

~~How To Properly~~ ~~What is the~~  
~~Best Way~~ How to Dispose  
of Household  
Hazardous Waste

ILCSWMA

September 22, 2010

David Walters  
IEPA



# One-Day HHW Collections

- IEPA sponsored nearly 500 one-day HHW Collections
- Served more than 400,000 households
- Disposed of >80,000 drums of toxic or hazardous materials



# HHW Long-Term Facilities



Long-Term Facilities are open most weekends and accept waste from all Illinois residents.



# My New (downsized) Office



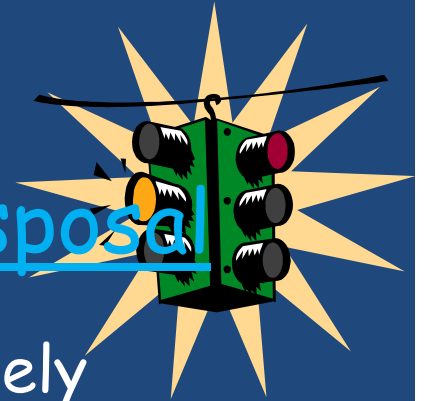


The following suggestions are for  
residentially  
generated materials only!

All other materials have very specific  
and regulated disposal requirements.

# Further Caution

## Sewer Disposal vs. Septic Tanks Disposal



Many sewage treatment facilities can safely handle a wide range of chemicals. Always, however, check with the proper authorities before advising on sewage disposal.



**Warning: Many people do not know the difference between sewer and septic systems and do not know which their home is connected to!!!!!!!!!!**

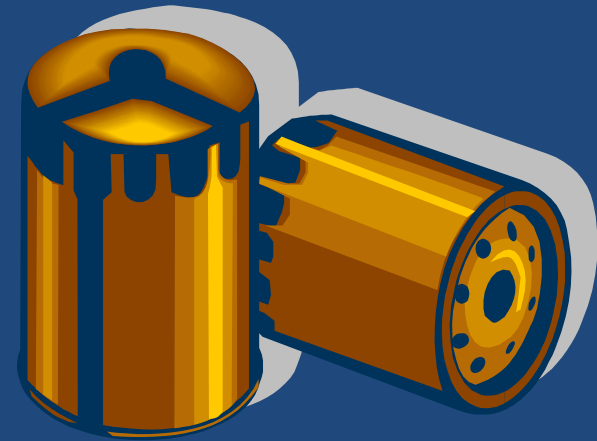
# Auto Fluids

- Motor Oil - Banned From Landfill Disposal

- Auto Parts Stores
- Oil Change Facilities

- Oil Filters

- Check Same Facilities (Earth 911 - WalMart)
- Drain and Dispose/Recycle





# Auto Fluids

- **Auto Batteries (Lead Acid) - Banned From Landfill Disposal**
  - In Illinois any place that sells lead acid batteries must accept them for recycling.
- **Gasoline**
  - Mix with new gas and burn in engine
- **Antifreeze**
  - Check places that accept motor oil
  - Some sewage treatment facilities can handle



# Auto Fluids

- Brake Fluid/Transmission Fluid/etc.
  - Check places that accept motor oil



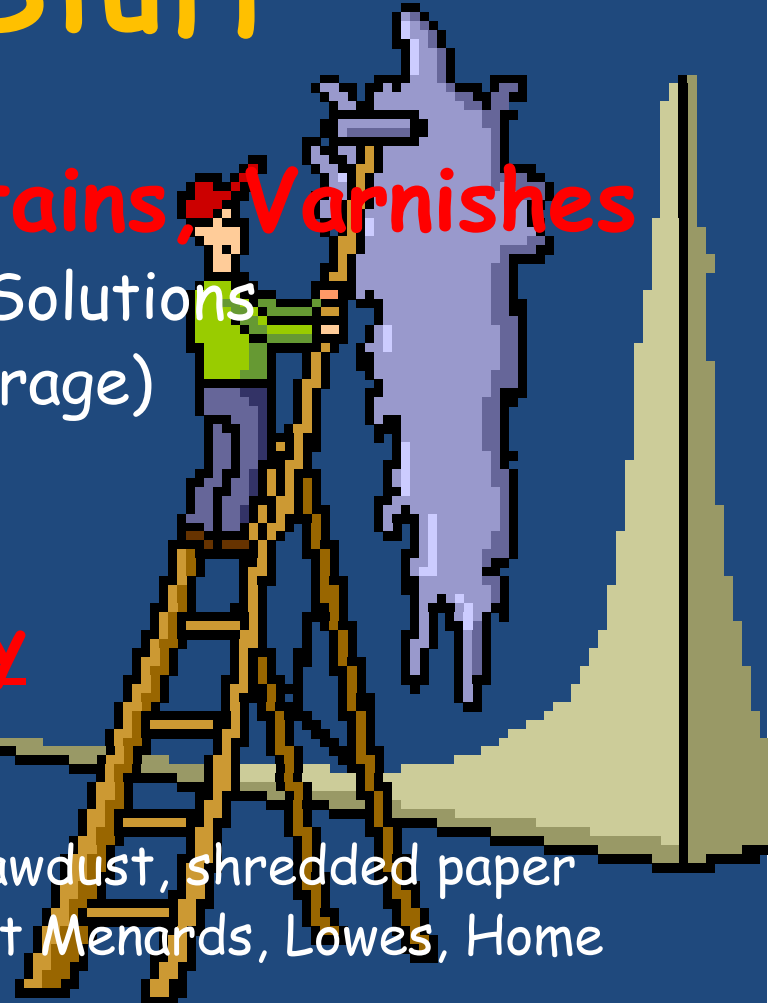
# Paints and Stuff

- **Oil and Latex Paint, Stains, & Varnishes**

- Partners For Waste Paint Solutions
- Paint something (closet, garage)
- Donate if a large quantity

- **Solidify and Throw Away**

- Leave lid off
- Pour on cardboard
- Mix in kitty litter/oil dry, sawdust, shredded paper
- Purchase "Paint Hardener" at Menards, Lowes, Home Depot



# Paints and Stuff

- **Aerosol Paints**

- Empty onto cardboard and recycle/trash can

- **Thinners**

- Recondition and Reuse - Let solids settle and reuse liquid
- Evaporate

- **Paint Strippers**

- Mix with absorbent and let solidify



WET  
PAINT!

# Household Batteries

- Dry Cell Batteries (D, C, AA, AAA, 9 volt)

- Garbage
- Have not contained Hg since early 1990s



## Rechargeable Batteries

- Recycle - Many Home Improvement and battery stores collect (tricky - may look just like dry cell)  
<http://www.call2recycle.org/>

- Button Batteries

- Recycle - Many home improvement, battery, jewelry, and hearing aid stores collect



# Cleaners

- **Soaps**

- If on a sewer system - pour down drain

- **Disinfectants**

- Use as intended

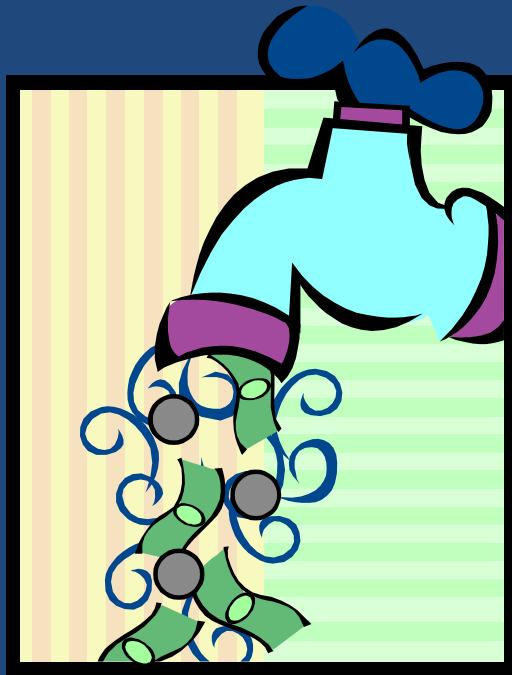
- **Acids** (tile cleaners, masonry cleaners)

- Add to large amounts of water (always pour acid into water - NOT water into acid!)
  - Can add baking soda to water before mixing
  - Wear protective clothing (rubber gloves, safety glasses, etc.)



# Cleaners

- Drain Cleaners/Oven Cleaners/Lye
  - Add to large amounts of water



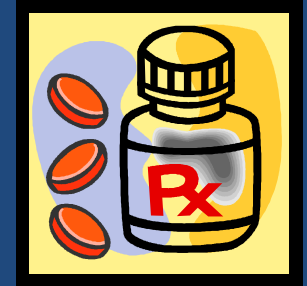
# Photographic Chemicals

- Kodak website claims:
  - “Most photographic processing effluents and washwaters contain chemicals which are biodegradable. They are, therefore, compatible with aerobic (with oxygen) biological treatment systems and are effectively treated when discharged to municipal sewer systems such as Publicly Owned Treatment Works (POTWs). Septic systems operate with anaerobic (without oxygen) biological treatment. Therefore, septic systems do not have the ability to properly treat photographic processing effluents.”

# Medical Wastes

## • Old/Unwanted Medicines

- DO NOT advise pouring down the drain
- Some collection locations throughout Illinois
- Mix with coffee grounds, sawdust, etc. and throw away



## • Sharps (needles)

- Entomb in plaster of paris or mortar
- Several Mail-Back programs ~\$25.00  
» <http://www.safeneedledisposal.org/>



Check with prescribing doctor or pharmacy to see if they will take back.



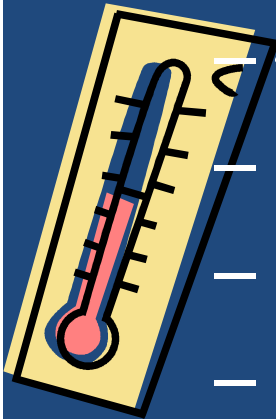
# Mercury

- Compact Fluorescent Bulbs (CFLs)
  - ComEd/Ace Hardware
  - Lighting stores
  - Mail-Back Programs - 12 bulbs ~\$17.00
- Fluorescent Tubes
  - Lighting Stores
- Thermostats
  - July 2011 - Banned from landfills
  - HVAC contractors must take
  - Wholesalers must accept for recycling



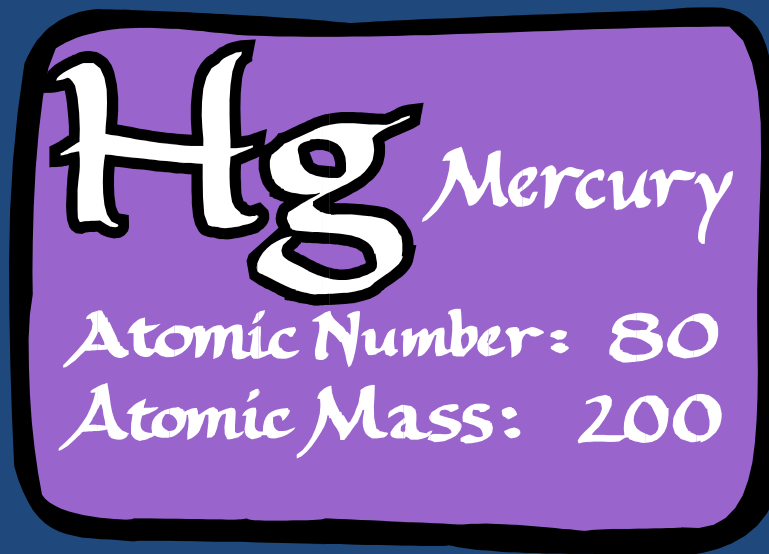
## Typical Mercury Content:

- CFL: 5 milligrams
- 4' Fluorescent Tubes: 20 milligrams
- Watch Battery: 25 milligrams
- Dental Amalgams: 500 milligrams
- Hg Thermometer: 500 milligrams
- Sump Pump Switch: 2,000 milligrams



# Mercury

- Mercury - Elemental, Instruments
  - Put into glass container and pack in shredded paper, bubble wrap, foam peanuts and store in a very secure location.
  - Check local hospitals - some may collect items





# Turkey Frying Oil

- Check with local restaurants to mix with their old oil
- Find biodiesel converter
- Mix with oil dry and throw away



# Driveway Sealer

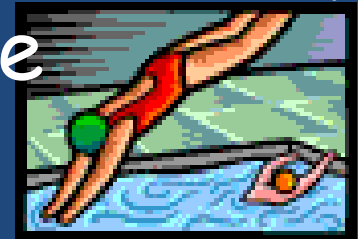
- **Solidify**

- Mix with large quantities of sawdust, oil dry, etc.
- When dry can be thrown away



# Pool Chemicals

- Contain sodium hypochlorate, muriatic acid, etc.
- Find pool owner willing to use
- Contact local sewage treatment facility to determine if they can utilize
- Dry products can be trashed
- Liquids can be poured down drain in small quantities

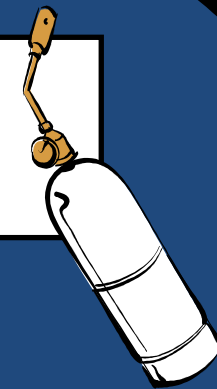


# Propane Tanks

- Propane suppliers
- Scrap metal dealers



Small disposal propane containers  
can be recycled/trashed



# Miscellaneous

## Fire Extinguisher

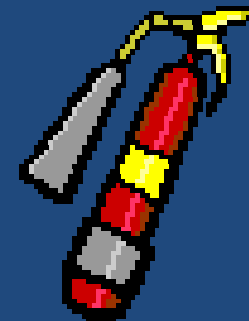
- Check local fire extinguisher service companies
- Empty contents and recycle/dispose

## Smoke Detector

- Remove battery and throw in trash

## Railroad Ties

- Trash



# Miscellaneous

Treated Lumber  
Trash

Shingles  
Trash

Flares  
Ignite



# Miscellaneous

## Ammunition

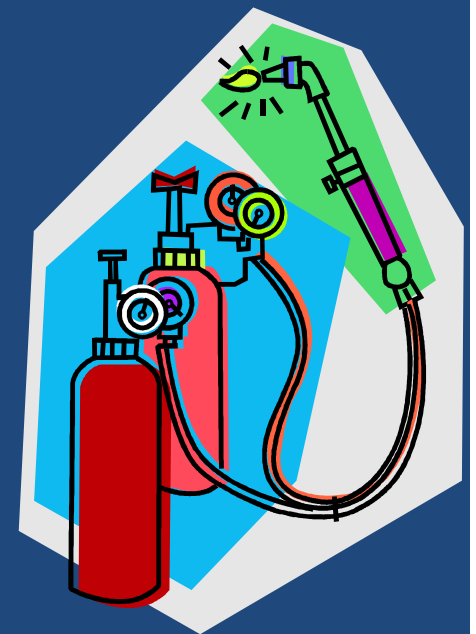
- Contact Police Department

## Helium Tanks

- Empty, punch out tab, recycle/trash

## Large Gas Cylinders

- Contact local compressed gas companies





David Walters  
Illinois Environmental  
Protection Agency  
1021 North Grand Ave.  
Springfield, Illinois  
62794  
217/782-9261

