

SANTA BARBARA COUNTY HOUSEHOLD AND BUSINESS HAZARDOUS WASTE COLLECTION PROGRAMS FISCAL YEAR 2013/2014

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 South Coast 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 210,000. 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. 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.

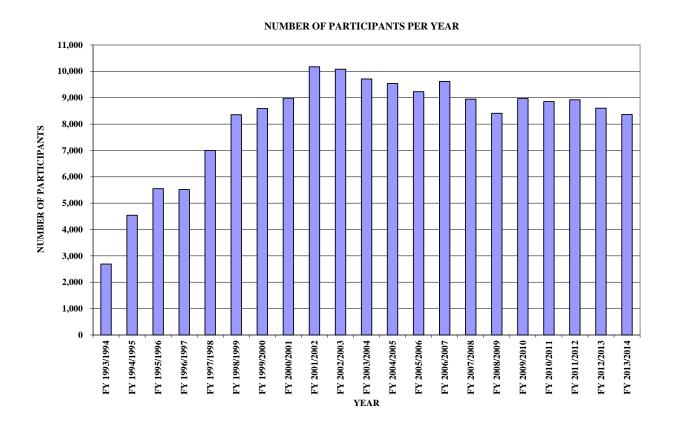
CHWCC SERVICE AREA AND PARTICIPATION

During FY 2013/2014, the CHWCC served 8,020 residential customers. The participation breakdown for residents is listed below.

	Number of Participants
Unincorporated County	3,002
City of Goleta	2,041
City of Santa Barbara	2,939
City of Solvang	31
Out of Area	7
TOTAL	8,020

In addition to the 8,020 residents, 345 businesses also used the CHWCC in FY 2013/2014. 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 8,365 residential and business customers in FY 2013/2014 who disposed of 602,409 pounds of hazardous waste. In comparing the yearly totals of waste received, it can be noted that a similar quantity of hazardous waste was received at the facility during this time period over the previous year. 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.

POUNDS OF WASTE PER YEAR 850,000 800,000 750,000 700,000 650,000 600,000 550,000 POUNDS COLLECTED 500,000 450,000 400,000 350,000 300,000 250,000 200,000 150,000 100,000 50,000 FY 2009/2010 FY 1994/1995 FY 1997/1998 FY 1998/1999 FY 1999/2000 FY 2001/2002 FY 2002/2003 FY 2004/2005 FY 2007/2008 FY 2011/2012 FY 2012/2013 FY 2013/2014 FY 1993/1994 FY 1995/1996 FY 1996/1997 FY 2000/2001 FY 2003/2004 FY 2005/2006 FY 2006/2007 FY 2008/2009 FY 2010/2011 YEAR

METHODS OF DISPOSAL AT THE CHWCC

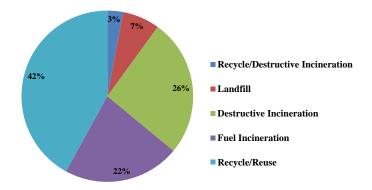
The County has set a priority of trying to recycle and reuse as much of the hazardous waste stream as possible before resorting to other management methods. Batteries, aerosols, fluorescent bulbs and ballasts, mercury, latex paint, propane tanks, motor oil, antifreeze, oil filters, and a small number of other products are all recycled through the County's program – approximately 45% 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 2013/2014, the CHWCC distributed 9,872 pounds of material back to the public through this program with a cost savings of approximately \$25,000.

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, oil-based paints, 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 2013/2014.



The types and quantities of material collected at the CHWCC in FY 2013/2014 are listed below in pounds:

Aerosols	19,990	Isocyanates 1,101
Alkaline/Lead Acid Batteries	16,789	Latex Paint 146,526
Antifreeze	11,067	Mercury Manufactured Items 193
Asbestos	43,020	Motor Oil/Oil With Water 43,410
Auto Batteries	13,240	Oil-Based Paint 72,405
Contaminated Soil	6,629	Oil Filters 4,875
Corrosive Liquids/Solids	1,690	Organics 1,900
Cutting Oil	425	Oxidizers 3,386
Fertilizers	8,545	PCB Light Ballasts 1,747
Flammable Liquids/Solids	31,304	Photochemicals 2,125
Flammable Liquids – Solvents	25,160	Poison Liquids/Solids 84,908
Flammable Liquids – Fuel Blends	16,565	Propane and Gas Cylinders 4,186
Flammable Paint Liquids	20,018	Sharps 32
Flares	128	Smoke Detectors 136
Fluorescent Lights	4,481	Rechargeable Batteries 1,551
Inorganics	12,577	Water Reactive Solids 336

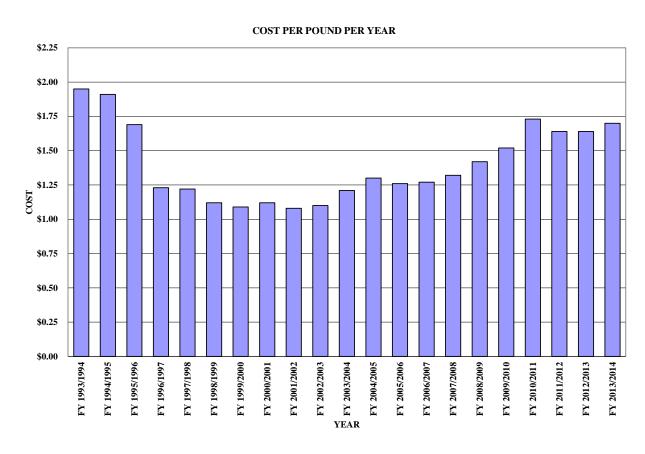
The waste shown on the previous page was disposed using the following methods:

Destructive Incineration Contaminated Soil Corrosive Liquids/Solids Cutting Oil Fertilizers Flammable Liquids/Solids Flares Inorganics Isocyanates Medical Waste – Sharps Organics Oxidizers	6,629 1,690 425 8,545 31,304 128 12,577 1,101 32 1,900 3,386	
PCB Light Ballasts	1,747	
Poison Liquids/Solids	84,908	
Water Reactive Solids	336	
TOTAL	154,708	(26% of Total Waste)
T 1011		
Landfill Ashastas	42.020	
Asbestos TOTAL	43,020 43,020	(7% of Total Waste)
TOTAL	43,020	(770 Of Total Waste)
Fuel Incineration		
Flammable Liquids – Solvents	25,160	
Flammable Liquids – Fuel Blends	16,565	
Flammable Paint Liquids	20,018	
Oil-Based Paint Quarts/Pints	72,405	
TOTAL	134,148	(22% of Total Waste)
Daguela/Dage		
Recycle/Reuse Alkaline/Lead Acid Batteries	16,789	
Antifreeze	11,067	
Auto Batteries	13,240	
Fluorescent Lights	6,445	
Latex Paint	146,526	
Mercury Manufactured Items	193	
Motor Oil/Oil With Water	43,410	
Oil Filters	4,875	
Photochemicals	2,125	
Propane and Gas Cylinders	4,186	
Rechargeable Batteries	1,551	
Smoke Detectors	136	
TOTAL	250,543	(42% of Total Waste)
Recycle and Destructive Incineration		
Aerosols	<u>19,990</u>	(20)
TOTAL	19,990	(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, and the Materials Exchange Program. Currently, the cost per pound for operation of the program is \$1.70. An analysis of current costs for FY 2013/2014 shows that the transportation and management/disposal of the hazardous waste makes up approximately 43% of the total; County administration costs make up 8% of the total; 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 49% 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 get information out to residents and businesses. 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 2011, the Resource Recovery and Waste Management Division issued a Request for Proposal to thirteen national hazardous waste management companies; 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 service, safety standards, and proximity to our service areas, the panel unanimously voted to award the contract to Clean Harbors; this contract continues to 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 171,400 residents and small businesses, and has collected over 12,102,000 pounds of material.

OTHER HHW SERVICES PROVIDED

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

- The public can drop off household batteries at 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 2013/2014, approximately 6,000 pounds of batteries were brought to the CHWCC from these sites.
- 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 2013/2014, approximately 12,139 gallons of oil and 1,839 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 2013/2014, approximately 3,378 gallons of oil and 358 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 2013/2014, residents dropped off 71,261 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 one in the City of Goleta and
 one in the City of 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 2013/2014, countywide a total of 3,300 sharps containers were distributed to the public and 8,000 pounds of sharps were collected from this program.
- 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 2013/2014, approximately 5,200 pounds of unwanted pharmaceuticals were collected from residents through this program.
- County residents can now put batteries in a baggie on top of their recycling container lid
 for curbside collection and can request a sharps container from their hauler that can be
 mailed back when full. This program is also offered in the Cities of Goleta and Santa
 Barbara. The City of Solvang also offers the mail- back sharps container program to its
 residents.

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.