

Santa Clara County Fire Chiefs
Association

Hazardous Materials Subcommittee

Rob D'Arcy

Hazardous Materials Program Manager

County of Santa Clara

Department of Environmental Health

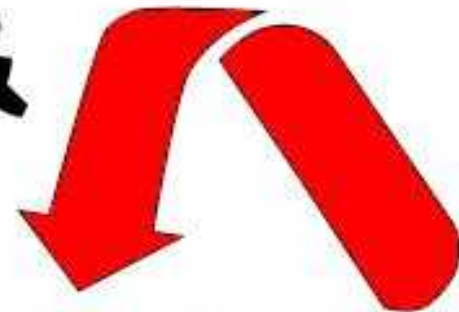
408-918-1967

rob.darcy@deh.sccgov.org

September 9, 2008

Small Business Service
27 gal / 220 lbs per month
408-299-7300

**Hazardous Waste
Recycling &
Disposal**

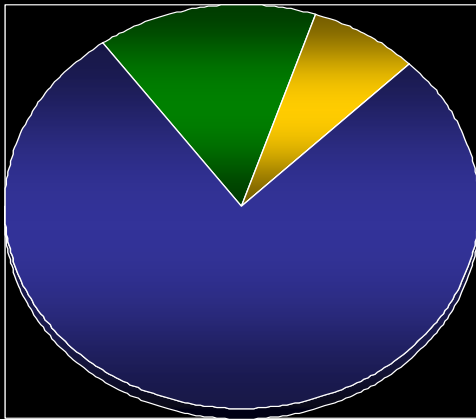


FOR SANTA CLARA COUNTY

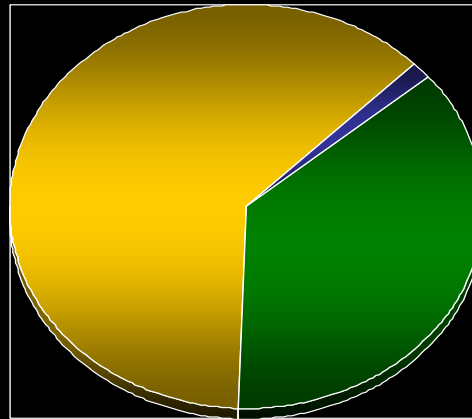
The Problem

- Expanding waste streams
- Shrinking budgets/more recycling
- Growing participation
- Inability to meet service demands will become an environmental, human health and political liability
- Increased public education, even if only about one waste stream, will increase participation through general awareness about HHW

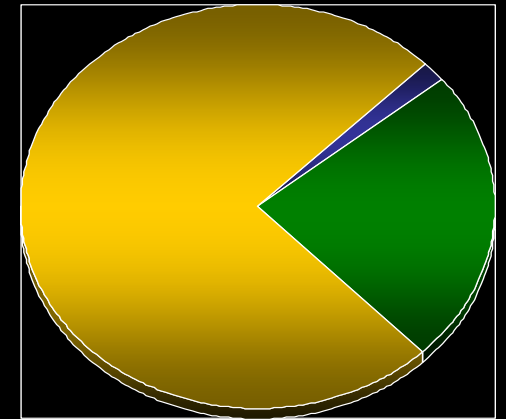
Per Capita Waste Production



1900 - NYC



1960 - USA



2000 - USA



Mineral

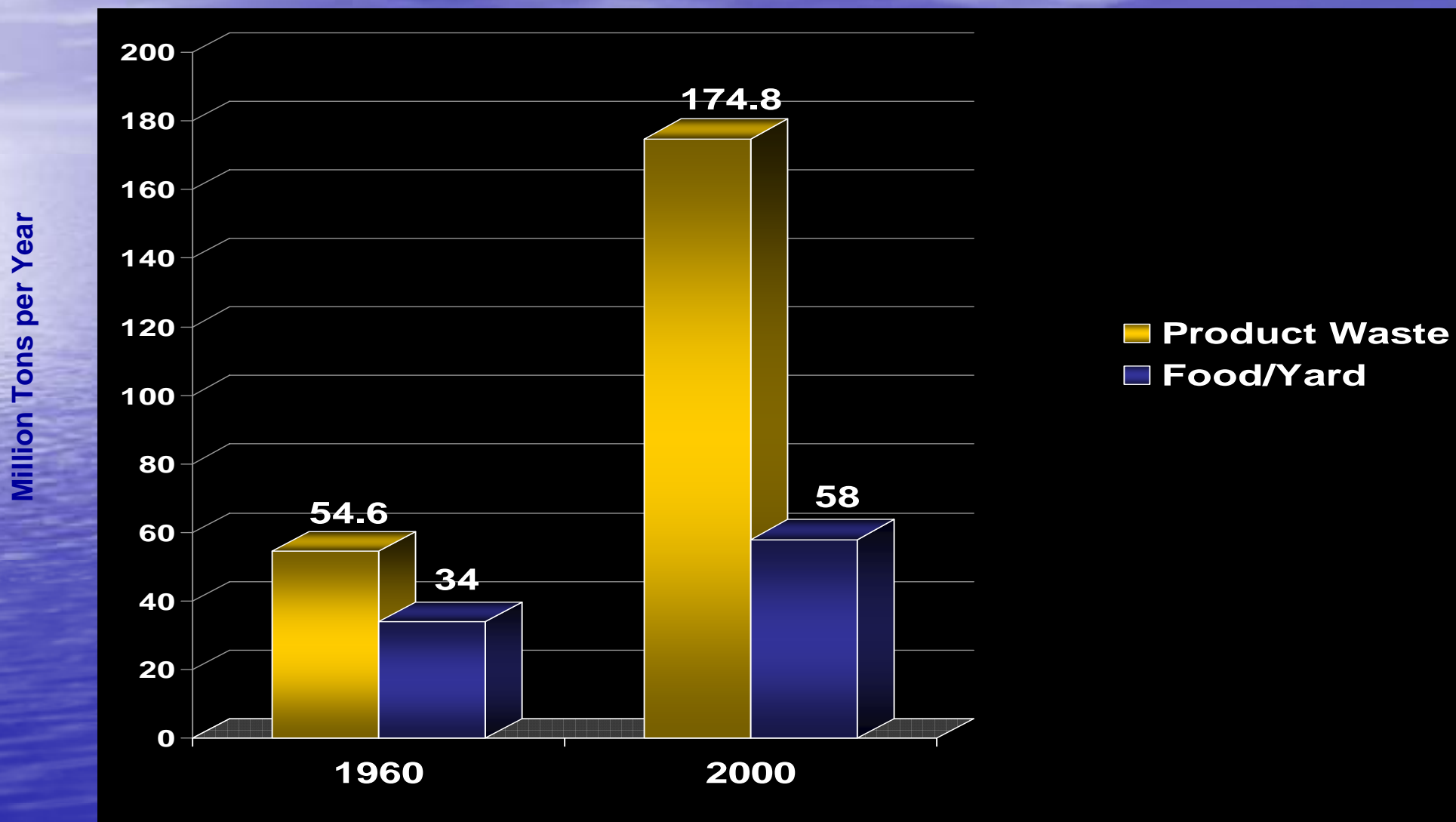


Food/Yard



Products

Changing Waste



New Disposal Bans – What's Next?

- **Feb 2006: Universal Waste**
 - Mercury-containing products
 - Electronics – “anything with a circuit board”
 - Alkaline Batteries – corrosive
 - Rechargeable Batteries – heavy metals

- **Jan 2007: Treated Wood**

- **Sept 2008: Sharps/Needles**

Contaminant du jour....Product by Product Approach

New Waste Streams

No more household or small business exemptions

- Universal Waste
 - Mercury
 - Fluorescent lamps, mercury batteries, thermostats, thermometers
 - Lead (toys, lunch boxes)
- Pharmaceuticals
- Personal Care Products (antibacterial soaps)
- Sharps/Needles
- Brominated Fire retardants
- Solar Panels
- Nanotechnology?

Waste of the Month Club



Toxic Toys



SHERIDAN Stocker Camera # 871507
CORLEY NEWS SERVICE
sherridan@comcast.net



2007 © COPYLEFT NEWS SERVICE
GARY MARKSTEIN

YOU GOTTA WEAR
THIS SUIT, TOO,
WHEN YOU PLAY
WITH YOUR TOY
FROM CHINA?



The AI Gore Phenomenon

- Environmental Awareness on the rise
- Environmental Education from all directions
- NPDES Permit – Pollution Prevention
 - Waste water Agencies
 - Storm water Agencies
 - Solid waste Agencies (landfill bans)
 - Hazardous materials agencies
- All agencies continue to promote HHW as the default disposal solution

HHW Participation by Households

- FY 2002 – 19,000
- FY 2003 – 22,000
- FY 2004 – 23,500
- FY 2005 – 24,500
- FY 2006 – 25,000
- FY 2007 – 26,000
- FY 2008 – 27,000 (4.3%)

Current HHW Funding

- Funded through a Solid Waste Tipping Fee
(AB 939 Implementation Fee \$2.05 per ton)
- Grant awards from the California Integrated Waste Management Board (\$500K per year)
 - Used for education and used motor oil management
 - facility construction
 - Pesticide (Diazanone and Dursban) public education and disposal
 - Mercury Education Project
 - Fluorescent lamp education and collection
 - Sharps Education and collection

Small Business HW Service

Small business disposal service

- Fee for service
- Serve less than 1% of small businesses
- Need small business education
- Served 319 businesses (560 Drop-offs)
- Collected 153,692 pounds

What do the rest of the businesses do?

Santa Clara County HHW FY 2008

- Collected over 2.9 million pounds of hazardous waste
- 3.6 million dollar budget
- 107 pounds of HHW per resident
- Serves 27,000 residents per year
- Two Permanent Facilities (building a third in San Jose)
- Serve 4.3% of households
- Requires trained staff (40 hour HAZWOPER)
- Wide diversity in waste streams
- Government run/sponsored/supported
- Mandated by law
- 64 collection days
- 5 hours per collection day (+3 hours to pack up)
- Most cities must augment the solid waste tipping fee to meet service demands

Residential Fluorescent Lighting Collection in Santa Clara County

- 2 Permanent HHW Facilities
 - operating 54 days per year and 10 Temporary events around the County
- 3 Transfer Stations
 - Operating 7 days per week
- 64 Retail Take-back stores + 12 Pharmacies
 - Operating 7 days per week

Amount of Banned Hazardous Products is Huge

Estimated **Sales** in California 2006

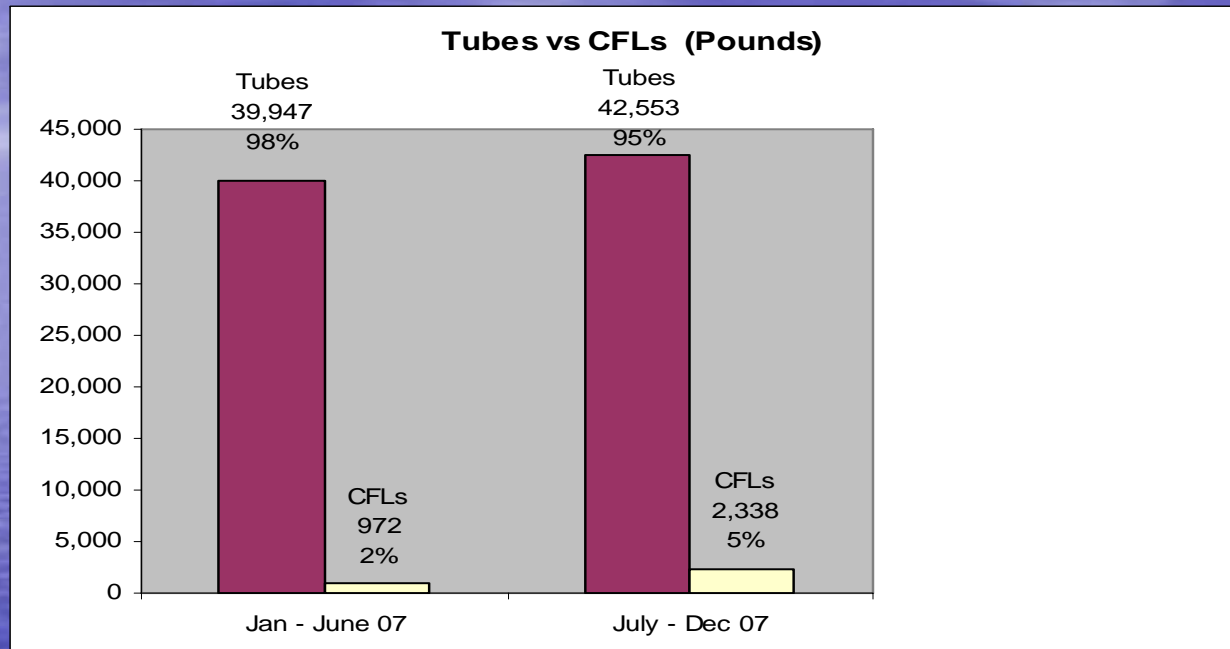
Batteries	593,864,218
Fluorescent Lamps	17,444,444
Thermostats (Hg)	365,282

Electronics **Discarded**

(not covered by SB-20): 254,584
tons

SOURCE: MGT of America, 2002

Collection Volumes - 2007



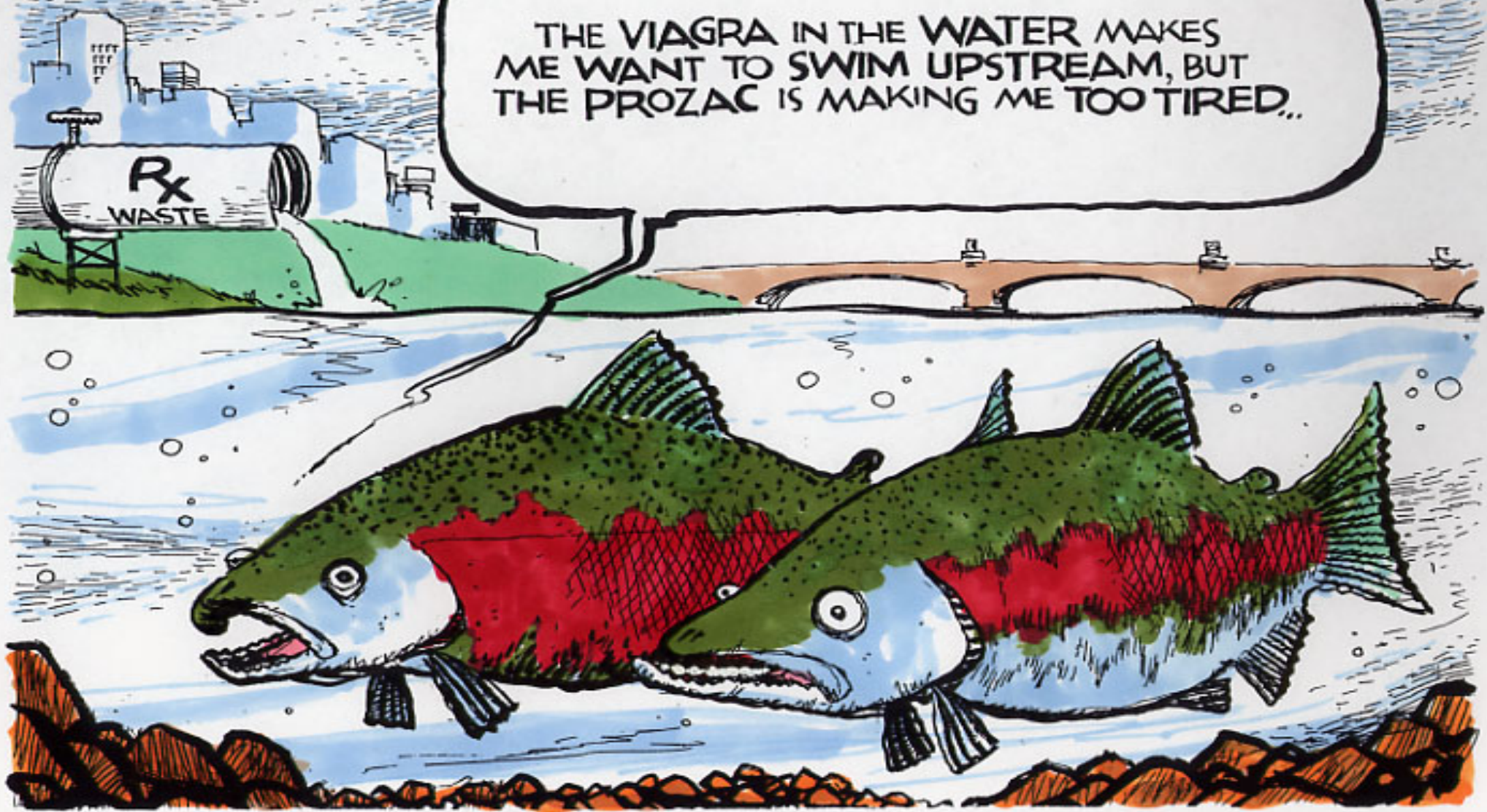
- CFLs account for 24% of the recycling Cost

Cost to Collect is Staggering

- More than **\$100 Million** needed to keep just U-waste out of the trash in CA (banned by DTSC as of 2-8-06):
 - San Luis Obispo: budget of \$300,000, would need \$4 Million for U-waste products.
 - CIWMB study calculated additional \$41 Million needed for 32 jurisdictions, for only three U-waste product categories.
 - Santa Clara County spends \$337,000 per year to collect 6% of the fluorescent lighting waste stream
 - Where is the other 94% going?

OH MAN THE OREGONIAN © 2007/5/10

THE VIAGRA IN THE WATER MAKES
ME WANT TO SWIM UPSTREAM, BUT
THE PROZAC IS MAKING ME TOO TIRED...



Hazardous Waste?



Solution: Shared Responsibility

- Industry – primary responsibility
- Solid Waste
- Wastewater agencies
- Stormwater agencies
- Hazardous Waste agencies
- We manage HHW legally and properly
- Develop alternate collection methodologies (retail stores, reverse distribution)
- Support Producer Responsibility legislation

Sharps (needles and syringes)

- September 1 – illegal to dispose of in trash or recycling bins
- 1.2 million generated each month in SCC
- FY 2007 – Countywide HHW collected approximately 295,000 sharps
- 39 pharmacies, hospitals and fire stations accepting sharps

Retail Recycling Partner Data

- 72% of fluorescent lamps managed by the HHW Program are received by the partners
- Fluorescent lamp collection is a fraction of generation
- Orchard Supply Hardware, Ace Hardware are community environmental partners.
- Reward participating retailers with your purchasing dollars!
- Why don't the big box stores participate?
- Wal-Mart? Costco?





UNIVERSAL WASTE

CONTENTS *Universal Waste*

ACCUMULATION START DATE _____

SHIPPER *See HW*

ADDRESS *1515 Kappa Drive apt 300*

CITY, STATE, ZIP *San Jose, CA 95128*



Amount Collected is Tiny in Santa Clara County

- Less than 6% of fluorescent lamps are collected from households and small businesses.
- Less than 2% of alkaline batteries are collected
- Less than 25% (est.) of rechargeable batteries are collected
- Less than 5% of household throughout the state use HHW services.

In Washington State

- 74% of respondents said they are willing to properly dispose of unwanted medicines if a convenient location is offered
- 84% said a local pharmacy would be the most convenient location to dispose of unused medicines

Source: Soundstate Survey of King County Households (2006, WCRC)

Fluorescent Lamps

- Support front-end financed product stewardship solution nationally and regionally
- Lighting industry pays for program
- Retailers provide take-back locations
- Consumers return their unwanted universal waste to where they bought it
- Government provides oversight and education

Private Sector Solution

- Product return becomes part of doing business
- Avoids new costs to local government
- Uses relationships that already exist between pharmacies, distributors, manufacturers and regulatory agencies
- Every hardware store already has a hazardous waste contractor
- No charge to consumers
- Provides good customer service
- Can't get same convenience or cost savings with government programs

EPR Provides Many Solutions

- Removes implementation and financing burden from local governments.
- Provides more convenient collection options to customers than government can provide.
- Provides an economic feedback loop that influences design, leading to cleaner, safer products.

Political Support for EPR Across the Isle

- **Conservatives**

- Reduces unfunded mandates on local government
- Gets waste management off the tax base
- Industry can operate more efficiently than government

- **Liberals**

- Producers should be responsible (polluter pays)

Why Government Should NOT Pay

Municipal solid waste management is:

- *Welfare* for waste.
- A *Subsidy* to the makers of toxic and throwaway products that encourages design for disposal.



Engage in the Process!

**“If you are not at the table,
you are probably
on the menu.”**

- Product manufacturing is global, product pollution and problems are local.
- These problems cannot be solved within our own cities/counties.
- Local governments are beginning to value involvement in state and national processes.



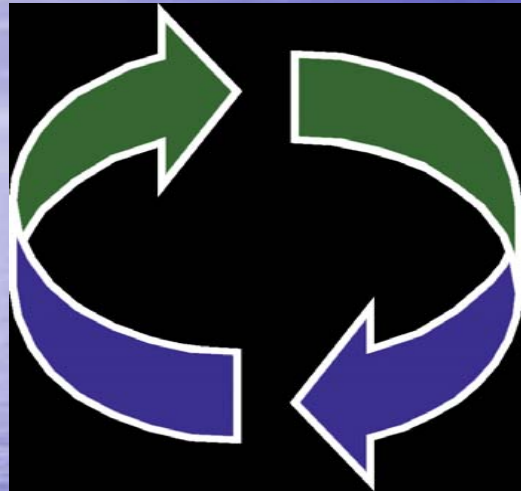
Is TSCA broken?

A Conversation with California Blog

- DTSC Green Chemistry Initiative
 - Cradle to cradle
 - Green Chemistry Forum (definitions)
 - Toxics in products by design
 - Toxics in products by accident

<http://www.dtsc.ca.gov/>

<http://californiagreenchemistry.squarespace.com/welcome/>



California Product Stewardship Council

A Better Way:

Product Stewardship

www.caproductstewardship.org

Mission

To shift California's product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design.

CPSC Associates (local government only)

Counties	Cities	Rural JPAs
Alameda County	Amador City	Alpine
Amador County IWM Agency	Chula Vista	Amador
Butte County	Cupertino	Butte
Central Contra Costa SWA	Diamond Bar	Calaveras
Del Norte SWMA	Dixon	Colusa
Humboldt WMA	El Cerrito	Del Norte SWMA
Los Angeles County IWM Task Force	Elk Grove	El Dorado
Marin County JPA	Fresno	Glenn
Mariposa County	Indian Wells	Imperial
Mendocino SWMA	Isleton	Inyo
Napa County	La Verne	Lassen
Sacramento County	Lemon Grove	Madera
San Bernardino County	Los Altos Hills	Mariposa
San Francisco County	Morgan Hill	Modoc
San Joaquin County	Oakland	Mono
San Mateo County	Palo Alto	Nevada
Santa Barbara County	Pasadena	Plumas
Santa Clara County	Rio Vista	Sierra
Santa Cruz County	San Dimas	Siskiyou
Solano County	San Joaquin	Tehama
Sonoma County WMA	San Jose	Trinity
Tehama County	Santa Cruz	Tuolumne
Yolo County	Santa Monica	
	Sierra Madre	
	Union City	
	Vacaville	
	Vernon	

CPSC Associates cont.

Environmental Services JPA
Regional Council of Rural Counties

Alpine

Amador

Butte

Calaveras

Colusa

Del Norte

El Dorado

Glenn

Imperial

Inyo

Lassen

Madera

Mariposa

Modoc

Mono

Nevada

Plumas

Sierra

Siskiyou

Tehama

Trinity

Tuolumne

CPSC Participants.

Local Government Associations

- Association of Bay Area Governments, Bay Area Hazardous Waste Management Facility Allocation Committee
- Association of Bay Area Governments (ABAG)
- Bay Area Clean Water Agencies
- Bay Area Stormwater Management Agencies Association
- California Council of Directors of Environmental Health (CCDEH)
- California Stormwater Quality Association
- East Bay Municipal Utility District
- Los Angeles County Sanitation District
- Mojave Desert and Mountain Recycling Authority
- Rural Counties' Environmental Services Joint Powers Authority (ESJPA)*
(Counties of Alpine, Amador*, Butte*, Calaveras, Colusa, Del Norte*, El Dorado, Glenn, Imperial, Inyo, Lassen, Madera, Mariposa*, Modoc, Mono, Nevada, Plumas, Sierra, Siskiyou, Tehama*, Trinity, Tuolumne)
- Sacramento Business Environmental Resource Center
- Sacramento County Regional Sanitation District
- Santa Clara Valley, CLEAN South Bay

CPSC Partners

- Allied Waste, Daly City
- California Resource Connections Inc.
- CR&R Waste and Recycling Services
- Main Street Moms
- Marin Sanitary Service
- Pacific Recycling Solutions
- Reverse Logistics Assoc
- Sacramento County Regional Sanitation District
- Sierra Club Napa
- Total Recycling Associates
- Keep California Beautiful
- Computer Take-Back Campaign
- California Retailers Association