

# Feasibility of a Permanent HHW Facility for Mesa, AZ

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# What is HHW?

## Household Hazardous Waste definition

“Leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients” (EPA)

## Why Manage it?

HHW has an impact on water quality and general health of the community

### Some Accepted Items

Batteries

Motor oil

Electronics

Needles/medicines

Paint



Assist in exploring the feasibility of a permanent HHW facility for the City of Mesa, AZ

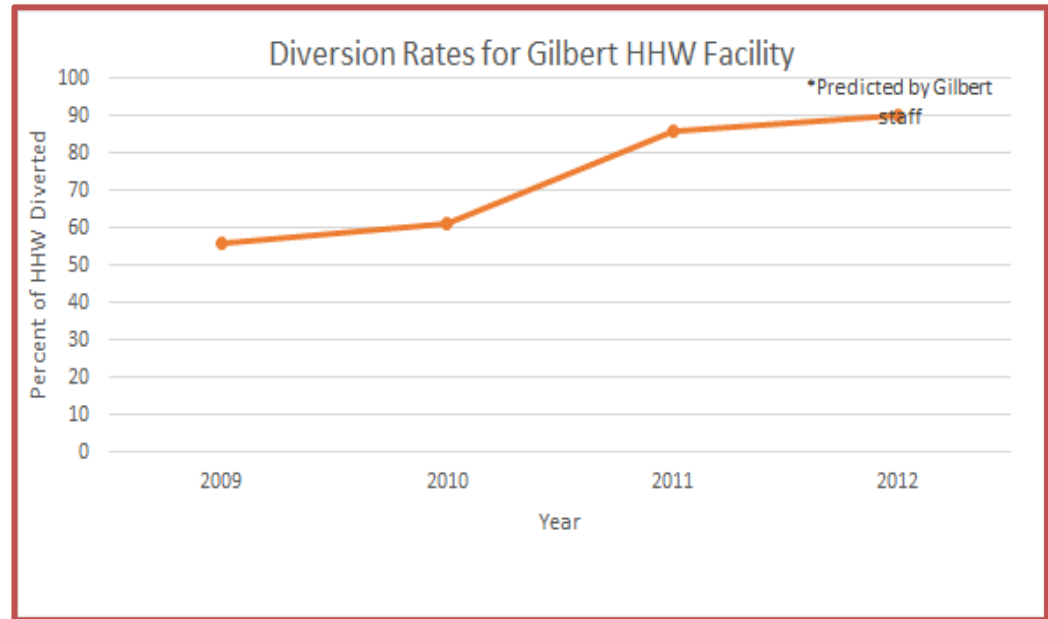
## Current Situation

- 4 one day quarterly events
- 2 sites in Mesa
- Increased participation



# Why a Permanent Facility?

- Expected population growth
- Continued participation rates
- Greater convenience for customers
- Help increase diversion rates



# Research Questions

Question 1: What process was used to create a permanent HHW facility?

Question 2: What are the pros and cons of permanent HHW facilities?

Question 3: What are the associated costs (capital, operating, cost/car)?

Question 1: What process was used to create a permanent HHW facility?



Stockton, CA permanent Facility

# Comparable Cities

## Gilbert, AZ

Population:  
229,972

## Albuquerque, NM

Population:  
556,495

## Butte County, CA

Population:  
220,263



Year Built	<b>2008</b>
Previous Events Per Year	2 events per year
Funding	Capital Improvements Projects (CIP) funding
Operation Structure	City owns and operates
Additional Information	N/A



Year Built	<b>1992</b>
Previous Events Per Year	2 collections per year
Funding	Up to \$1,200,000 for a two year contract (to operate and hold events)
Operation Structure	Contractor owned and operated
Additional Information	Regionalization with Bernalillo County and other surrounding areas

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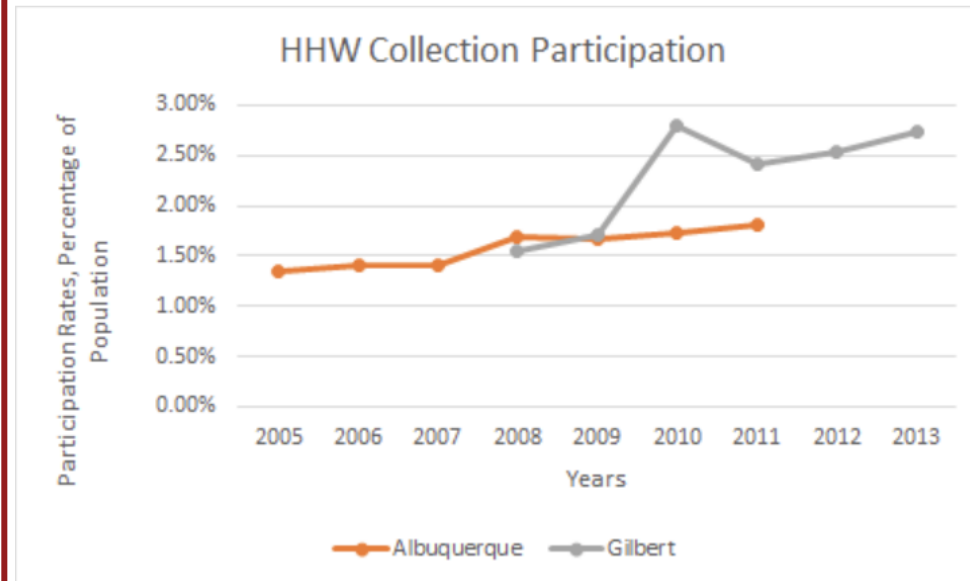
Year Built	<b>1995</b>
Previous Events Per Year	N/A
Funding	CalRecycle Grant Funding
Operation Structure	Contracted outs to NRC Environmental Services
Additional Information	They regionalize as a county. All county residents can take HHW to this facility.

## Question 2: What are the pros and cons?

Pros	Cons
Increased participation and greater populations reached	Location dependent and inflexibility
Encourages proper disposal and increases reuse opportunities	Liability of HHW processing and storage
Cleaner water supplies	Complex permitting process
Reduced planning, marketing, and education efforts	Well trained permanent staff required
Increased safety/decreased liability	Public/ political justification required

# Benefits of a Permanent Facility

- Increased participation and greater populations reached
- Encourages proper disposal and increases reuse opportunities
- Cleaner water supplies
- Reduced planning, marketing, and education efforts
- Increased safety/decreased liability



## Cons

- Location dependent and inflexibility
- Liability of HHW processing and storage
- Complex permitting process
- Well trained permanent staff required
- Public/ political justification required



Temecula, CA overcrowding at an HHW event

# Question 3: Associated Costs

Type of cost	City	Permanent HHW Facility Costs (Except Mesa)	Explanation and Timeframe of Costs
Capital/ Fixed Cost (for permanent facility)	Butte County	\$1,200,000	Estimate provided by County Employees
	Albuquerque	N/A	Not available
	Gilbert	\$800,000	\$800,000 upfront for new facility
Yearly/ Operational Costs	Butte County	\$410,287.66	Average yearly cost, 2009-2011
	Albuquerque	\$620,000	This is an estimate per year. The contract is up to \$1,200,000 for two years
	Gilbert	\$350,000	Annual budget
	<b>*Mesa</b>	\$480,000	Annual budget
Costs per car	Butte County	\$59.07	Averaged from 2009-2011
	Albuquerque	\$61.00	Fixed Cost
	Gilbert	\$79.68	Average between 2008-2014
	<b>Mesa</b>	\$70.87	Current

It is recommended that the City Mesa build a permanent facility for their household hazardous waste

- Costs per unit decreases
- Increased convenience, awareness, and usage, and diversion rates
- Benefits to the health of the community

Thank You!