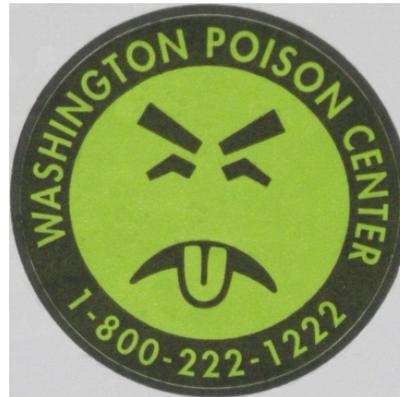


Collection and Handling of Hazardous Waste in Research & Development

What is “Hazardous Waste?”

- 1. “Characteristic Wastes” are wastes that meet certain criteria (but are not a “listed waste”) and include **reactivity** (unstable materials), **ignitability**, **toxicity**, **corrosivity**, etc.
- 2. “Listed Wastes” are specific products, or a waste from specific processes, as determined by the EPA or the State of Washington (includes wastes from electroplating, wood preserving, pesticide manufacturing, etc.). They are called “listed” because waste lists appear in 40 CFR Part 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE
- 3. Trace Chemo Waste
- 4. Universal Waste



1. Labeling Hazardous Waste

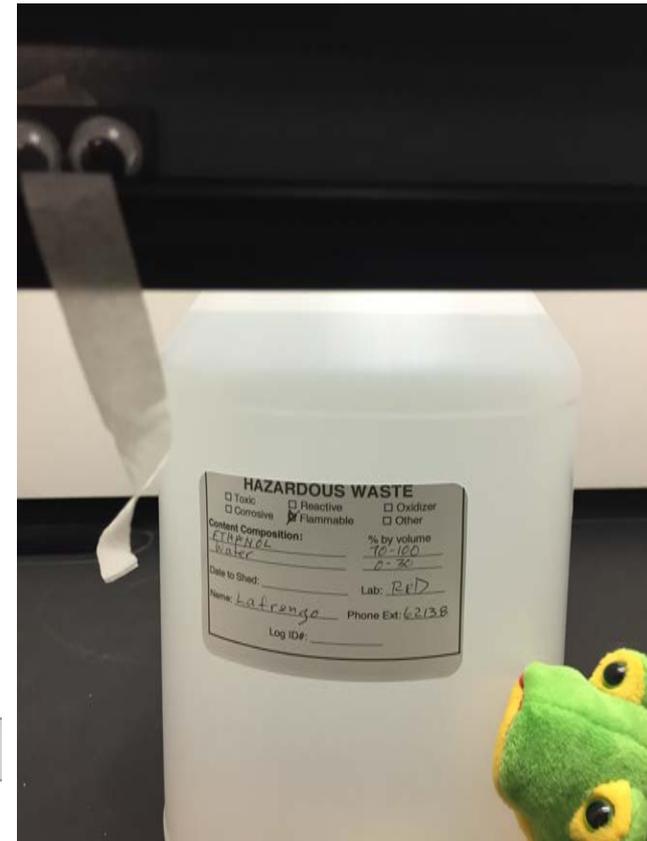
Once a material is determined to be hazardous waste, it must be properly labeled:

- * Hazardous Waste
- * Characteristics (toxic, flammable, corrosive, reactive, oxidizer)
- * Contents (no abbreviations)
- * % by volume
- * Date brought to HW Shed
- * Log ID# (enter into binder)
- * Put hazard sticker on container

CORROSIVE

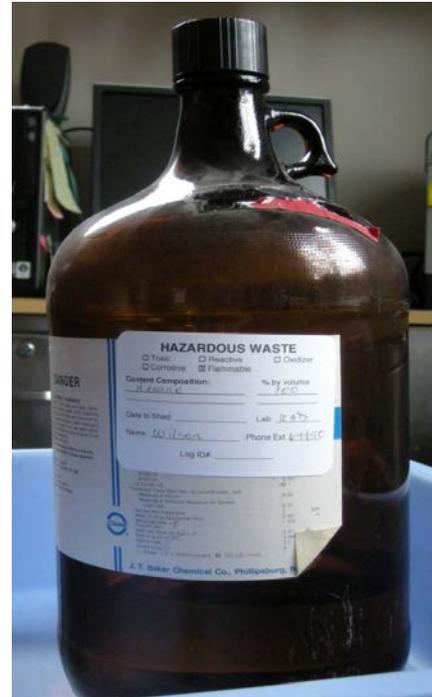


FLAMMABLE



Storage of Hazardous Waste

- Collect the hazardous waste in an appropriate container
- Keep the container closed except when adding more waste
- If the word “Empty” is on the container, cover it or cross it out when you add waste and relabel
- Store the waste in a tub or bucket to contain a spill if the hazardous waste container leaks



Hazardous Waste Shed



- HW shed is located on the loading dock of building 1
- The shed is accessible only by ProxCard
- Contact R&D Safety at 6-1854 for initial training and card access
- Note locations of eyewash, emergency shower, emergency phone and closest fire pull box within the shed
- Place waste on table; enter appropriate information into the log book binder
- Date the label and add the sequential ID number in log book and on label
- Punch red button by door when exiting and turn off lights

3. Trace Chemo Waste

- Trace Chemo Waste includes:
- *any personal protective equipment or other materials that are not visibly contaminated by chemotherapy compounds*
 - any empty chemotherapy containers containing less than 3% of the original contents
 - contaminated syringes
 - chemo-contaminated cell culture plates
 - For specific procedures on collection/disposal of trace chemo waste:
Contact the R&D Safety Office at 6-1854



4. Universal Waste

- Although **Universal Waste** meets the criteria for Hazardous Waste, it follows different, more relaxed rules than for hazardous waste, to encourage proper disposal and *recycling*
- **Universal Waste** includes
 - Batteries
 - Lamps, Fluorescent Bulbs, UV lights
 - Mercury-containing Equipment



4. Universal Waste: Batteries

- The Universal Waste handler (the VA) must track how long the **Universal Waste** has accumulated and avoid exceeding the one year storage limit
- At our facility containers are dated for a six month accumulation period and emptied before the six months are over
- For large batteries, contact R&D Safety at 6-1854 for disposal



Other Waste: Black Bins

- Black bins are used for collection of the following:
 - partially used, empty and/or expired **pharmaceuticals** (e.g., oxytocin, gentamicin, G-418 Sulfate, penicillin, streptomycin)
 - **BULK** chemotherapy waste
 - Nicotine, epinephrine



Black Bins

- Do **NOT** put the following into the black bins:
 - Used biohazard sharps (put into needle boxes)
 - Infectious waste
 - Trace Chemotherapy Waste (collect in yellow chemo bags for incineration)
 - Controlled substances
 - Silver nitrate
 - Garbage



Cactus Smart Sink

- Located in Building 11, room 106
- **Cactus Smart Sink**
 - The Smart Sink is for disposal of partially administered or unused **controlled substances**
 - The Cactus Smart Sink securely captures controlled substances and renders them "unrecoverable, non-retrievable and unusable"
 - Use instead of sink disposal
 - Contact **GEMS** for further information



Uncontaminated *Glass Waste* Disposal

- Use a sturdy container (e.g., cardboard box) and deface any hazardous labels
- Line container with two plastic bags
- Place clean glass into the bags
- Tape container closed when full
- Label “glass” or “broken glass” and place by the regular trash



Hazardous Waste Contacts

- Corinne Gajdusek, R&D Safety Officer
 - 206-277-1854 (phone)
- Lisa Woodings, Industrial Hygiene
 - 206-768-5344 (phone)
 - 206-510-3315 (cell phone)
- Alejandro Trujillo, Industrial Hygiene/Safety
 - 206-321-7058 (cell phone)
- Conrad Wilson, GEMS Coordinator Seattle
 - 206-277-2930