

#### SANTA BARBARA COUNTY HOUSEHOLD AND BUSINESS HAZARDOUS WASTE COLLECTION PROGRAMS FISCAL YEAR 2014/2015

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 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.

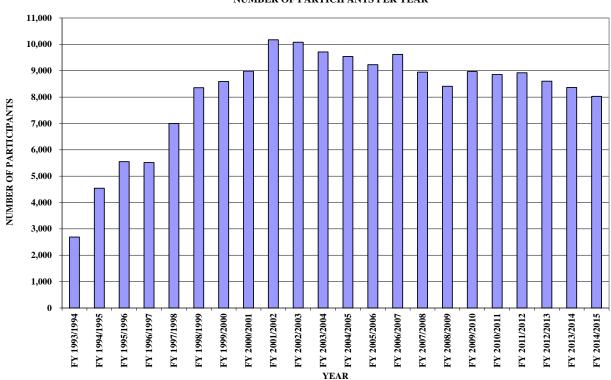
### CHWCC SERVICE AREA AND PARTICIPATION

During FY 2014/2015, the CHWCC served 7,676 residential customers. The participation breakdown for residents is listed below.

	Number of Participants
Unincorporated County	2,940
City of Goleta	1,968
City of Santa Barbara	2,727
City of Solvang	32
Out of Area	9
TOTAL	7,676

In addition to the 7,676 residents, 353 businesses also used the CHWCC in FY 2014/2015. 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 number of residential users most likely declined slightly over the past year due to more outlets for paint at other locations.

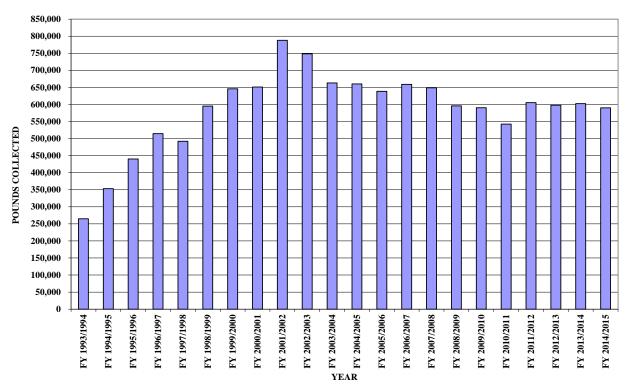
The following graph shows the total residential and business participation rates since the CHWCC began operating in FY 1993/1994.



NUMBER OF PARTICIPANTS PER YEAR

# CHWCC WASTE DISPOSAL

The CHWCC had 8,029 residential and business customers in FY 2014/2015 who disposed of 590,087 pounds of hazardous waste. In comparing the yearly totals of waste received, it can be noted that a slightly smaller 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

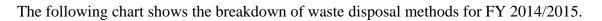
#### METHODS OF DISPOSAL AT THE CHWCC

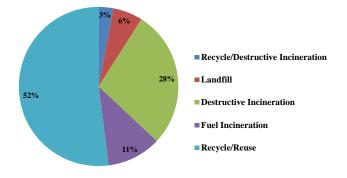
The County has set a priority of trying to recycle and reuse as much of the hazardous waste stream as possible before resorting to other management methods. Batteries, aerosols, fluorescent bulbs and ballasts, mercury, latex paint, propane tanks, motor oil, antifreeze, oil filters, and a small number of other products are all recycled or reused through the County's program – approximately 52% 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 2014/2015, the CHWCC distributed 12,978 pounds of material back to the public through this program with a cost savings of approximately \$35,000.

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 types and quantities of material collected at the CHWCC in FY 2014/2015 are listed below in pounds:

Aerosols	19,426	Isocyanates 1,310
Alkaline/Lead Acid Batteries	14,076	Latex Paint 171,143
Antifreeze	7,310	Mercury Manufactured Items 212
Asbestos	39,235	Motor Oil/Oil With Water 36,635
Auto Batteries	14,080	Oil-Based Paint 39,012
Contaminated Soil	1,355	Oil Filters 4,875
Corrosive Liquids/Solids	752	Organics 1,266
Cutting Oil	1,275	Oxidizers 1,891
Fertilizers	8,630	PCB Light Ballasts 911
Flammable Liquids/Solids	25,876	Photochemicals 2,125
Flammable Liquids – Solvents	28,135	Poison Liquids/Solids 105,139
Flammable Liquids – Fuel Blends	12,871	Propane and Gas Cylinders 6,212
Flammable Paint Liquids	20,400	Sharps 174
Flares	485	Smoke Detectors 136
Fluorescent Lights	10,110	Rechargeable Batteries 1,766
Inorganics	11,543	Water Reactive Solids 1,721

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

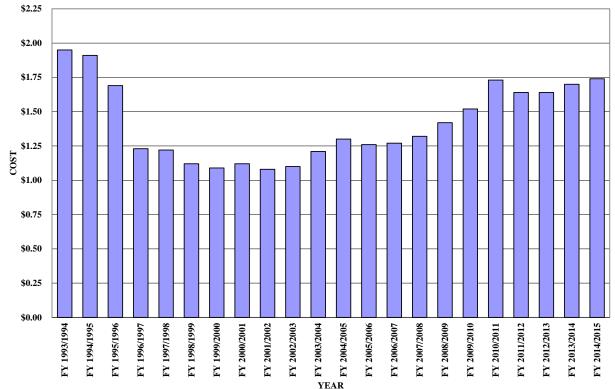
Destructive Incineration		
Contaminated Soil	1,355	
Corrosive Liquids/Solids	752	
Cutting Oil	1,275	
Fertilizers	8,630	
Flammable Liquids/Solids	25,876	
Flares	485	
Inorganics	11,543	
Isocyanates	1,310	
Medical Waste – Sharps	1,310	
Organics	1,266	
Oxidizers	1,200	
PCB Light Ballasts	911	
Poison Liquids/Solids	105,139	
Water Reactive Solids		
water Reactive Solids	1,721	
TOTAL	162,328	(26% of Total Waste)
Landfill		
Asbestos	39,235	
13003005	<u>37,233</u>	
TOTAL	39,235	(7% of Total Waste)
Fuel Incineration		
Flammable Liquids – Solvents	28,135	
Flammable Liquids – Fuel Blends	12,871	
Flammable Paint Liquids	20,400	
Oil-Based Paint	850	
On-Dased I ann	050	
TOTAL	62,256	(22% of Total Waste)
Recycle/Reuse		
Alkaline/Lead Acid Batteries	14,076	
Antifreeze	7,310	
Auto Batteries	14,080	
Fluorescent Lights	10,110	
Latex Paint	171,143	
Mercury Manufactured Items	212	
Motor Oil/Oil With Water	36,635	
Oil-Based Paint		
Oil Filters	38,162	
	4,875	
Photochemicals	2,125	
Propane and Gas Cylinders	6,212	
Rechargeable Batteries	1,766	
Smoke Detectors	136	
TOTAL	306,842	(42% of Total Waste)

Recycle and Destructive Incineration		
Aerosols	<u>19,426</u>	
TOTAL	19,426	(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 2014/2015 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.



COST PER POUND PER YEAR

# 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 179,429 residents and small businesses, and has collected over 12,692,087 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 2014/2015, approximately 7,000 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 2014/2015, approximately 13,007 gallons of oil and 3,599 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 2014/2015, approximately 4,305 gallons of oil and 562 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 2014/2015, residents dropped off 62,648 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 2014/2015, countywide a total of 3,952 sharps containers were distributed to the public and 4,441 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 2014/2015, approximately 8,000 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.