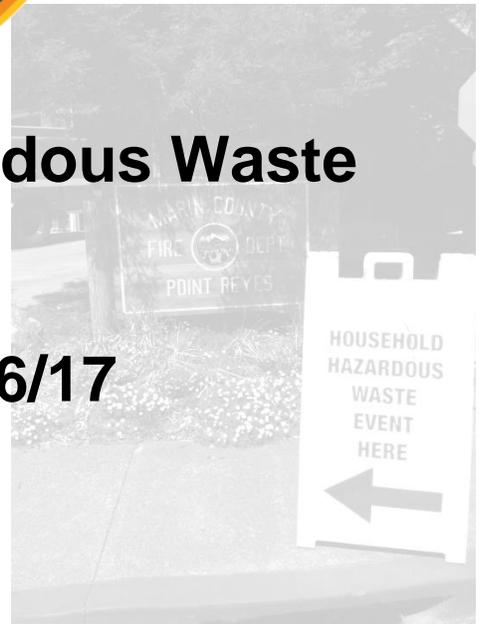




Marin Household Hazardous Waste Program

Fiscal Year 2016/17 Report





Fiscal Year 2016/17 Summary

The Marin Household Hazardous Waste (HHW) Program had another productive and successful year. The program ended FY 2016/17 significantly under budget and several one-time, special projects were accomplished.

Notable special projects include the following purchases:

- An air gun and sander;
- Four new forklift tires and foam filling;
- A sign to place above the front gate;
- An iPad with case to process payments and avoid collecting cash from customers.

Additionally, six pieces of concrete were cut to reinforce and protect the entrance gate, and a new fence was built to enclose the drum storage area.

In FY 2016/17, the commodities recycling markets stabilized at what can be expected to be a "new normal" of low revenues for collection facilities. This has impacted revenue collected from CRTs, miscellaneous electronic waste, cooking oil, motor oil, and anti-freeze.

Separately, a successful West Marin Toxic Away Day temporary collection event was held in May 2017 in Point Reyes Station. The event turned out 51 participants and approximately 6,000 pounds of waste were collected.

Personnel-wise, Courtney Scott left her position as Environmental Management Coordinator in September 2016. San Rafael Deputy Fire Chief Bob Sinnott capably took on her responsibilities until a new Environmental Management Coordinator, David Catalinotto, joined the department in February 2017.

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 (the City of Fairfax discontinued its pick-up program in 2016). Conditionally Exempt Small Quantity Generator (CESQG) businesses may drop off their hazardous waste for a fee.

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 2016/17. The HHW Program collected 1,618,347 pounds of hazardous waste overall, virtually unchanged from the FY 2015/16 total of 1,617,836 pounds.

| <u>Program Type</u> | <u>Pounds Collected</u> | <u>Household Participants</u> | <u>CESQG Participants</u> |
|-----------------------------------|-------------------------|-------------------------------|---------------------------|
| Marin HHW Facility | 1,611,997 | 24,884 | 461 |
| Pt. Reyes Toxic Away Day | 5,871 | 51 | N/A |
| San Rafael Pick-Up Program | 479 | 3 | N/A |
| Reuse Area | 22,670 | N/A | |

Budget

The HHW Facility's FY 2016/17 budget allocation was \$1,474,291, an 8.7% increase from the FY 2015/16 budget of \$1,320,255. The FY 2016/17 HHW facility budget included an additional \$50,000 cushion to account for the weak market and \$25,000 to replace expected revenue loss with the loss of oil grant money (FY 2015/16 was the final year for which oil grant money was allocated to the facility). Financially, the Marin HHW Program ended the year \$49,177 under budget.

Staff continues to search for new markets for selling waste and enhanced recycling opportunities despite the "new normal" of an unfriendly recycling market. The facility now sends all dry-cell batteries to Call2Recycle for recycling, which not only builds on a partnership that had started with rechargeable batteries but also saves the facility money on recycling of alkaline and other non-rechargeable batteries.

Fortunately, rechargeable batteries, sharps, and thermostats are still collected at no charge. Additionally, the facility continues to sell reprocessed paint to customers for \$4.65 per gallon and to receive money for its lead-acid batteries.

This fiscal year, the Marin HHW Program recovered \$110,031 in outside funding.

Temporary HHW Collection Events 2016/2017 Expenses

| <u>Expense Item</u> | <u>Expense</u> |
|---------------------------------------|-----------------------|
| Labor Costs Subtotal | \$1,845.00 |
| Disposal Costs Subtotal | \$4,046.00 |
| Supply Purchase Costs Subtotal | \$1,888.00 |
| GRAND TOTAL: | \$7,779.00 |



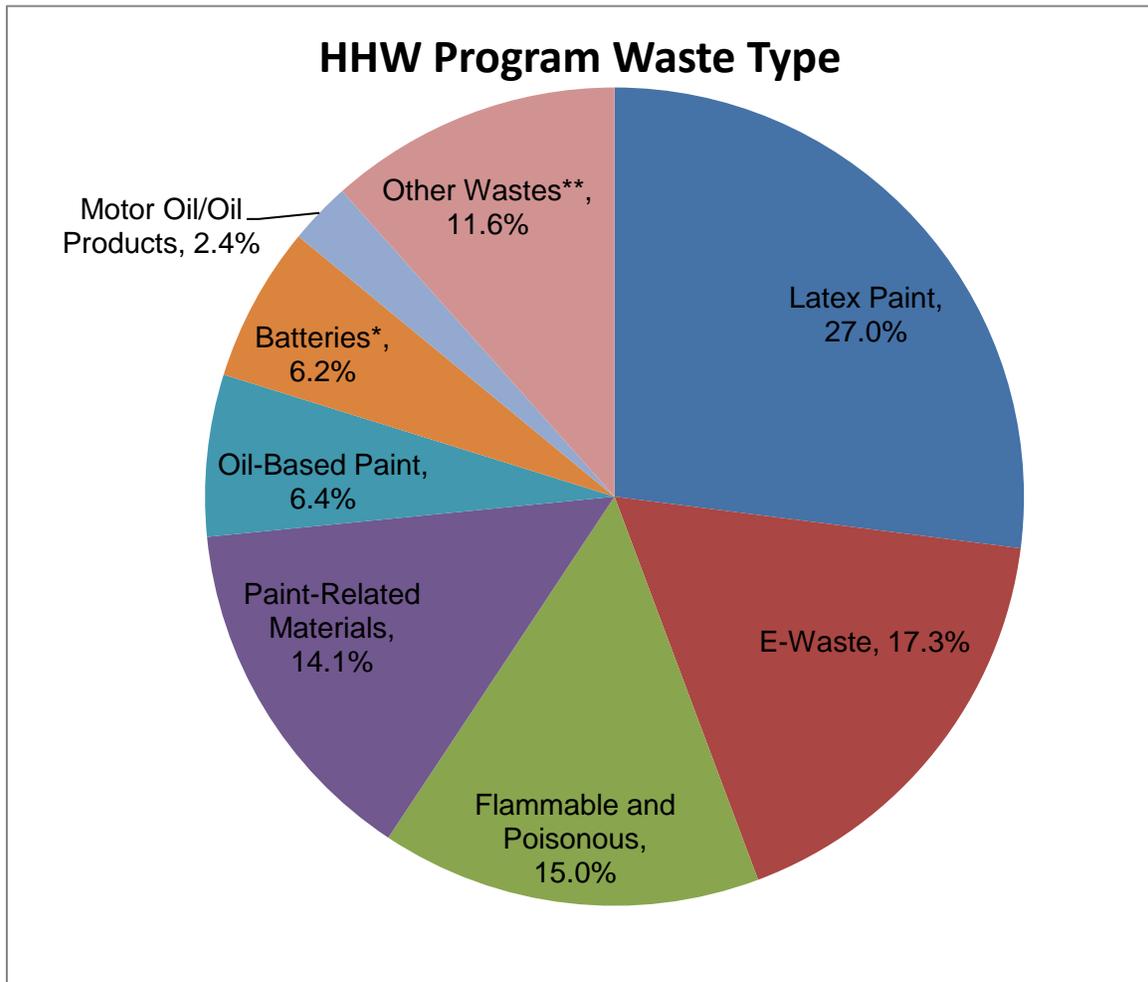
HHW Facility 2016/2017 Actual Results

| <u>Expense Item</u> | <u>Actual</u> |
|---|------------------------|
| Classified Personnel | \$ 402,196.50 |
| Vacation pay | \$ 34,754.72 |
| Group Life/Health Insurance (was 8128) | \$ 68,915.30 |
| Worker's Compensation | \$ 65,392.14 |
| Retirement | \$ 16,883.80 |
| Payroll Taxes | \$ 36,950.22 |
| PERSONNEL SUBTOTAL | \$ 625,092.68 |
| Legal and Professional | \$ 551.00 |
| Travel & Conference | \$ 8,287.27 |
| Training Instruction & Medical Examinations | \$ 802.20 |
| Equipment Rental/Repair | \$ 6,178.32 |
| Contractual Services | \$ 2,595.00 |
| Waste Disposal Costs | \$ 387,945.60 |
| Advertising & Community Promotions | \$ 409.00 |
| Insurance & Surety Bonds | \$ 16,574.93 |
| Admin. Allocation | \$ 73,861.99 |
| Office Supplies | \$ 12,769.29 |
| Clothing & PPE Supplies | \$ 42,922.10 |
| Miscellaneous Supplies & Materials | \$ 117,308.97 |
| Maintenance Buildings & Improvements | \$ 10,610.00 |
| NON-PERSONNEL SUBTOTAL | \$ 680,815.67 |
| Operating Ratio | \$ 137,084.10 |
| Rental/Land | \$ 92,152.92 |
| EXPENSES SUBTOTAL | \$ 1,535,145.57 |
| OUTSIDE FUNDING SOURCES: | |
| BOP Grant Monies | \$ (0) |
| E-Waste Monies | \$ (12,670.74) |
| Batteries Monies | \$ (10,008.00) |
| Paint Sale Monies | \$ (1,217.01) |
| CESQG Monies | \$ (86,135.63) |
| OUTSIDE FUNDING SUBTOTAL | \$ (110,031.38) |
| GRAND TOTAL | \$ 1,425,114.19 |
| Approved Budget for FY 2016/17 | \$ 1,474,290.79 |
| Under budget | \$ 49,176.80 |

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. Approximately 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 14.1% of HHW program waste.

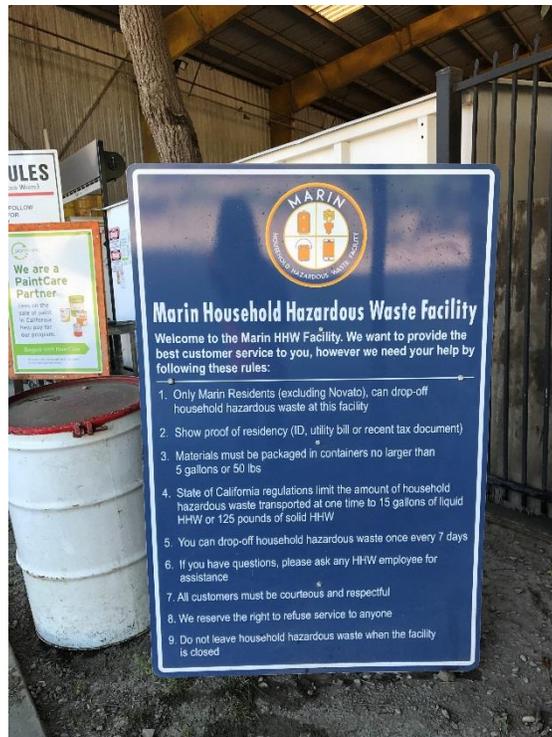


* = "Batteries" category includes household, rechargeable, and car batteries. These are individually listed in the table on page 6.

** = Quantities of other waste types are included in the table on page 6.

HHW Program Waste Totals by Type in Pounds

| Waste Type | Pounds | % of Total |
|---|------------------|------------|
| Latex Paint | 437,210 | 27.0 |
| E-Waste | 279,635 | 17.3 |
| Flammable and Poisonous | 243,077 | 15.0 |
| Paint-Related Materials | 228,450 | 14.1 |
| Oil-Based Paint | 103,369 | 6.4 |
| Household Batteries | 54,280 | 3.4 |
| Base | 43,280 | 2.7 |
| Motor Oil/Oil Products | 39,589 | 2.4 |
| Car Batteries | 38,542 | 2.4 |
| Lamps | 36,275 | 2.2 |
| Aerosol Cans | 21,872 | 1.4 |
| Asbestos | 21,480 | 1.3 |
| Acid | 15,480 | 1.0 |
| Antifreeze | 8,883 | 0.5 |
| Rechargeable Batteries | 6,767 | 0.4 |
| Oxidizer | 5,224 | 0.3 |
| Used Oil Filters | 2,650 | 0.2 |
| PCB-containing | 1,558 | 0.1 |
| Sharps | 744 | 0.0 |
| Mercury-Containing Items (except Thermostats) | 138 | 0.0 |
| Thermostats | 40 | 0.0 |
| Unclassified | 29,804 | 1.8 |
| FY 16/17 Total: | 1,618,347 | |
| FY 16/17 Monthly Average: | 134,862 | |



Destination Method

Destination methods are based on the CalRecycle 303a reporting categories. The destination percentages are similar to those from prior years, with approximately 61% of the waste being recycled and only 1.5% 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.

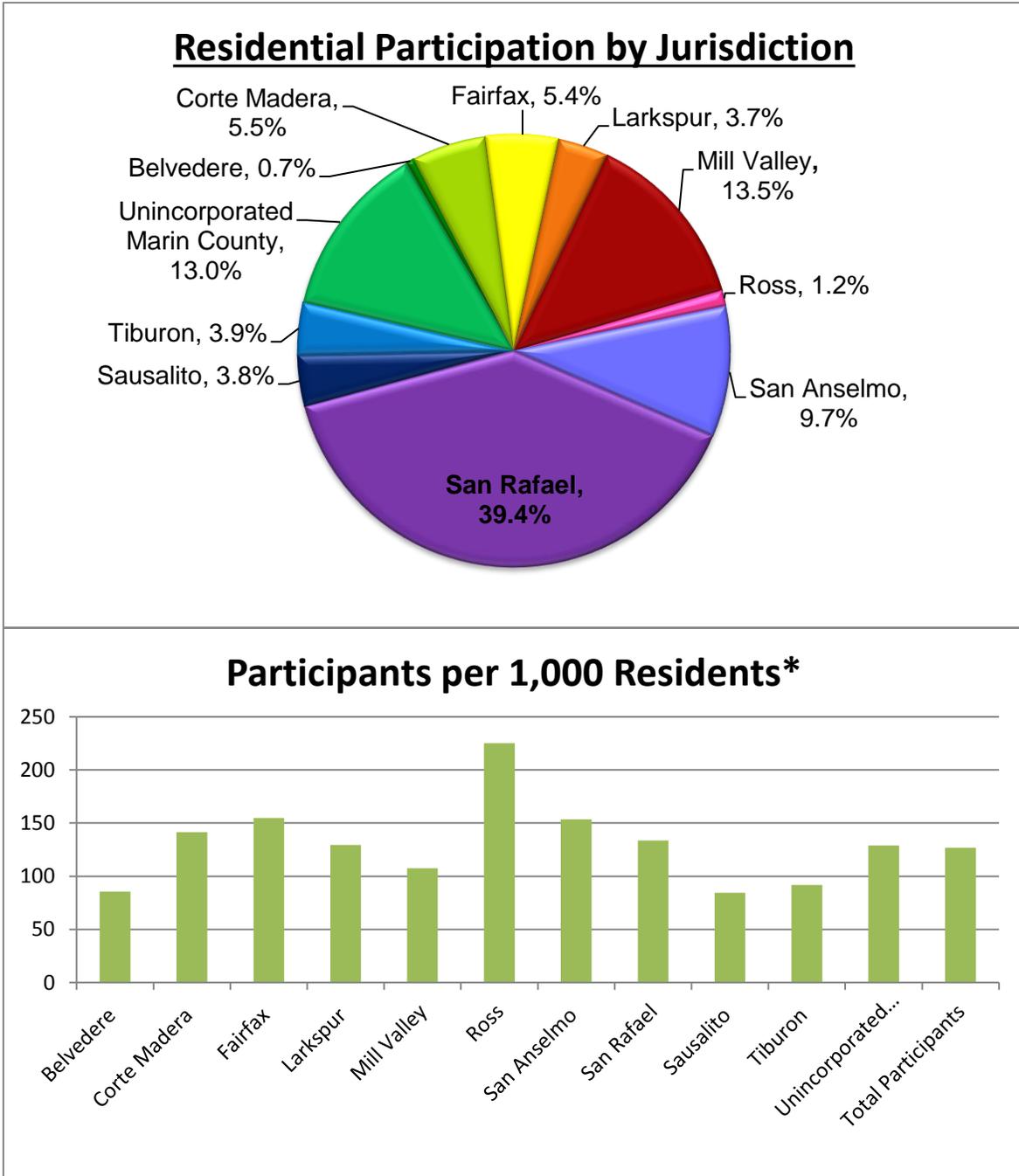
Just over 2,000 pounds of oxidizers were sent for stabilization, during which waste is brought to a solid or semi-solid state and is rendered non-hazardous.

Nearly all the landfilled waste consisted of asbestos.



Residential Participation

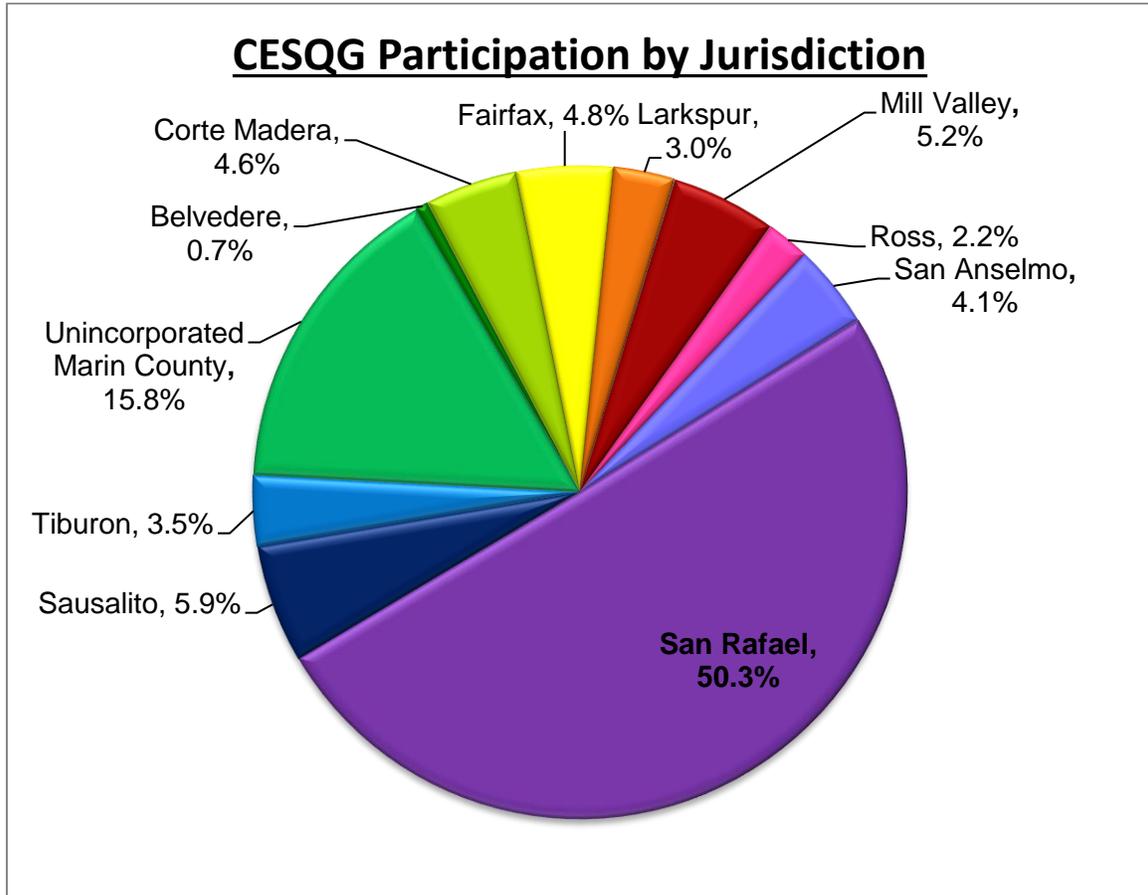
Participants are sorted by jurisdiction by reviewing the mailing address on their identifying documentation. Residents from unincorporated communities adjacent to a city thus are likely to be counted as city residents; for example, residents of Tamalpais Valley are counted as residents of Mill Valley. 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 HHW 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, roughly half are from a single jurisdiction: San Rafael.



Looking Forward FY 2017/18

The HHW Program never stop seeking innovative approaches for enhancing recycling and reuse opportunities.

The Marin HHW Facility is partnering with Austin, Texas-based Smarter Sorting to increase reuse of products and save money on disposal fees. Through the use of Smarter Sorting's patented scanner, we can find end-use markets for household products that otherwise may be incinerated or sent to a landfill.

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.