



Photo by Bob Hollis



Marin Household Hazardous Waste Program

Fiscal Year 2017/18 Report





Fiscal Year 2017/18 Summary

The Marin Household Hazardous Waste (HHW) Program had another productive and successful year. Even though the amount of waste collected under the program increased nearly 4% from FY 2016/17, the program ended FY 2017/18 significantly under budget.

The program has a responsibility to provide residents and small businesses with a safe and convenient option for disposal of hazardous waste. To that end, the Marin HHW Facility teamed in May 2018 with Call2Recycle, a North American program implemented by the Rechargeable Battery Recycling Corporation (RBRC) for recycling used batteries and cellphones, for the [Avoid the Spark](#) campaign. Focusing on the end-of-life flammability risk of lithium-based batteries when improperly handled and disposed, the campaign generated significant [media attention](#).

Once again, the facility was honored with Call2Recycle's Leader in Sustainability Award, which "recognizes the top performing participants for their commitment to recycling." The facility also co-sponsored a training, certification, and speaker event in April 2018 with the [North American Hazardous Materials Management Association](#) (NAHMMA).

The facility began a partnership with Austin, Texas-based [Smarter Sorting](#) to better identify the products in the reuse shed, making for faster and more accurate data collection and report generation. Smarter Sorting's patented scanner also finds end-use markets for household products that otherwise may be incinerated or sent to a landfill.

Over the years, some customers have had difficulty navigating to the correct place to drop off their household hazardous waste. To help alleviate some of the confusion, the road between 565 to 535 Jacoby Street was re-painted to make the lane for the facility more visible.

Finally, two successful West Marin Toxic Away Day temporary collection events were held: one in November 2017 in Bolinas and another in May 2018 in Point Reyes Station. More than 10,000 pounds of waste from approximately 80 participants were collected.

HHW Program Overview

The Marin HHW Program is a combination of HHW services provided at the Marin HHW Facility, at West Marin Toxic Away Days, and through the Pilot Household Universal Waste Pick-Up Program. Residents of Marin County, except Novato, may drop off their HHW at the facility or at the collection events for free, and residents of San Rafael may have their waste picked up from their house for a fee. Conditionally Exempt Small Quantity Generator (CESQG)¹ businesses may drop off their hazardous waste for a fee. The facility is operated by Marin Recycling & Resource Recovery Association and managed by the San Rafael Fire Department.

The Marin HHW Facility offers a reuse area where like-new products are available for residents and businesses to take for free. The reuse area is open to the public during facility hours. Additionally, we offer reprocessed latex paint for a fee to the public and to local jurisdictions for the use of graffiti abatement, offered in white, beige, and gray.

Household battery collection bins are conveniently located at fire stations and select businesses across Marin County. These bins are only for use by Marin County households and the batteries are then brought to the Marin HHW Facility and sent for recycling. This program is run separately from the JPA's Bulb and Battery Program.

The following table is a brief summary of the number of people who participated in the Marin HHW Program and the amount of waste that was collected in FY 2017/18. The HHW Program collected 1,676,279 pounds of hazardous waste overall, up 3.6% from the FY 2016/17 total of 1,618,347 pounds.

¹ Entities that generate no more than 200 pounds of hazardous waste per month. The term CESQG is no longer being used in federal regulations, having been replaced by VSQG (Very Small-Quantity Generator) in 2017. However, the California Department of Toxic Substances Control (DTSC) does not yet reference VSQG in its regulations or statutes.

<u>Program Type</u>	<u>Pounds Collected</u>	<u>Household Participants</u>	<u>CESQG Participants</u>
Marin HHW Facility	1,665,746	26,829	418
Bolinas Toxic Away Day	4,878	40*	N/A
Pt. Reyes Toxic Away Day	5,498	40*	N/A
San Rafael Pick-Up Program	158	2	N/A
Reuse Area	42,365		N/A

*=approximate total; does not account for walk-ins



Budget

The HHW Facility's FY 2017/18 budget allocation was \$1,523,266, a 3.3% increase from the FY 2016/17 budget of \$1,474,291. Financially, the Marin HHW Program ended the year \$64,987 under budget.

This fiscal year, the Marin HHW Program recovered \$120,042 in outside funding; most of this came from CESQGs, with additional money received from battery and electronic waste recycling.

Temporary HHW Collection Events 2017/2018 Expenses

<u>Expense Item</u>	<u>Actual</u>
<u>Labor Costs</u>	
Bolinas	\$1,845.00
Pt. Reyes Station	\$1,980.00
Labor Costs Subtotal	\$3,825.00
<u>Disposal Costs</u>	
Bolinas	\$4,463.00
Pt. Reyes Station	\$5,320.00
Disposal Costs Subtotal	\$9,783.00
<u>Supply Purchase Costs</u>	
Bolinas	\$1,993.00
Pt. Reyes Station	\$1,551.00
Supply Purchase Costs Subtotal	\$3,544.00
GRAND TOTAL:	\$17,152.00



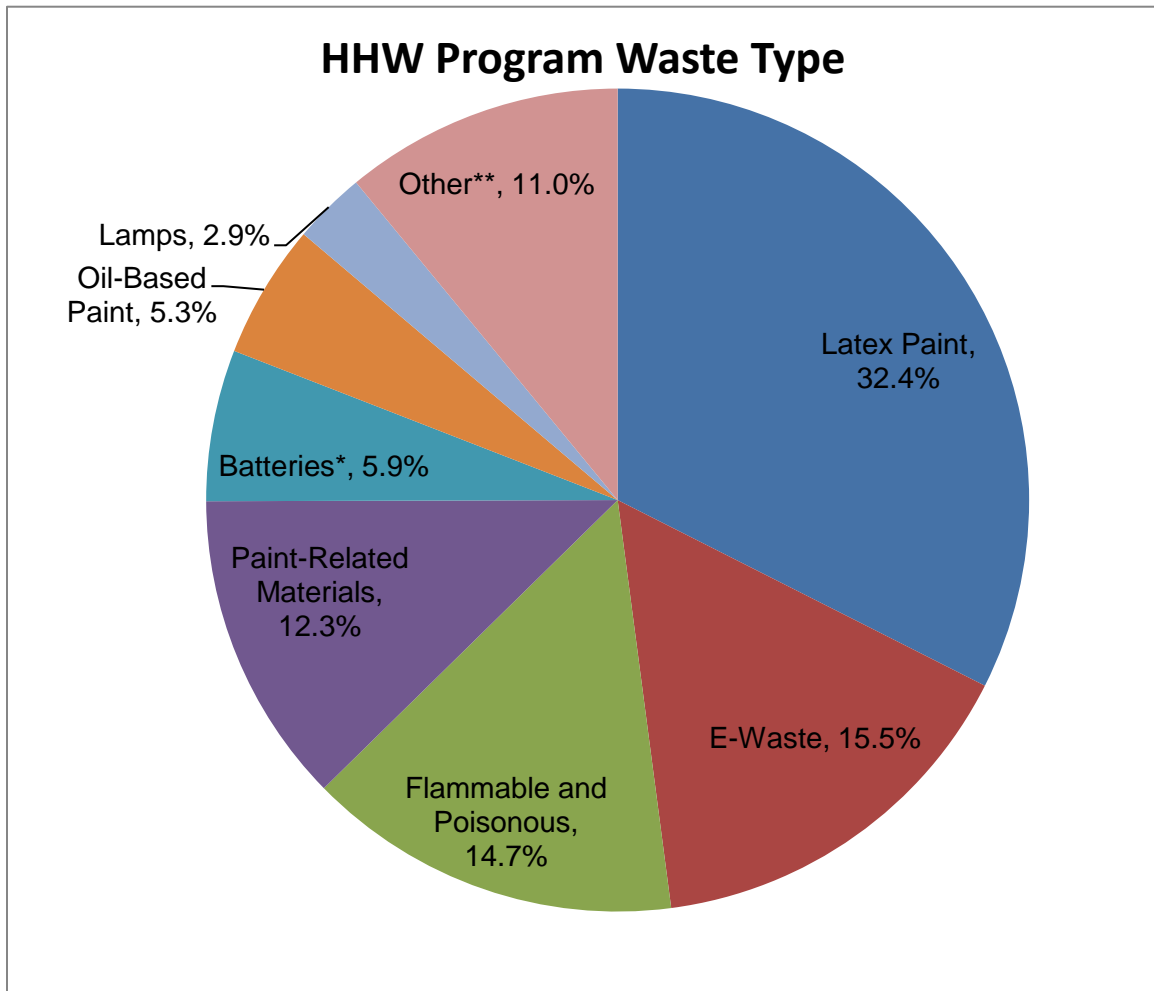
HHW Facility 2017/2018 Actual Results

<u>Expense Item</u>	<u>Actual</u>
Classified Personnel	\$ 416,588.64
Vacation pay	\$ 39,135.33
Group Life/Health Insurance (was 8128)	\$ 82,283.09
Worker's Compensation	\$ 66,337.15
Retirement	\$ 19,184.64
Payroll Taxes	\$ 40,494.26
PERSONNEL SUBTOTAL	\$ 664,023.11
Legal and Professional	\$ 0
Travel & Conference	\$ 2,793.32
Training Instruction & Medical Examinations	\$ 1,694.75
Professional Dues and Subscriptions	\$ 90.00
Equipment Rental/Repair	\$ 11,312.32
Waste Disposal Costs	\$ 386,620.45
Advertising & Community Promotions	\$ 0
Insurance & Surety Bonds	\$ 16,207.32
Admin. Allocation	\$ 68,192.03
Office Supplies	\$ 19,074.22
Clothing & PPE Supplies	\$ 41,093.62
Miscellaneous Supplies & Materials	\$ 129,999.19
Maintenance Buildings & Improvements	\$ 1,120.00
NON-PERSONNEL SUBTOTAL	\$ 678,197.82
Operating Ratio	\$ 140,896.12
Rental/Land	\$ 95,202.32
EXPENSES SUBTOTAL	\$ 1,578,319.37
OUTSIDE FUNDING SOURCES:	
E-Waste Monies	\$ (11,125.91)
Batteries Monies	\$ (5,286.00)
Paint Sale Monies	\$ (0)
CESQG Monies	\$ (103,630.57)
OUTSIDE FUNDING SUBTOTAL	\$ (120,042.48)
GRAND TOTAL	\$ 1,458,276.89
Approved Budget for FY 2017/18	\$ 1,523,265.75
Under budget	\$ 64,988.86

Waste Analysis

The following waste totals include the West Marin Toxic Away Days.

The facility continues to save money by partnering with PaintCare, which pays the San Rafael Fire Department to take certain paint products from the facility for recycling. The oil-based paint category only includes items on PaintCare's accepted materials list; it does not include paint that has been bulked with other flammable liquids. More than one-third of the Marin HHW Facility's annual waste (by weight) went to PaintCare, with paint-related materials such as thinners and resins that are not a part of PaintCare accounting for an additional 12.3% of HHW program waste.



* = "Batteries" category includes household, rechargeable, and car batteries. These are individually listed in the table on page 8.

** = Quantities of other waste types are included in the table on page 8.

HHW Program Waste Totals by Type in Pounds

Waste Type	Pounds	% of Total
Latex Paint	543,947	32.4
E-Waste	259,353	15.5
Flammable and Poisonous	246,954	14.7
Paint-Related Materials	206,200	12.3
Oil-Based Paint	88,462	5.3
Household Batteries	57,911	3.5
Lamps	47,833	2.9
Base	47,026	2.8
Motor Oil/Oil Products	41,899	2.5
Car Batteries	33,145	2.0
Aerosol Cans	22,454	1.3
Asbestos	21,620	1.3
Acid	13,677	0.8
Antifreeze	9,233	0.6
Rechargeable Batteries	8,667	0.5
Oxidizer	5,387	0.3
Used Oil Filters	2,965	0.2
PCB-containing	1,045	0.1
Sharps	939	0.1
Thermostats	80	0.0
Mercury-Containing Items (except Thermostats)	70	0.0
unclassified	17,413	1.0
FY 17/18 Total:	1,676,279	
FY 17/18 Monthly Average:	139,690	



Destination Method

Destination methods are based on the CalRecycle 303a reporting categories. The destination percentages are similar to those from prior years, with approximately 63% of the waste being recycled and only 1.4% being landfilled. Common waste items that are recycled are latex paint, e-waste, batteries, and motor oil. Most of the reused items were e-waste, household cleaners, pesticides, and paint products.

There are two types of incineration: destructive and fuel. The goal of destructive incineration is to simply destroy the material. During fuel incineration, energy is recovered through the burning process and sometimes material will also be recovered. The most common types of HHW used for fuel incineration are oil-based paint and flammable liquids, while poisons make up the majority of the waste sent for destructive incineration.

Among household hazardous wastes, only acids and bases go through neutralization and treatment. During this process, the pH of the waste is chemically adjusted to remove the hazard.

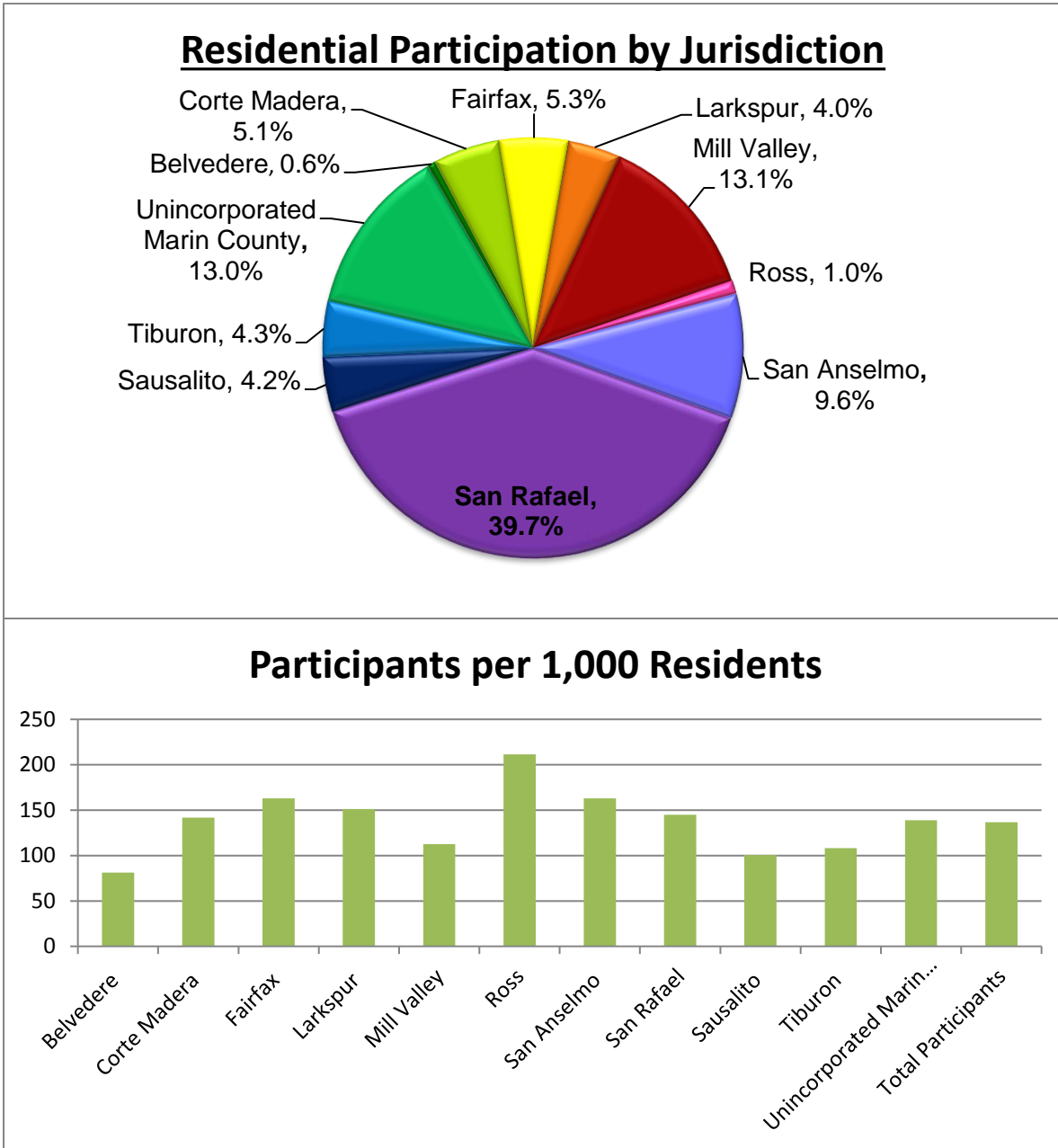
Just over 2,000 pounds of oxidizers were sent for stabilization, during which waste is brought to a solid or semi-solid state and is rendered non-hazardous.

Nearly all the landfilled waste consisted of asbestos.



Residential Participation

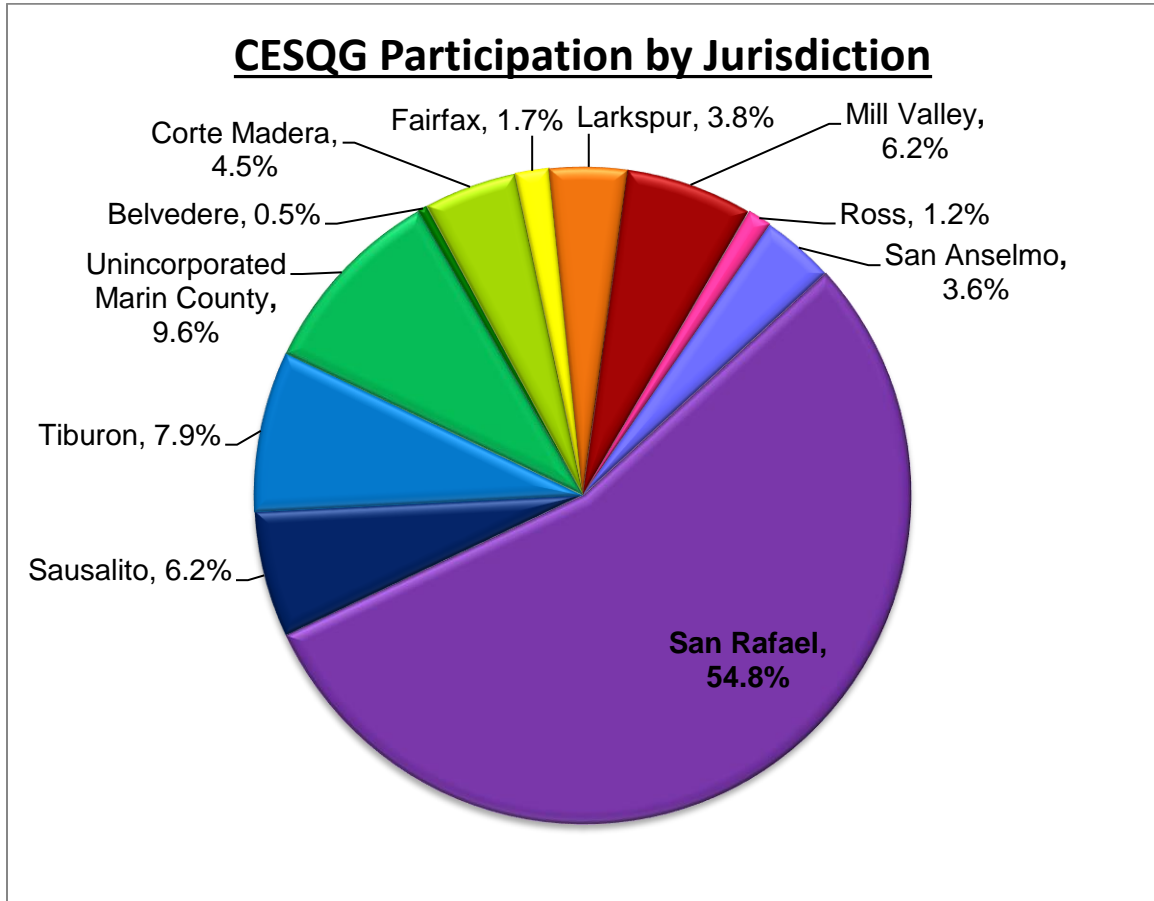
Participants are sorted by jurisdiction by reviewing the mailing address on their identifying documentation. Residents from unincorporated communities adjacent to a city thus are likely to be counted as city residents; for example, residents of Tamalpais Valley are counted as residents of Mill Valley. To account for this, city populations are based on U.S. Census ZIP Code Tabulation Area (ZCTA) data. The data show that residents from all over the service area use the facility.



* = City population based on ZIP Code Tabulation Area (ZCTA) data from U.S. Census Bureau

CESQG Participation

Although businesses from all over the county bring their hazardous waste to the facility, more than half are from a single jurisdiction: San Rafael.



Looking Forward FY 2018/19

The HHW Program continues to seek out innovative approaches for enhancing recycling and reuse opportunities.

At the end of FY 2017/18, the Marin HHW Facility's e-scrap processor, ECS Refining, permanently shut down. The facility has continued to work with its partner, Renew Computers, to manage output of electronic waste, but the revenue generated by the facility is expected to be minimal moving forward.

Our excellent and hard-working staff will continue our mission to provide a safe and convenient way for members of the public and small business to dispose of their hazardous waste.