



# Environmental Compliance and Technical Assistance for Auto Service Professionals -- RCRA C Hazardous Waste

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- This information was prepared specifically for building managers and may not be appropriate for other facilities.
- This information is highly condensed and does not include all regulatory requirements. It CANNOT be used as training material.
- This information includes best practices which may exceed the regulatory requirements.
- DOEE cannot attest to the accuracy of information provided at the links below. Providing these links does not constitute an endorsement by DOEE or any of its employees.

# What can get you in trouble?

- Failing to get an EPA ID #
  - (also called an EPA Handler ID # or an EPA Generator ID#).
- Failing to identify Hazardous Wastes (HW).
- Failing to properly manage Hazardous Wastes (HW), Universal Waste (UW), or Used Oil.
- Failing to properly dispose of Hazardous Wastes (HW), Universal Waste (UW), or Used Oil.
- Failing to keep paperwork to show you did everything right.

# Penalties!

- No EPA ID # is a \$2,000 fine.
- Not properly managing regulated wastes has fines ranging from \$500 to \$2,000 per infraction.
- Not submitting the annual renewal fee is a \$500 fine.
- Not submitting the annual Self Certification of Compliance is a \$500 fine.
- Clean up expenses caused by not properly managing or disposing of regulated wastes cost many thousands of dollars.
- Failure to properly manage regulated wastes puts you, your staff, your family, and the environment at risk.

# How to stay out of trouble:



- 1 - Get an EPA ID #.
  - All generators of HW, UW, or used oil in the District must have an EPA ID #.
    - An EPA ID # looks like this: DCR 000 500 109.
  - To get an EPA ID number, fill out EPA form 8700-12 and submit it, with the registration fee, to the DOEE-HW program.
- 2 - Identify all the items in your facility that will be Hazardous Waste if you can't use them.
- 3 - Properly manage and dispose of HW, UW, or Used Oil.
- 4 - Train your staff to follow the rules.
- 5 - Keep your paperwork to prove you did everything right!

# Commonly found wastes at auto shops which are regulated under the RCRA C Hazardous Waste (HW) Program

- Used oil
- Some parts washer solutions (HW) (ignitable)
- Some paints and paint thinners (HW) (ignitable)
- Lead Wheel weights (HW) (toxic)
- Some concentrated cleaning products (HW) (corrosive)
- Battery acid (HW) (corrosive)
- Most aerosol products (HW) (ignitable)
- Spoiled gasoline (HW) (ignitable)
- Car or forklift batteries (UW)
- Fluorescent lamps (UW)
- Mercury thermostats(UW)

# It might be Hazardous Waste if...

- If it says 'danger' on it
- If it says 'flammable' on it
- If it says 'toxic' on it
- If it says 'poison' on it
- If it says 'warning' on it
- If it has a picture of a skull and cross bones on it
- If it has a picture of a fire on it
- If it is an acid
- If it is a base
- If it is a solvent



These items should be evaluated to see if they must be managed as HW.

Note: this list is not exhaustive, it is intended to initiate the evaluation process.

# The regulation defines RCRA C regulated Hazardous Wastes as:

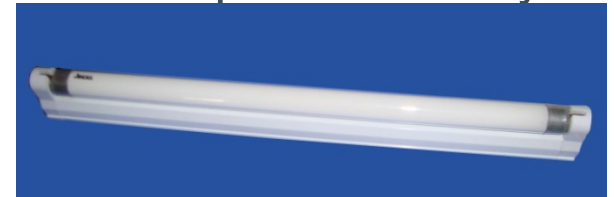
- Listed wastes
- Characteristic wastes
  - Ignitable (flash point below 140°F or 60°C)
  - Corrosive (pH  $\leq$ 2 or pH  $\geq$ 12.5)
  - Reactive
  - Toxic
- Anything the Administrator or the Director says is HW
- Anything you say is HW



# Other RCRA C regulated Wastes

Universal Waste is a subcategory of HW.

- Spent florescent lamps (intact only, crushed lamps are usually HW)
- Some batteries
- Some pesticides
- Mercury thermostats



Used oil is also regulated



# How to figure out if the item is a Hazardous Waste

- 1 - Decide if it is a waste. Remember, the regulations only apply to waste, not to products you are currently using.
- 2 - Determine if the waste meets or exceeds one of the criteria in the regulation (see slides 8 & 9).
  - Review a current MSDS for the product, the flash point and pH will be listed. Also, many MSDSs now state if the item will be regulated when it becomes a waste.
  - Ask the vendor for the flashpoint, pH, and ingredients.
  - Submit a sample for testing
- 3 – Any waste which meets or exceeds one of the criteria, is a Hazardous Waste.

# How to manage your - Hazardous Waste items

- Identify it
- Label it
- Date it
- Close it
- Contain it
- Inspect it
- Dispose of it (correctly)
- Train staff

# How to manage your - HW items (continued)

- Identify it
  - Make a determination on all waste to identify all which require management under the regulation
- Label it
  - With the contents if it is not waste
  - “Hazardous Waste” if it is HW
  - Universal waste allows several variants (see slides 13 and 14)
- Date it - with the accumulation start date
- Close it – keep it in a closed container
- Contain it – Use secondary containment
- Inspect it – conduct weekly inspections, and keep a log
- Dispose of it (correctly). Arrange for appropriate disposal using a licensed contractor on a schedule. You will get a manifest. Keep the manifest for your records.
  - Using small bottles helps
- Train staff

# How to manage your - UW lamps

- Contain it – put spent lamps in a drum, box, or carton
- Label it - “Universal Waste - Lamps” or “Waste Lamps” or “Used Lamps.”
  - You can’t call them tubes or bulbs, only lamps.
- Date it - with the accumulation start date
- Close it – keep it in a closed container
- Dispose of it (correctly). - You may store UW at your site for up to 1 year.
  - Arrange for appropriate disposal by a licensed contractor on a schedule
- Train staff
- Incandescent lamps and LED lights are not UW
- Remember that broken or crushed lamps are never Universal Waste; they are usually Hazardous Waste,



# How to manage your - UW batteries

- Label it - "Universal Waste Battery(ies)" or "Waste Battery(ies)" or "Used Battery(ies)."
- Date it - with the accumulation start date
- Dispose of it (correctly). - You may store UW at your site for up to 1 year.
  - Arrange for appropriate disposal by a licensed contractor on a schedule
- Train staff
- Alkaline batteries are not UW

# How to manage your - Used Oil

- Label it - “Used Oil”
- Close it – Keep the container closed
- Contain it – Use secondary containment
- Train staff
  
- You cannot burn used oil in the District
  
- Cooking oil is not regulated, only motor oil

# Other regulatory bodies

- DOEE
  - Water Quality Division
  - Lead Program
  - Air Quality Program
- OSHA
- WASA / DC Water
- Fire Marshall
- DOT
- others



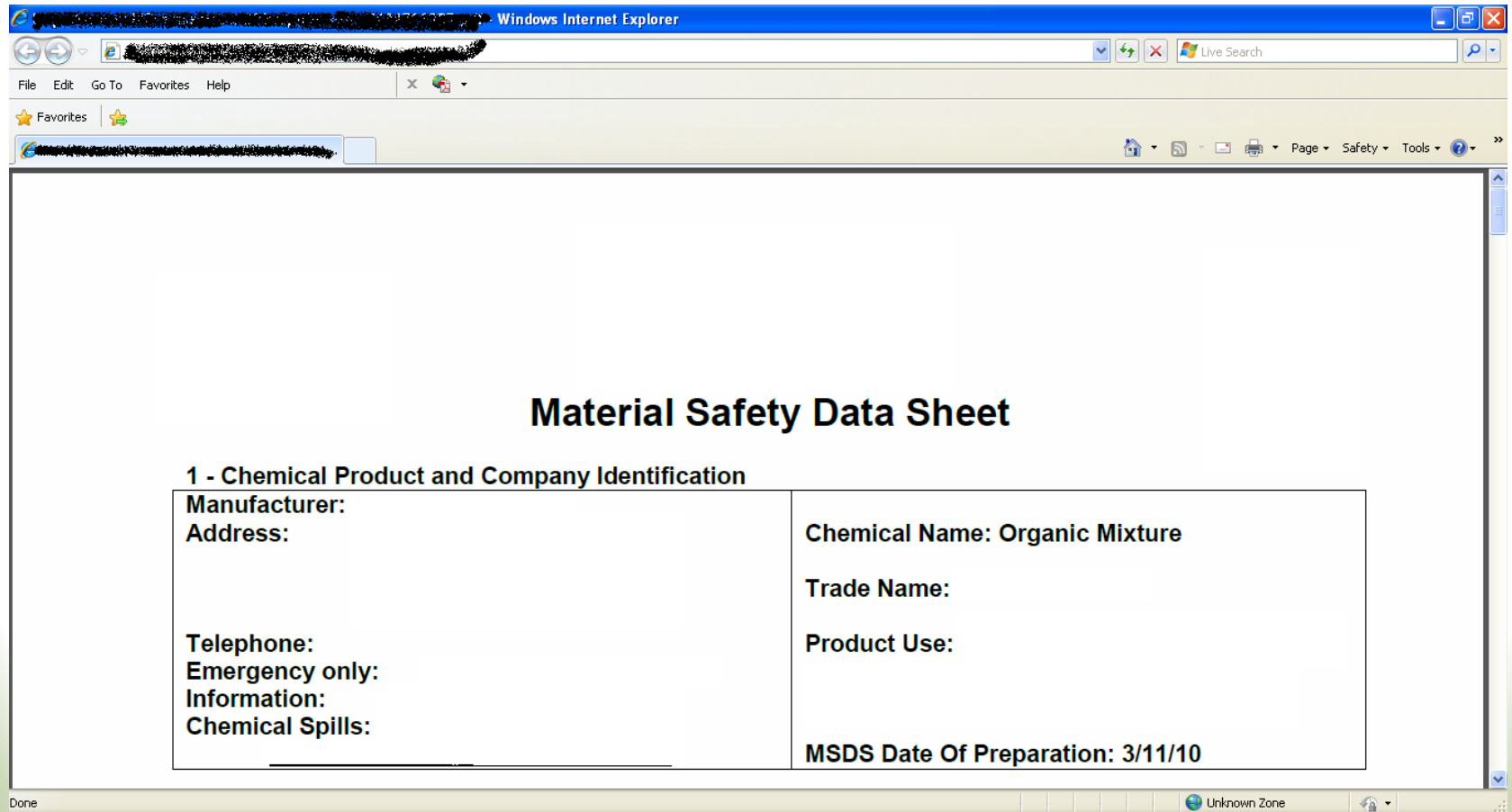
# Reminders:

- Each site must maintain current information on file with DOEE-HW.
  - Remember to send in a revised 8700-12 when the contact person changes, the mailing address changes, the waste streams change, or the generator status changes.
    - It's free to update the information!
- An annual fee is due every March 1<sup>st</sup>.
- A Self Certification of Compliance is due every March 1<sup>st</sup>.

# Examples

# Where is the info on an MSDS?

This is what the front page of an MSDS looks like:



The screenshot shows a Windows Internet Explorer browser window with a single tab. The address bar is redacted with black scribbles. The browser's menu bar includes File, Edit, Go To, Favorites, and Help. The Favorites bar is also visible. The main content area displays the following information:

## Material Safety Data Sheet

### 1 - Chemical Product and Company Identification

<b>Manufacturer:</b> <b>Address:</b>	<b>Chemical Name: Organic Mixture</b>
<b>Telephone:</b> <b>Emergency only:</b> <b>Information:</b> <b>Chemical Spills:</b>	<b>Trade Name:</b> <b>Product Use:</b>
	<b>MSDS Date Of Preparation: 3/11/10</b>

The status bar at the bottom of the browser window shows "Done" and "Unknown Zone".

# Where is the info on an MSDS?

pH and flashpoint area ALWAYS called out.

**Respiratory Protection.** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

### 9 – Physical and Chemical Properties

Boiling Point:	361 - 369°F (183 - 187°C)	Specific Gravity:	0.8 – 0.82 @ 60°F
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	95-115 PSI @ 70°F	vapor Density:	Greater than 1
Percent Volatile:	70-75%	VOC:	412 grams/liter (49.5%)
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	122°F (49°C) Tag Open Cup (concentrate)	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8.0%
Pour Point:	-63°C (-81.4°F ) ASTM D-97	Kinematic Viscosity:	2.79-2.96cSt @ 100°F

### 10 – Stability and Reactivity

# Where is the info on an MSDS?

Flash point is not always in the same spot, but it will always be listed.

The screenshot shows a Windows Internet Explorer browser window displaying an MSDS document. The document is divided into sections for first-aid measures and fire-fighting measures. The flash point information is highlighted with a yellow circle.

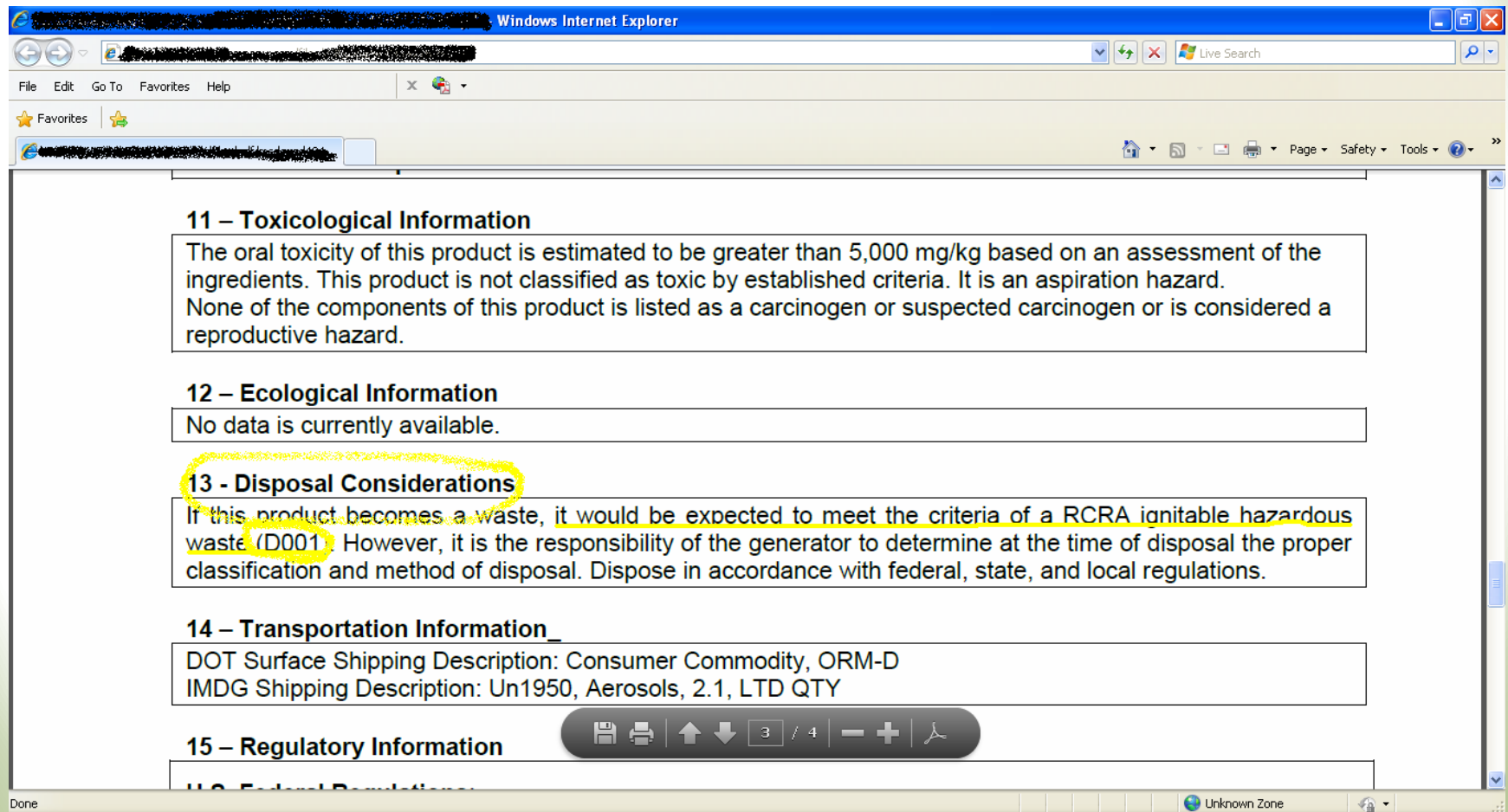
SECTION 4 - FIRST-AID MEASURES	
Eyes:	Quickly and gently blot or brush away chemical. Flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the chemical is removed. If irritation occurs, obtain medical advice.
Skin:	If irritation does occur, flush with lukewarm gently flowing water for 5 minutes or until chemical is removed. As quickly as possible, remove contaminated clothing, shoes, and leather goods (e.g. watchbands, belts) as the product is highly flammable.
Inhalation:	If breathing has stopped, trained personnel should begin artificial respiration (AR) or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Immediately transport victim to an emergency care facility.
Ingestion:	DO NOT INDUCE VOMITING. Aspiration hazard if swallowed. Have victim drink 240-300 mL (8-10 oz) of water to dilute material in stomach. NEVER give anything by mouth to someone who is unconscious or rapidly losing consciousness. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration and repeat administration of water. Quickly transport victim to an emergency care facility.

SECTION 5: FIRE-FIGHTING MEASURES	
Flash point:	WQ5: -10°C (14°F) (ASTM D3828-05) WE4: -5°C (23°F) WS4: 0.9°C (33.6°F)
Conditions of	HIGHLY FLAMMABLE Can release vapors that form flammable mixtures at or

# Where is the info on an MSDS?

Check the 'disposal considerations' for useful information.



**11 – Toxicological Information**  
The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard. None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

**12 – Ecological Information**  
No data is currently available.

**13 - Disposal Considerations**  
If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

**14 – Transportation Information**  
DOT Surface Shipping Description: Consumer Commodity, ORM-D  
IMDG Shipping Description: Un1950, Aerosols, 2.1, LTD QTY

**15 – Regulatory Information**  
U.S. Federal Regulations:



# What NOT to do



- UW Lamps must be
- in boxes
  - which are closed
  - are labeled
  - and are dated

# What NOT to do

Labels must be meaningful!

Hazardous Waste must bear the words “Hazardous Waste” and the date it was determined to be a waste.





# Secondary containment for small containers

Secondary containment units must be capable of containing the volume of the largest container placed on or in it OR 10% of the total volume placed on or in it, whichever is larger.



The secondary containment on the left is very shallow and is meant for use only with small containers. Use this style with caution, it is easy to put too large a container on it.

The unit on the right is much taller (deeper) and will hold more volume.

# Secondary containment for small containers (continued)

Secondary containment does not have to be fancy or pretty, it just needs to work!  
You may have something appropriate onsite already.



# Secondary containment for small containers (continued)



A flammables or corrosives cabinet is often suitable.  
Confirm that the unit you have has a tray in the bottom, older units may not have one.  
Also, check the tray occasionally to make sure it is not rusted out.

# Secondary containment for large containers



These are suitable for use outdoors. There are different styles available.

# Secondary containment for large containers (continued)

These are not suitable for use outdoors.  
A variety of configurations are available, pick one that works in your space.





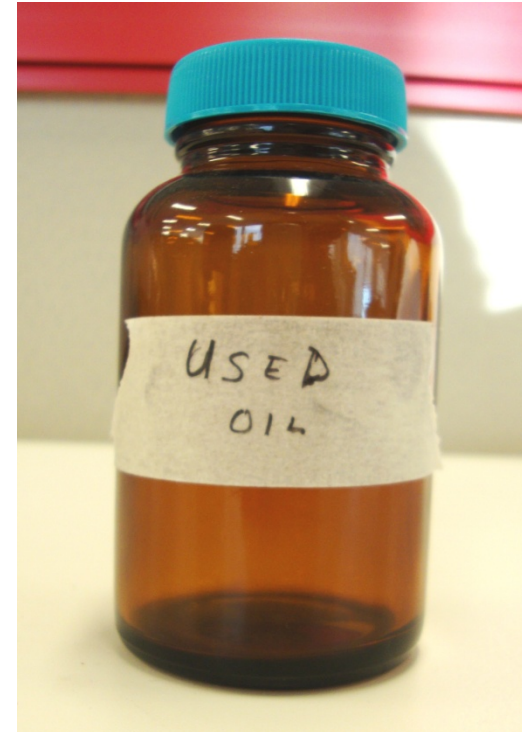
# Secondary containment for ASTs



# Used oil labels

- examples

Handmade labels are ok. Be sure to put the bottle of used oil in secondary containment.

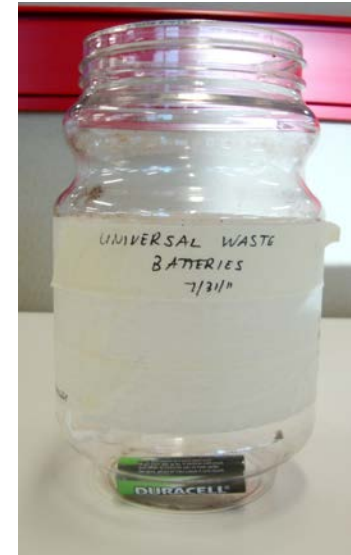


# UW battery labels

- examples



Handmade labels are ok.  
It may be easier to put small batteries in a container and label and date the container than to label each individual battery.



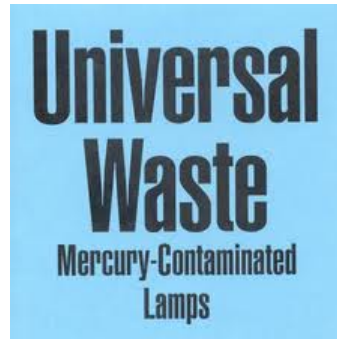


# UW lamp labels

- examples



UNIVERSAL WASTE  
LAMPS  
FOR RECYCLING



Both labels above need to have a date added to them.

Hand written labels are ok. Make sure the date is included (in this photo the date is very faint)

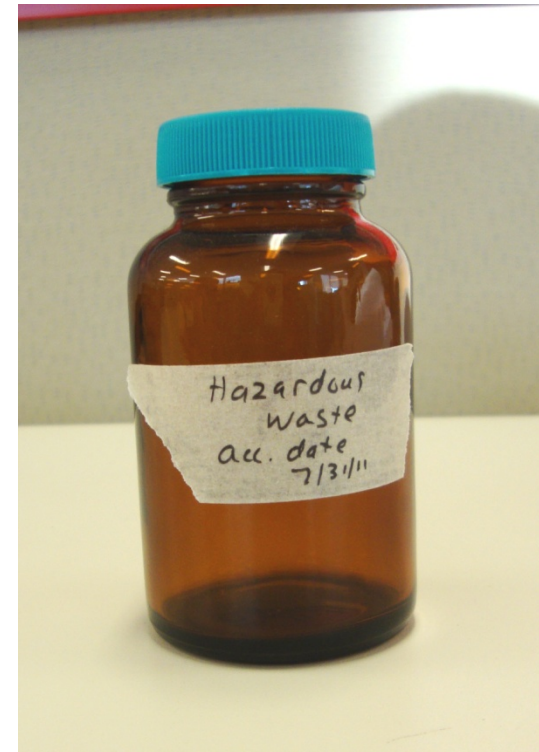


# HW labels

## - examples



Hand written labels are ok. Be sure to put the bottle of HW in secondary containment.



Containers of used oil must be closed,  
a self closing funnel may be used



# Resources



District Regulations may be viewed online at:

<http://www.dcregs.org/Gateway/ChapterHome.aspx?ChapterNumber=20-42>

AND

<http://www.dcregs.org/Gateway/ChapterHome.aspx?ChapterNumber=20-43>

District Law may be viewed online at:

[http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Haz.Waste%20Managment\\_law\\_1977.pdf](http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Haz.Waste%20Managment_law_1977.pdf)

EPA form 8700-12 can be found here:

<http://www.epa.gov/osw/inforesources/data/form8700/8700-12.pdf>

Department of Energy and the Environment website:

[www.doe.dc.gov](http://www.doe.dc.gov)

Questions can be answered by contacting DOEE Hazardous Waste Program at:  
(202) 535-2290

EPA Regulations may be viewed online at:

<http://www.epa.gov/lawsregs/search/40cfr.html>

EPA Assistance document for Managing Hazardous Waste for Small Businesses:

<http://www.epa.gov/osw/hazard/generation/sqg/handbook/k01005.pdf>