

FISCAL YEAR 2012

LEGISLATIVE REPORT



HOUSEHOLD HAZARDOUS MATERIALS PROGRAM



SAFE, SMART, SOLUTIONS FOR IOWA

The Iowa Department of Natural Resources (DNR) Household Hazardous Materials (HHM) programs provide a wide array of opportunities for Iowans to learn about proper purchasing, use, storage, disposal and dangers related to common household products. HHM programs also provide Iowans with proper disposal opportunities. The DNR's HHM programs are funded through a portion of the solid waste tonnage fee and HHM retailer permits.

This Household Hazardous Materials Program report discusses results of these actions undertaken by the DNR's Land Quality Bureau and its stakeholder partners in Fiscal Year 2012.



Above: The Northern Plains Regional Collection Center in Spencer opened October 2012 and serves the city of Spencer, rural residents of Clay County and Emmet and Palo Alto Counties.

WHAT IS A HOUSEHOLD HAZARDOUS MATERIAL?

A Household Hazardous Material (HHM) is a term defining common household products that have one or more of the following characteristics:

TOXIC: poisonous, causing cancer or other health problems

CORROSIVE: destroys human tissue or corrodes metal

FLAMMABLE: easily ignitable

REACTIVE: explosive through exposure to heat, sudden shock, pressure or comes into contact with incompatible chemicals



Above and graph: Poisonings in children under the age of six have steadily decreased over the past five years. Proper management of HHMs can reduce risks in the home.

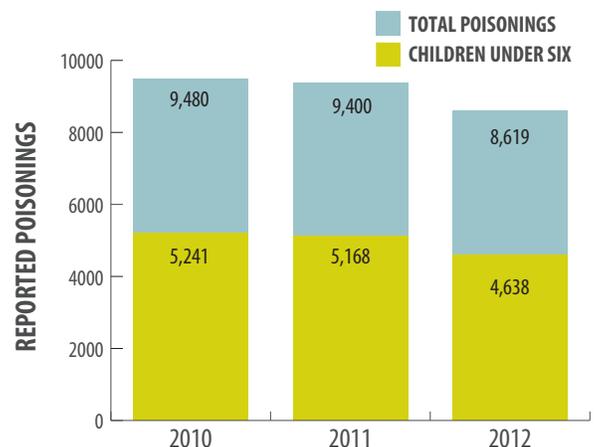
THE IMPACT OF HHMs

HHMs are found in nearly every home; under every sink, in closets, basements and garages. Consequently, nearly every household (and business) in the state generates household hazardous waste. Care should be taken to manage this waste independently from other household (and business) wastes. Improper disposal of HHMs has a negative impact on the environment and aquatic life; potentially contaminating groundwater, surface water and land, impacting air quality and compromising the effectiveness of septic systems and wastewater treatment plant operations.

HHMs are also associated with adverse health and environmental concerns. Health effects caused by hazardous waste can be acute (sudden or immediate onset of severe symptoms) or chronic (gradual onset of symptoms occurring through repeated exposure over an extended period of time). Environmental effects can include fires, explosions and toxic fumes, negative impacts on wastewater treatment and septic system effectiveness and contamination of land and water resources.

HHMs are the leading cause of poisonings in children. For the months of January-November in 2012, the Iowa Poison Control Center reported more than 8,600 exposures to HHMs. Of reported poisonings, 54 percent occurred in children under the age of six.

IOWA POISON CONTROL CENTER REPORTED HHM POISONINGS



REGIONAL COLLECTION CENTERS



SAFE, SMART,
SOLUTIONS FOR IOWA

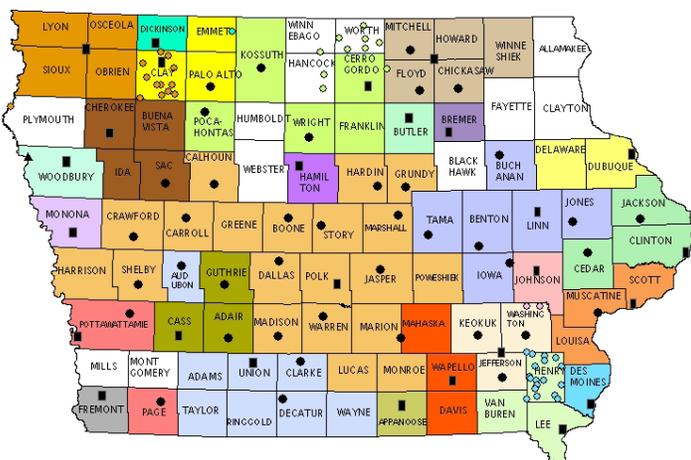
Regional Collection Centers (RCCs) are permanent collection facilities designed to assist the public and conditionally exempt small quantity generator (CESQG) businesses with proper management and disposal of HHMs. RCCs accept hazardous waste for disposal either through local outlets or through contracted service and also provide a materials exchange (Swap Shop) for usable materials and educate citizens about proper purchasing, storage and management techniques for HHMs.

THE BENEFITS OF RCCs

- Permanent availability, often year-round
- Increased surface and groundwater protection
- Increase in worker safety for both solid waste collectors and landfill operators
- Decrease in hazardous exposures to humans and pets
- Improved safety and indoor air quality in homes
- Reduced potential for damage to sewer and septic systems from improper disposal
- Ongoing education for Iowa residents

RCCs IN IOWA

Currently 26 main facilities and 39 satellite facilities are operating across the state serving a total of 89 counties. RCCs experienced an increase in the amount of materials collected in FY 2012. Six million pounds of HHMs were removed from the solid waste stream for proper management: a 22 percent increase from FY 2011. **For local RCC contact information go to www.safesmartolutions.org.**



Regional Collection Center Service Areas

■ RCC Main Facilities ● Satellite Facilities ○ Serviced Towns ▲ Sioux City Only RCC

- | | | |
|-----------------------------|-----------------------|---------------------------|
| ■ Appanoose Co. RCC | ■ Dubuque Co. RCC | ■ Monona Co. RCC |
| ■ Bremer Co. RCC | ■ FMC RCC | ■ NIASWA RCC |
| ■ Butler Co. RCC | ■ Fremont RCC | ■ Northern Plains RCC |
| ■ Cass Co. RCC | ■ Great River RCC | ■ Ottumwa Wapello RCC |
| ■ Cedar Rapids Linn Co. RCC | ■ Hamilton Co. RCC | ■ Prairie SWA RCC |
| ■ Cherokee Co. RCC | ■ Haz Chem Center RCC | ■ SEMCO RCC |
| ■ Clinton Co. Area RCC | ■ Iowa City RCC | ■ Scott Area Regional RCC |
| ■ Council Bluffs RCC | ■ LNI RCC | ■ Woodbury Co. RCC |
| ■ Dickinson Co. RCC | ■ Metro Waste RCC | ■ Unserviced Counties |



Above: A worker wheels gallons of paint to be properly managed at an RCC. More than 1.5 million pounds of paint were collected at Iowa RCCs in Fiscal Year 2012.

REGIONAL COLLECTION CENTER PROGRAM FY 2012 SUMMARY & ACCOMPLISHMENTS

PROGRAM INVESTMENT

Facility Establishment Funding	\$129,815
Support for Current Facility Operations	\$462,626
TOTAL PROGRAM INVESTMENT FOR FY 2012*	\$592,441

MATERIALS MANAGED BY HAZARD TYPE

TOXIC Ex: pesticides, poison	138,781 lbs.
CORROSIVE Ex: drain cleaners, mercury	91,447 lbs.
FLAMMABLE Ex: lighter fluid, aerosols, thinners, oil-based paint	341,062 lbs.
REACTIVE Ex: pool chemicals, toilet bowl cleaners, ammonia	7,833 lbs.

MATERIALS MANAGED BY COMMON PRODUCT TYPE

E-WASTE Ex: computers, televisions, cell phones	2,812,976 lbs.
FLUORESCENTS	232,240 lbs.
LEAD-ACID BATTERIES	191,201 lbs.
MOTOR OIL	719,095 lbs.
OTHER MATERIALS Ex: used oil filters, anti-freeze, rechargeable batteries	1,759,697 lbs.
PAINTS	1,587,137 lbs.

HHMs REUSED LOCALLY THROUGH EXCHANGE/SWAP SHOP 406,515 lbs.

CONTRACTED HHM DISPOSAL 2,577,446 lbs.

HHMs MANAGED LOCALLY 3,471,313 lbs.

TOTAL AMOUNT OF HHMs MANAGED **6,455,274 lbs.**

* The DNR's HHM programs are funded through a portion of the solid waste tonnage fee and HHM retailer permits.

2012 HHM PROGRAM DETAILS



IOWA HHM EDUCATION INITIATIVE

During the months of March and April 2012, an HHM education initiative was undertaken to increase the public's awareness of potential risks of HHMs to the environment and individual health.

Partnership between the DNR and local governments allowed the messages to focus on encouraging residents to look to their local Regional Collection Centers for proper HHM disposal. Launching the campaign in the last week in March coincided with annual spring cleaning and continuing the campaign through the month of April allowed the RCCs to tie-in advertising with local Earth Day activities.

A short survey was conducted at each main RCC facility to help measure the effectiveness of the public awareness campaign. One survey question asked whether the campaign influenced their decision to visit the RCC. More than 78 percent of survey respondents indicated the public awareness advertisement did influence their decision to collect and deliver their unwanted HHMs to the RCC.

The survey also asked RCC visitors if they were a new or repeat customer. 56 percent of respondents said that they were repeat visitors, and 44 percent indicated that they were a first-time visitor to the RCC.

Below: HHM education takes many forms. Here, college students receive a tour of an RCC facility.



TOXICS IN PACKAGING

Iowa's Toxics in Packaging law prohibits the sale or distribution of packaging containing heavy metals such as cadmium, lead, mercury, and hexavalent chromium if intentionally introduced and sets limits on incidental presence of these heavy metals in packaging materials. The purpose of this law is to prevent these toxic heavy metals from entering the environment, recycling stream, landfills, and waste incinerators. The Toxics in Packaging Clearing House (TPCH), a joint organization of ten states including Iowa, had many noteworthy activities in Fiscal Year 2012 including the following:

- **Released two reports:**
 - * Laboratory Round Robin Test Project: Assessing Performance in Measuring Toxics in Packaging, assessing the performance of seven national and regional laboratories in measuring the concentration of the four restricted metals – lead, cadmium, mercury, and hexavalent chromium – in packaging samples.
 - * An Assessment of Heavy Metals in Packaging: A Focus on Flexible PVC from Discount Retail Chain Stores.
- **Conducted two XRF screening projects** which resulted in coordinated state enforcement of state toxics in packaging laws:
 - * Non compliant PVC packaging, from seventeen manufacturers, distributors and retailers, was brought into compliance with state laws through voluntary actions, which included stopping the distribution and sale of the non compliant packaging in member states.
 - * Inks and colorants used in packaging, which was identified in previous screening projects as a packaging component with an increased likelihood of containing metals restricted by state toxics in packaging laws. The results will be published in Spring 2013.
- **Released a press report** on Toxic Heavy Metals in Packaging based on the results from the PVC screening project which was run by at least 5 statewide newspapers, and broadcast media including WQWT Channel 6 and WHO Radio.



www.iowadnr.gov

www.safesmartolutions.org

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