

HOUSEHOLD HAZARDOUS AND SPECIAL WASTES

What is hazardous and special Waste?

Why should I be concerned?

What alternatives do I have?

How do I dispose of these things correctly?

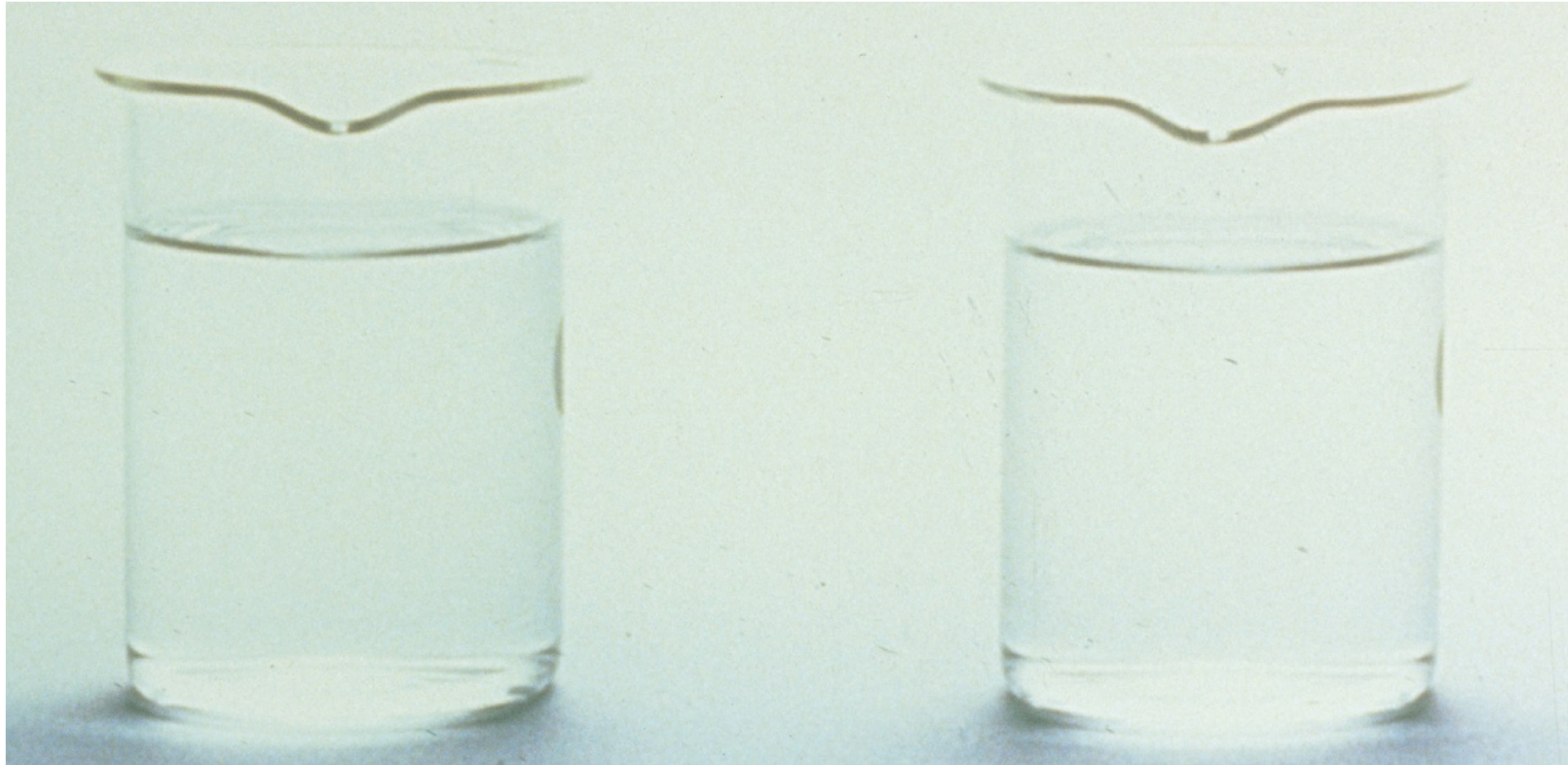
Who pays for disposal?

Solid Waste Special Service District #1

May 3, 2018

Hosted by Moonflower at Grand Library

Which is Ammonia and Which is Water?



National Fire Protection Association (NFPA)

- The NFPA uses a Fire Diamond label divided into 4 sections.
 - Blue=Health
 - Red=Flammability
 - **Yellow=Reactivity**
 - **White=Special Information**



What is Hazardous and Special Waste?

- Dictionary Definition: Risky or Dangerous Material that is not wanted or is unusable remains or byproducts of something.
- For Solid waste it must be one of the following:
 - Listed by the US EPA (referred to as Listed Waste)
 - F – generic industrial
 - K – specific industries
 - P & U – Discarded commercial chemical products
 - Universal
 - Certain Batteries
 - Certain Pesticides
 - Mercury Containing Lamps or Equipment
 - Characteristic
 - ICRT



Characteristic Hazardous Waste

- **Ignitability** – Liquid with flashpoint < 140° F, OR a non liquid under standard temperature & pressure causes fire through friction, absorption of moisture or spontaneous chemical change that burns vigorously & persistently OR ignitable compressed gas
- **Corrosivity** – Has a pH of < 2 or > 12.5
- **Ignitability: Turpentine (painters), Lighter Fluids, Propane Tanks, Rug Cleaners, Paints, Air Fresheners**
- **Corrosivity: Drain Cleaners, Oven Cleaners, Some laundry stain removers, Car Batteries, lye, Sodium Hydroxide**
- *Interesting Tidbit: pH of White Distilled Vinegar, White Wine and Red Wine is 2.2 – almost hazardous*

Characteristic Hazardous Waste

- **Reactive:** Swimming Pool Chemicals, Car Batteries, Ammonia, Chlorine Bleach,
- **Toxicity:** Paint pigments: Cadmium, Lead, Antimony Glassworking: Metals, hydrofluoric acid, formaldehyde
- **Others:** Antifreeze, Insect or Rodent Bait Traps, Air Freshners, Mothballs, Pesticides, Insecticides

- **Reactivity** – Violently explode or undergo violent reactions. Can create toxic fumes or gases when exposed to water or under normal handling conditions. No formal test methods.
- **Toxicity** – Has the potential to leach out toxics in a landfill condition. Test method to determine is called the Toxicity Characteristic Leaching Procedure (TCLP).



Special Wastes -

- Polychlorinated Biphenyls (PCB) – light ballasts and transformers (TSCA)
- Refrigerants (Freon) found in refrigerators, air conditioners, freezers, etc. (40 CFR 82)
- Bloodborne Pathogen Waste such as needles/syringes (OSHA)
- Radioactive Waste found in Smoke Detectors (NRC)
- Asbestos found in old tiles, shakes/shingles, insulation, window caulking (NESHAP)
- Used Oil – primarily fails paint filter test
- Septage from septic tanks – cannot go to a landfill untreated
- Electronics, E-Waste, does not mean all electrical items.



E-Waste Details

- Reason for being “hazardous”. Materials fail TCLP specifically for Lead, Cadmium, Mercury in particular).
- What is considered e-waste: In most cases, e-waste consists of expensive and more or less durable products used for data processing, telecommunications or entertainment.
 - Is this a microwave?
 - Hair dryer?
 - Cordless drill?
 - Coffee Pot?
 - Vacuum Cleaners?
- Examples: CPU (computer), Laptop, Televisions, Printers/Scanners/Copiers, Monitors, Keyboards, entertainment electronics (radios, stereos, compact disc players, etc), cell phones, similar items

E-Waste Turn In Information

- Second Saturday at Community Recycling Center (CRC), 9 am to noon
- What can be turned in?
 - E-Waste
 - Batteries (small, rechargeable to one pound)
 - Fluorescent Lamps
- Is there a charge?
 - **YES** - \$0.30 per pound.
- Why isn't it free for residents?
 - Responsibility for waste belongs with Generator, even for recycling
 - Hazardous waste generated is still the responsibility of the one who generates the waste
 - Disposal costs is responsibility of a generator

What about Other Household Hazardous Waste?

- Residential (household) is exempt from most hazardous waste requirements
- Held one time per year in cooperation with Monument Waste at the Transfer Station
- May 5, 2018, 9 am to noon.
- Vendor has to be approved at state level with certifications to handle hazardous waste
 - Veolia
- What about business with small quantities of hazardous waste? Can they throw their material away in dumpsters or at the landfills or transfer station?
 - **NO**. But
 - They can work directly with Veolia or other hazardous waste company.

Why should I be concerned



Consider alternatives

- Glass Cleaner
- Furniture Polish
- Mothballs
- Discussion?
- 1 Tablespoon Vinegar or Lemon Juice to 1 Quart Water
- 1 Teaspoon Lemon Juice to one pint of mineral or vegetable oil
- Use cedar chips, lavender flowers, rosemary, mint, or white peppercorns

Dispose or?????

- Determine if really need the purchase, if not then **REFUSE** to buy it
- If need the material, look at labels to see if there is a less hazardous option
- Research alternatives.
- Buy only what is needed, ie. use it up this is related to **REDUCE**
- Share with others to use before throw it away, ie. **REUSE**
- Finally, participate in the HHW Roundup to have the materials properly handled.

Feel free to donate \$ to the district to offset the cost at it averages around \$150 to \$200 per carload subsidized by the fees paid at the Klondike Landfill

Who pays for handling Hazardous Waste?

- Generator of Hazardous Waste is required to document collection, transportation, disposal
- Generator of Hazardous Waste is responsible for paying for all costs
- Exception allowed for some specific wastes and generators.
 - Household (residential) hazardous waste (HHW) is exempt
 - However, the local landfill and haulers can deny disposal of specific items.
- E-Waste is charged regardless of generator
- HHW roundup has fees waived for residential generators
- Commercial, Industrial, Institutional has **NO** exemption and must pay for the disposal of their hazardous waste.

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Questions/Discussion?

- Landfill manager certification requires taking a 40 hour class and passing a 3 hour exam. Part of that certification covers hazardous waste (about 2 hours).
- There is also a 6 hour class specific to special and hazardous waste which goes into more detail that covered earlier.
- Some hazardous waste when used in processes result in non hazardous beneficial items.
- To find out what hazardous chemicals are in our area, go to the local emergency manager or fire department as they have Tier II reports from any entity having hazardous chemicals.
- Community Right To Know