critical financial and programmatic decisions are made and implemented, such as reductions in certain expenditures and/or consideration of an increase, restructuring, or diversification of fees and other sources of revenue. Given the unique manner in which the Agency is funded, determining the appropriate fund balance threshold required a comprehensive analysis (Attachment 1) designed to provide fiscal guidance based on differing scenarios, as discussed below.

### **FORECAST SCENARIOS**

The main purpose of the initial Crowe analysis and development of the fiscal forecasting model was to help determine an adequate or minimum fund balance with reserves that the Agency should maintain that both supports advancement of the Agency's mission today, while also providing the means to plan for the future. To achieve this purpose, the consultants assisted with developing forecasting scenarios as described in the "Forecast Scenario Descriptions" table below (see page 9 of Attachment 1 for a more detailed description of each scenario). The Agency intended for these scenarios to cover a range of potential circumstances that

could occur in the future and the potential impact of these scenarios on the Agency's reserves and fund balance. We are now and will continue to use these models as part of the annual multi-year forecast.

For purposes of the analysis, Scenario A represents the best case from a revenue perspective, descending to Scenario G which is the worst case, again from a revenue perspective. The basis for Scenarios A, B, C, and F is historical, meaning that a review of historical trends such as disposal changes over a specific time frame and/or impacts from the 2007-2009 recession were factored into the forecast. The basis for Scenarios D, E, and G is "goal-based," meaning that the trends reflect longer-term declines in tonnage based on policy goals, as articulated in the Recycling Plan adopted by the Agency's Recycling Board. The Agency's financial status has been closely tracking with Scenario C, and to refine our forecast for the coming fiscal year 2025 and beyond, staff added scenario C1 which maintains hard costs at FY 2024 levels for a total discretionary budget under \$13 million.

### **Forecast Scenario Descriptions**

	Scenario	Brief Description	Tonnage Change	Basis
A.	Status Quo with Growth	Slight growth based on most recent five years	Increase	Historical
В.	Status Quo	Tonnage stays flat	No Change	Historical
C.	<b>Economic Cycle</b>	Declines based on most recent 15 years	Decrease	Historical
CI.	Economic Cycle – Static hard cost	Declines based on most recent 15 years. No Hard Cost Expenditure Increase FY 2025	Decrease	Historical
D.	Organics	Achieve 75% reduction in landfilled organics by Jan 1, 2025 (FY 2025) using a FY 2021 baseline (SB 1383¹), then tonnage stays flat	Decrease	Goal-based
E.	Organics and Recyclables	Achieve 75% reduction in landfilled organics by Jan 1, 2025 (FY 2025) using a FY 2021 baseline (SB 1383), then 75% reduction in recyclables by FY 29/30	Decrease	Goal-based
F.	Recession	Tonnage declines similar to 2008 Recession to its recovery	Decrease	Historical
G.	Recycling Plan	Achieve Recycling Plan goal of 100% diversion by 2045	Decrease	Goal-based

\_

<sup>&</sup>lt;sup>1</sup> Senate Bill 1383 Short-lived climate pollutants. Section 39730.6. Requires local government to reach a 75% reduction in organics landfilled by January 1, 2025. StopWaste is using a FY 21/22 baseline for the purposes of the projection.

#### MINIMUM FUND BALANCES AND RESERVES

A component of this analysis was to help determine what the Agency should maintain as the minimum level of funding required per each forecasting scenario in order to continue to efficiently operate while decisions are made to address funding imbalances if needed. This calculation is described in detail on page 12 of the report. Included in the report is the assumption that three years of lead time is needed to undergo a process that addresses funding declines, whether that be through changes to the revenue structure or programmatic changes (i.e., reductions), which take time to implement effectively.

The analysis concluded that the minimum funding level is an amount equivalent to 1 to 1.4 times an average discretionary budget (depending on the scenario). The Agency currently meets that minimum with an additional 9-month surplus (above the minimum contingency funding levels). Therefore, the Agency would have sufficient surplus fund balance and reserves based on any of the seven scenarios to operate under an annual deficit for at least the next three years. The one exception is scenario G which is highly unlikely to occur within this time frame.

### **KEY FINDINGS FROM THE SCENARIO ANALYSIS**

The Crowe analysis provides a useful tool to the Agency to help identify a level of fund balance and reserves needed to efficiently operate while making critical decisions regarding its revenue structure or level of expenditures. Staff updated the projection models for the most recent fiscal forecast to include actual figures for last fiscal year (FY 2023) and budgeted figures for the current fiscal year. Based on actual figures and revenues to date, the Agency's fiscal trend closely matches Scenario C.

Here are the key findings from the Agency's latest fiscal forecast analysis:

- Under all eight scenarios, the Agency has accumulated fund balances and reserves, currently totaling approximately \$24.5m, which provide a sufficient planning horizon to implement changes which address the structural imbalance between revenues and expenditures.
- Based on the current fund balance, the Agency does not require any fee adjustment at this time.
   However, reliance on tonnage-based fees under the current rates (as the Agency's primary source of discretionary revenue), will not be adequate to fund operations (assuming a similar expenditure plan), in the longer term.
- The longer-term forecast (through FY 2030-2032) shows a decline in all fund balances and reserves even in the best-case scenario, with some scenarios showing the Agency exhausting all fund balances and reserves by FY 2029-2032. That is because even in the scenario which shows revenue growth, it will not outpace expected inflationary impacts.
- The Agency's unique circumstances related to revenue generation and the complexity of adjusting the fees that generate Agency revenue expose the Agency to financial risk in the longer-term, which points to the benefits of maintaining higher fund balance than other area waste management authorities that have different, more nimble fee structures.
- The Agency will use the forecasting tools to inform its budgetary and policy decision-making going forward. With active monitoring of the Agency's fund balance, the Agency can proactively assess and manage potential surpluses or deficits.
- The Agency has already begun the process of analyzing options for diversifying and stabilizing revenues for the long-term.

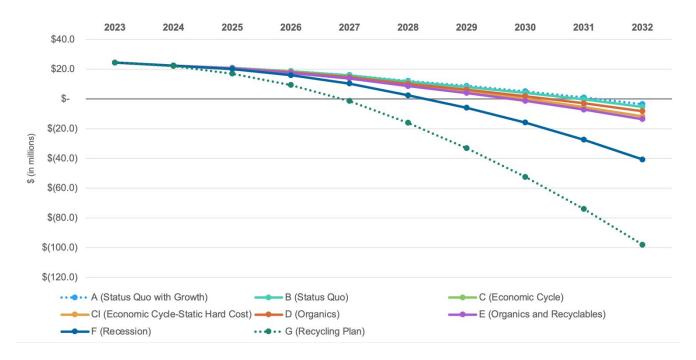
### **LONGER TERM FORECASTS**

While financial forecasting is a valuable tool, the forecasts are estimates that become less accurate the further out data are projected. However, extending the scenarios through FY 2032 still provides insight as shown below. Note these charts have been updated so are slightly different from the Crowe report. The table and chart below reflect estimated fund balance trends without interventions such as expenditure reductions or diversification of revenues.

Projected Ending Fund Balance with Reserves (in millions) - Years 3, 6, and 9

Scenario	Base \ 202		Year 202		Yea 20		Year 9 2032		
A. Status Quo with Growth	\$	24.5	\$	18.8	\$	8.8	\$	(3.5)	
B. Status Quo	\$	24.5	\$	18.7	\$	8.1	\$	(5.3)	
C. Economic Cycle	\$	24.5	\$	18.0	\$	5.3	\$	(11.8)	
CI. Economic Cycle-Static Hard Cost	\$	24.5	\$	18.1	\$	5.4	\$	(11.7)	
D. Organics	\$	24.5	\$	17.9	\$	6.3	\$	(8.2)	
E. Organics and Recyclables	\$	24.5	\$	17.5	\$	4.0	\$	(13.6)	
F. Recession	\$	24.5	\$	16.0	\$	(5.9)	\$	(40.7)	
G. Recycling Plan	\$	24.5	\$	9.4	\$	(33.1)	\$	(98.1)	

### Projected Fund Balance with Reserves (FY 2023 through FY 2032)



As previously mentioned, the longer-term forecast (through FY 2032) shows a decline in all fund balances and reserves even in the best-case scenario, with scenarios C-G showing the Agency exhausting all fund balances and reserves. That is because simple inflationary increases will outpace revenues in the best-case scenario, and more likely we will experience declines in tonnage-based revenues over time. While the Agency will take steps to minimize the risk of these longer-term forecasts, they do highlight the need for the Agency to continue to regularly update the forecasting models to help identify trends and to address this fiscal imbalance.

### **BUDGET IMPACTS FOR FY 2025**

While the longer-term forecasts indicate that the Agency will need to restructure and diversify its revenue streams, the short-term forecasts show that even in the worst-case scenario the Agency is in a stable financial position. This is helpful in preparing for the upcoming budget in that the Agency has the flexibility to make additional investment in our programs that further our mission. As the chart below shows, the Agency can utilize its funding contingency to fill in the budgetary gaps between revenue and expenditures and still maintain an adequate surplus even in the worst-case scenario (Scenario G, which is highly unlikely) through FY 2027, and through FY 2029 in the more likely scenario (Scenario C). Note, this does not mean that the Agency will have exhausted the fund balances and reserves by these dates, only that the accumulated fund balance and reserves would no longer meet the minimum three-year funding contingency for that particular scenario.

### **Fund Balance with Reserves (in millions)**

Scenario	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
A. Status Quo with Growth	\$ 24.5	\$ 22.4	\$ 21.0	\$ 18.8	\$ 16.1	\$ 12.2	\$ 8.8	\$ 5.1	\$ 1.0	\$ (3.5)
B. Status Quo	\$ 24.5	\$ 22.4	\$ 21.0	\$ 18.7	\$ 15.8	\$ 11.7	\$ 8.1	\$ 4.1	\$ (0.3)	\$ (5.3)
C. Economic Cycle	\$ 24.5	\$ 22.4	\$ 20.7	\$ 18.0	\$ 14.6	\$ 9.8	\$ 5.3	\$ 0.2	\$ (5.5)	\$(11.8)
CI. Economic Cycle- Static Hard Cost	\$ 24.5	\$ 22.4	\$ 20.8	\$ 18.1	\$ 14.7	\$ 9.8	\$ 5.4	\$ 0.3	\$ (5.4)	\$(11.7)
D. Organics	\$ 24.5	\$ 22.4	\$ 20.6	\$ 17.9	\$ 14.7	\$ 10.2	\$ 6.3	\$ 1.9	\$ (2.9)	\$ (8.2)
E. Organics and Recyclables	\$ 24.5	\$ 22.4	\$ 20.6	\$ 17.5	\$ 13.8	\$ 8.7	\$ 4.0	\$ (1.3)	\$ (7.2)	\$(13.6)
F. Recession	\$ 24.5	\$ 22.4	\$ 20.1	\$ 16.0	\$ 10.4	\$ 2.5	\$ (5.9)	\$(15.9)	\$ (27.4)	\$(40.7)
G. Recycling Plan	\$ 24.5	\$ 22.1	\$ 17.1	\$ 9.4	\$ (1.4)	\$ (16.1)	\$ (33.1)	\$(52.4)	\$ (74.1)	\$(98.1)

Staff is in the process of preparing the FY 2025 budget, which will be presented at the joint session of the Boards and the Energy Council on April 24, 2024. While the Agency will always exercise fiscal prudence, this analysis provides particularly useful information based on Agency priorities including SB 1383 implementation, and our ongoing efforts to build upstream waste prevention infrastructure, such as by advancing reusable foodware options to replace single-use disposables.

### PLANNING FOR THE FUTURE

As previously discussed, staff is currently analyzing various options to stabilize its core revenue and will be presenting findings to the Boards upon completion of the analysis, tentatively scheduled for July or September. Furthermore, the Agency is taking proactive measures regarding expenditures, such as by limiting hiring and carefully managing vacancies. The Agency will continue its practice of monitoring unfunded liabilities and making strategic discretionary payments when feasible to both ensure the adequacy of the pension and post-retirement benefits (OPEB) and reduce annual operating expenses.

#### RECOMMENDATION

This item is for information only. Staff will continue to prepare and present annual fiscal forecasts using these forecasting models and advise the Boards of any changes in disposal trends which would require significant changes to Agency expenditures and/or revenues.

Attachment 1: Crowe report: Fiscal Forecasts and Fund Balance/Reserve Analysis