

**SANTA BARBARA COUNTY
HOUSEHOLD AND BUSINESS
HAZARDOUS WASTE COLLECTION PROGRAMS
FISCAL YEAR 2016/2017**

The County of Santa Barbara offers many programs that provide the community with a means to properly dispose of household and business hazardous waste which has become a growing concern due to an increased understanding of the potential for harm to the health of humans and animals, as well as the environment.

COMMUNITY HAZARDOUS WASTE COLLECTION CENTER (CHWCC)

The County of Santa Barbara (County) has supported the development and operation of the Community Hazardous Waste Collection Center (CHWCC), which has operated as a public/private partnership between the County and the University of California at Santa Barbara (UCSB) since 1993. The CHWCC diverts household hazardous waste (HHW) from being disposed at the County's solid waste facilities by providing the public with an alternative disposal method that is both safe and environmentally sound.

The CHWCC accepts waste from both residents and small businesses located in the Cities of Goleta, Santa Barbara, and Solvang, and the unincorporated areas of Santa Barbara County.

OPERATION OF CHWCC FACILITY

The CHWCC is open to residents from the unincorporated communities from Orcutt and the Santa Ynez Valley down to the Carpinteria Valley, and the Cities of Goleta, Santa Barbara, and Solvang. The CHWCC, which opened on October 1, 1993, serves a population of approximately 240,000. The facility is open to residents and to Conditionally Exempt Small Quantity Generators (CESQGs), which are businesses that generate up to 27 gallons or 220 pounds of hazardous waste per month. Businesses may use the CHWCC on Fridays from 9:00 a.m. to 3:00 p.m. by appointment only, while residents may use the Center without an appointment, on Saturdays from 9:00 a.m. to 3:00 p.m. and Sundays from 11:00 a.m. to 3:00 p.m. Three full-time employees, two half-time employees and several weekend student workers are trained in hazardous materials management and are responsible for offloading the incoming hazardous waste from the vehicles, identifying where the waste is originating from, and packaging the material to be transported for appropriate processing and disposal. The County has one full-time employee who spends three-fourths of her time answering inquiries from the public; setting up

appointments and meeting with businesses; tracking tonnage, participant and cost data; and monitoring the overall administration of the CHWCC.

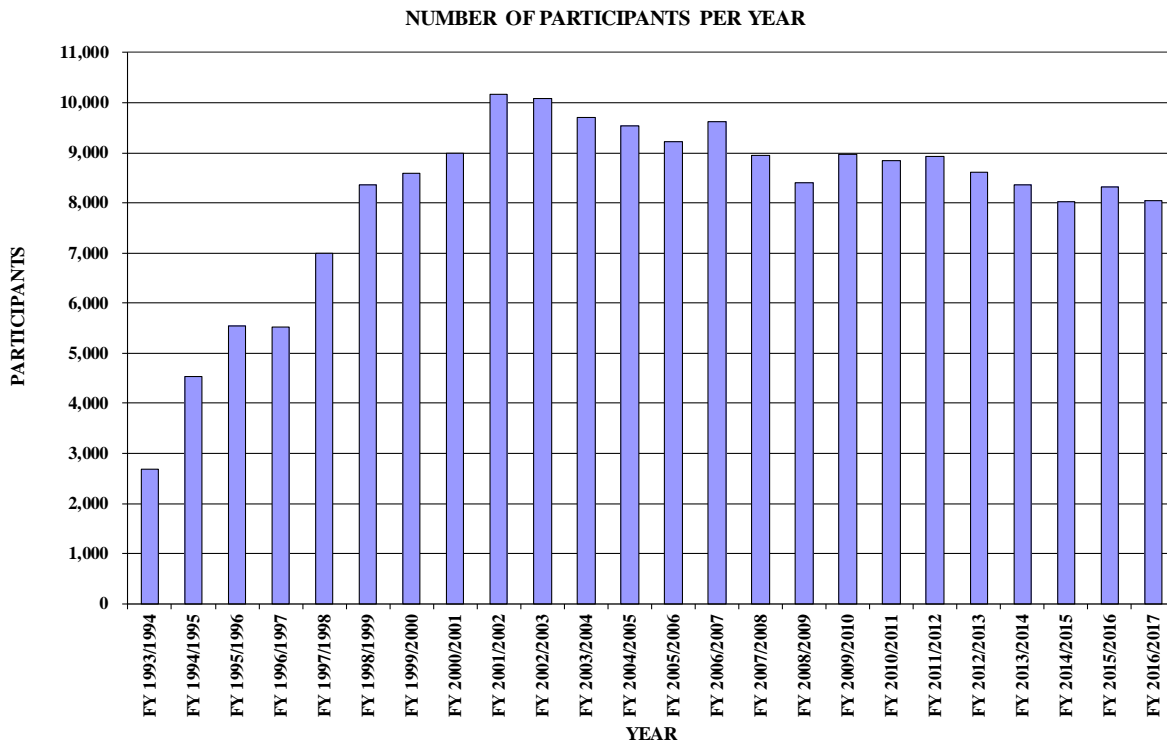
CHWCC SERVICE AREA AND PARTICIPATION

During FY 2016/2017, the CHWCC served 8,053 residential customers. The participation breakdown for residents is listed below.

	<u>Number of Participants</u>
Unincorporated County	2,934
City of Goleta	2,201
City of Santa Barbara	2,868
City of Solvang	31
Out of Area	<u>19</u>
TOTAL	8,053

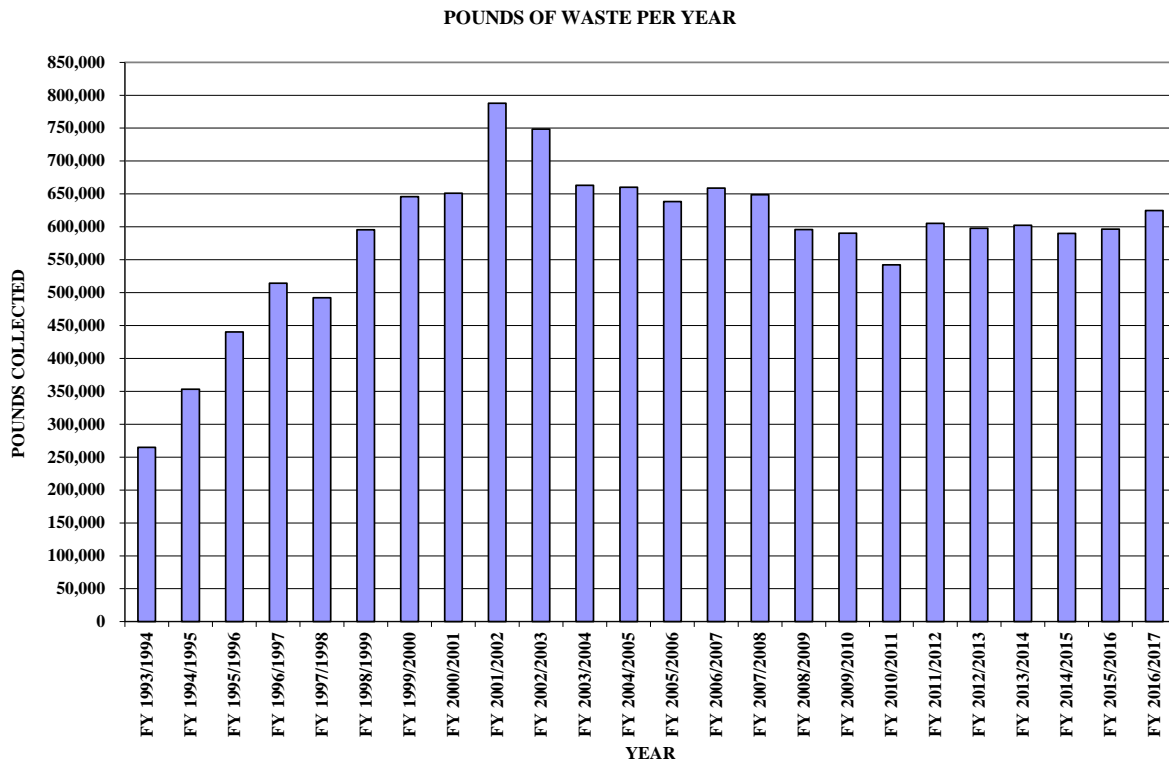
In addition to the 8,053 residents, 335 businesses also used the CHWCC in FY 2016/2017. Since these businesses serve customers from jurisdictions all over the County, a breakdown of where they are located is not as important in determining trends and is not shown for purposes of this Report.

The following graph shows the total residential and business participation rates since the CHWCC began operating in FY 1993/1994.



CHWCC WASTE DISPOSAL

The CHWCC had 8,053 residential and business customers in FY 2016/2017 who disposed of 624,628 pounds of hazardous waste. The graph shown below gives total quantities of hazardous waste accepted at the CHWCC from both residents and businesses collected over the life of the program.



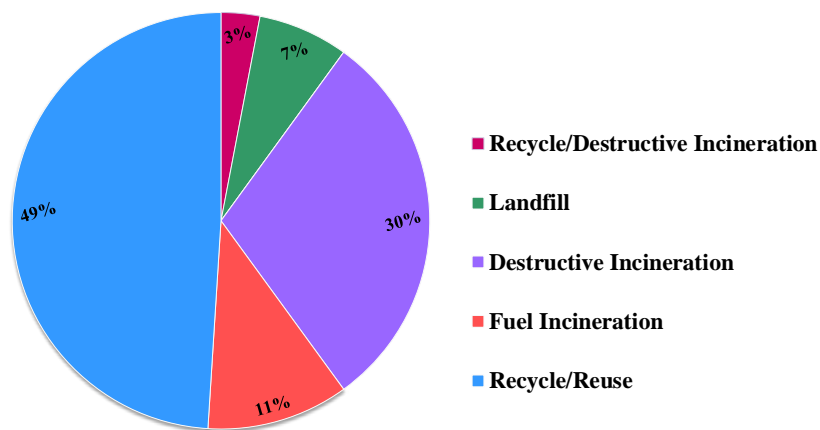
METHODS OF DISPOSAL AT THE CHWCC

The County has set a priority of trying to recycle and reuse as much of the hazardous waste stream as possible before resorting to other management methods. Batteries, smoke detectors, fluorescent lighting, mercury, latex and most oil-based paint, propane tanks, motor oil and oil filters, antifreeze, and a small number of other products are all recycled or reused through the County's program – approximately 48% of the total hazardous waste received. The CHWCC also has a "Materials Exchange Cart," which helps reduce another 4% of HHW that would otherwise be disposed. Many incoming products are placed on the cart and customers can take the products home for reuse by signing a release. Materials on the cart must be in their original containers and at least half full; no banned pesticides or extremely hazardous chemicals are released to the public. In FY 2016/2017, the CHWCC distributed 13,780 pounds of material back to the public through this program with a cost savings of approximately \$45,000.

The next method of waste treatment is fuel incineration, whereby waste material is blended into a fuel source for use in incinerators. Materials received at the CHWCC which are used in this process might include gasoline, paint-related materials, solvents, and thinners.

Destructive incineration in which materials are sent to treatment facilities for neutralization and/or high temperature destructive incineration is the next process used if materials can't be recycled, reused, or treated and used in fuel incineration. Materials included in this waste treatment category include oxidizers, acids, bases, PCB waste, pharmaceutical waste, photochemicals, Non-RCRA (Resource Conservation and Recovery Act) solids, and corrosive and poisonous aerosols. In the case of aerosols, the metal is most often recovered before the chemical is incinerated.

The final method of disposal is landfilling, which is usually the least expensive method of disposal and also the least preferred; this is reserved for materials such as asbestos. The following chart shows the breakdown of waste disposal methods for FY 2016/2017.



The types and quantities of material collected at the CHWCC in FY 2016/2017 are listed below in pounds:

Aerosols	20,981	Latex Paint	166,306
Alkaline/Lead Acid Batteries	12,060	Mercury Manufactured Items	107
Antifreeze	11,076	Motor Oil/Oil With Water	37,357
Asbestos	44,866	Oil-Based Paint	38,855
Auto Batteries	14,600	Oil Filters	1,875
Contaminated Soil	682	Organics	952
Corrosive Liquids/Solids	1,835	Oxidizers	2,271
Fertilizers	10,162	PCB Light Ballasts	1,733
Flammable Liquids/Solids	36,498	Photochemicals	1,700
Flammable Liquids – Solvents	41,200	Poison Liquids/Solids	109,663
Flammable Liquids – Fuel Blends	11,142	Propane and Gas Cylinders	9,201
Flammable Paint Liquids	25,075	Rechargeable Batteries	1,835
Fluorescent Lights	7,063	Medical Waste - Sharps	22
Inorganics	14,040	Smoke Detectors	407
Isocyanates	916	Water Reactive Solids	148

The waste shown above was disposed using the following methods:

Destructive Incineration

Contaminated Soil 682

Destructive Incineration (Continued)

Corrosive Liquids/Solids 1,835

Fertilizers 10,162

Flammable Liquids/Solids 36,498

Inorganics 14,040

Isocyanates 916

Medical Waste – Sharps 22

Organics 952

Oxidizers 2,271

PCB Light Ballasts 1,733

Poison Liquids/Solids 109,663

Water Reactive Solids 148

TOTAL 178,922 (29% of Total Waste)

Landfill

Asbestos 44,866

TOTAL 44,866 (7% of Total Waste)

Fuel Incineration

Flammable Liquids – Fuel Blends 11,142

Flammable Liquids – Solvents 41,200

Flammable Paint Liquids 25,075

Oil-Based Paint 2,975

TOTAL 80,392 (13% of Total Waste)

Recycle/Reuse

Alkaline/Lead Acid Batteries 12,060

Antifreeze 11,076

Auto Batteries 14,600

Fluorescent Lights 7,063

Latex Paint 166,306

Mercury Manufactured Items 107

Motor Oil/Oil With Water 37,357

Oil-Based Paint 35,880

Oil Filters 1,875

Photochemicals 1,700

Propane and Gas Cylinders 9,201

Rechargeable Batteries 1,835

Smoke Detectors 407

TOTAL 299,467 (48% of Total Waste)

Recycle and Destructive Incineration

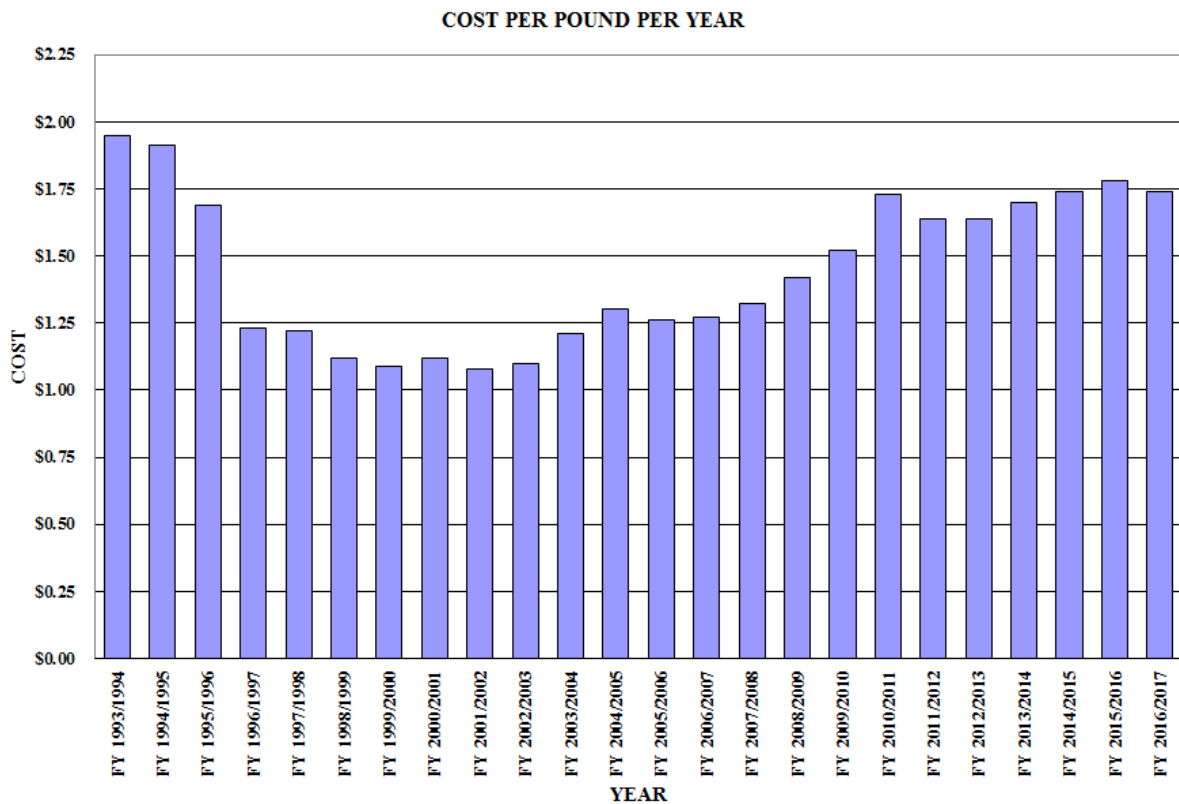
Aerosols 20,981

TOTAL 20,981 (3% of Total Waste)

In addition to hazardous waste, other types of solid waste materials were collected and recycled through conventional methods. These materials included empty steel cans, plastic containers, and cardboard.

CHWCC COSTS

The graph below shows the cost per pound to operate the program at the CHWCC since its inception. In addition to education programs for the public regarding best use practices and reducing the use of hazardous materials, the County attempts to contain costs through management of materials by reuse and recycling; blending of materials for fuel incineration, participating in the PaintCare program, and distributing useable items through the Materials Exchange Program. Currently, the cost per pound for operation of the program is \$1.74. An analysis of current costs for FY 2016/2017 shows that County administration costs make up 7% of the total cost per pound; transportation and management/disposal of the hazardous waste makes up approximately 43% of the total cost per pound; and University costs (facility use fees, salaries for employees handling the incoming hazardous waste, materials and supplies used in storing and packing hazardous waste, and miscellaneous operating equipment) make up 50% of the total cost per pound.



PUBLIC EDUCATION FOR CHWCC

The County has an extensive public education program that includes advertising in newspapers, television, and radio; distributing flyers; attending public events; displaying information on the County and City websites; and using hauler newsletters to send information out to residents and

businesses, and miscellaneous social media outlets. In addition, ads are run each spring with a “Spring Cleaning” theme. Program brochures are also distributed to property managers and retail sites to increase public awareness regarding hazardous waste and the CHWCC. All literature has also been translated into Spanish in order to reach the Spanish-speaking population in our community.

ADMINISTRATION OF CHWCC

In 2016, the Resource Recovery and Waste Management Division issued a Request for Proposal; two companies responded. A panel of representatives familiar with the management of hazardous waste was assembled to review and rank the proposals. Using the criteria of low cost, quality of service, safety standards, and proximity to our service areas, the panel unanimously voted to award the contract to Clean Harbors; this contract continues at the present time.

In addition, the County has a contract with the University of California at Santa Barbara to house the CHWCC on campus at the Environmental Health and Safety Facility.

The Household Hazardous Waste program continues to be an integral part of Santa Barbara County’s Recycling and Waste Management program, and a very popular program within the community; feedback from the public has been positive and supportive. Since 1993, this program has served approximately 195,711 residents and small businesses, and has collected over 13,913,352 pounds of material.

OTHER HHW SERVICES PROVIDED

The County also coordinates other programs that offer residents and businesses additional options for disposing of hazardous waste, sharps, pharmaceuticals, batteries, and used motor oil:

- The public can drop off household batteries at more than 40 local retail sites and public facilities on the South Coast of the County; these retailers can then bring their batteries to the CHWCC for free or use a private hauler to pick up their batteries along with other hazardous waste they generate onsite. In FY 2016/2017, approximately 7,000 pounds of batteries were brought to the CHWCC from these sites. In addition, City of Goleta and Santa Barbara residents, and County residents, can now put batteries in a baggie on top of their recycling container lid for curbside collection
- The County, in partnership with the California Department of Resources Recycling and Recovery (CalRecycle) and the Cities of Buellton, Goleta, and Solvang, operates a regional Used Oil Recycling Program. The program provides free and convenient opportunities for the public to safely recycle used motor oil and filters. Within the unincorporated area of the County and its partner Cities, there are nine certified used oil collection centers that include automotive supply stores, quick lubes, automotive repair shops, and a recycling buy-back facility. In FY 2016/2017, approximately 12,876 gallons of oil and 2,083 oil filters were collected from Do-It-Yourselfers at these sites.
- In addition to collection centers for the general public, the County provides a special used oil recycling program for the agricultural community. In partnership with Waste

Management, the County operates two “ag oil” collection facilities – one in Buellton and one in Santa Maria. During FY 2016/2017, approximately 16,667 gallons of oil and 3,701 filters were collected from local growers at these sites.

- The County also holds one-day collection events once a year at the New Cuyama Transfer Station and twice a year at the Santa Ynez Valley Recycling & Transfer Station, in order to accommodate residents who are not able to make it to the CHWCC due to its distance from their homes. In FY 2016/2017, residents dropped off 64,133 pounds of hazardous waste at these events (this includes electronic equipment).
- There are four ABOP (Antifreeze, Batteries, Motor Oil/Filters, and Latex Paint) facilities within the CHWCC service area: the County operates one at the Santa Ynez Valley Recycling & Transfer Station, MarBorg Industries operates two in the Cities of Goleta and Santa Barbara, and Waste Management operates one in the City of Buellton.
- The CHWCC does not accept sharps; however, the County offers a program in which residents can drop off sharps at five County clinics. Under this free program, residents can pick up a sharps container at one of the clinics and once the container is full they can bring it back to the clinic in exchange for a new, empty container. In FY 2016/2017, 4,147 pounds of sharps were collected from this program. In addition, trash haulers in both the South and North County offer a mail-back program for sharps.
- The County operates a program called “Operation Medicine Cabinet,” which was specifically designed for collecting unwanted household medications. This program uses drop-boxes located outside each of the Sheriff’s nine substations throughout the County; residents can deposit all unwanted prescription and over-the-counter medications in these drop-boxes. The drop-boxes resemble white mail boxes and are free to the public. The program is for household use only; businesses, including clinics and doctors’ offices, are not permitted to use the boxes. In FY 2016/2017, approximately 9,352 pounds of unwanted pharmaceuticals were collected from residents through this program.

The hazardous waste programs offered throughout the County have successfully provided residents and small businesses with solutions for disposing of unwanted hazardous waste. Public education throughout the year continues to encourage participation in programs, increases public awareness regarding the harmful effects of improperly using and disposing of hazardous waste, and encourages residents to purchase smaller quantities of hazardous waste and to use less toxic alternatives.