RCRA C HAZARDOUS WASTE

Environmental Compliance and Technical Assistance Session for Building Managers

Victoria North

Toxic Substances Division Hazardous Waste Branch victoria.north@dc.gov 202-535-1909



DISCLAIMER

- This information was prepared specifically for building managers and may not be appropriate for other facilities.
- This information is highly condensed and does <u>not</u> 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 in the presentation. 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.
- Tenants...

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 hazardous waste, universal waste, 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 #, fill out EPA Form 8700-12 and submit it, with the registration fee, to the DOEE Hazardous Waste Branch.
- 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 hazardous waste, universal waste, and used oil.
- 4. Train your staff to follow the rules.
- 5. Keep your paperwork to prove you did everything right!

WHAT IS REGULATED?

The Resource Conservation and Recovery Act (RCRA) regulates ALL waste. Hazardous waste is regulated under RCRA C.

Household hazardous wastes (HHW) are excluded from the hazardous waste regulations. Households include apartment buildings, hotels, motels, condos, co-ops, military barracks, dormitories, homeless shelters, and summer camps. Wastes covered by the household hazardous waste exclusion must satisfy two criteria:

- 1. The waste must be generated by individuals on the premise of a temporary or permanent residence, and
- 2. The waste stream must be composed primarily of materials found in wastes generated by consumers in their homes.

All other businesses are regulated: all non-profits, non-boarding schools, Federal government buildings, and State government buildings, etc.

Regulated Hazardous Wastes Are:

- 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 hazardous waste

WASTES WHICH ARE REGULATED UNDER THE RCRA C HAZARDOUS WASTE PROGRAM AND ARE COMMONLY FOUND AT OFFICE BUILDINGS

- Used oil
- Dry cleaning fluid
- Oil based paint and paint thinners (ignitable)
- Some concentrated cleaning products (corrosive)
- Most aerosol products (ignitable)
- Spoiled gasoline (ignitable)
- Car or forklift batteries
- Rechargeable batteries
- Fluorescent lamps
- Mercury thermostats

IS THIS 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 7 & 11).
 - Review a current MSDS or SDS for the product, the flash point and pH will be listed. Also, many SDSs 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.

IT MIGHT BE A HAZARDOUS WASTE IF...





- If it says 'danger'
- If it says 'flammable'
- If it says 'toxic'
- If it says 'poison'
- If it says 'warning'





- If it has a picture of a fire
- If it is an acid
- If it is a base
- If it is a solvent
- If it has a picture of a skull and cross bones

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

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

OTHER RCRA C REGULATED WASTES







- Universal waste is a subcategory of hazardous waste. You may choose to manage certain items as universal waste, or you may manage them as hazardous waste.
 - » Spent fluorescent lamps (intact only, broken or crushed lamps are usually hazardous waste)
 - » Some batteries
 - » Some pesticides
 - » Mercury thermostats
- Used oil is also regulated



HOW TO MANAGE YOUR HAZARDOUS WASTE ITEMS - SQGs ONLY

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

HOW TO MANAGE YOUR HAZARDOUS WASTE ITEMS - **SQGs ONLY** (continued)

- Identify it
 - Make a determination on all waste to identify all which require management under the regulation (see slide 9)
- Label it
 - With the contents if it is not waste
 - "Hazardous Waste" if it is hazardous waste
 - Universal waste allows several variants (see slides 14 and 15)
- Date it with the accumulation start date
- Close it keep it in a closed container
- 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 HAZARDOUS WASTE ITEMS - **CESQGs ONLY**

- Identify it
- Dispose of it (correctly)
- Train staff

WHAT DO CESQG AND SQG MEAN?

CESQG and SQG are generator statuses.

The statuses are based on the weight of hazardous waste your facility generates or creates each month.

Note: This is not how much you ship each month. It is how much you create each month. It is not an average.

WHAT DO CESQG AND SQG MEAN? (continued)

- CESQG stands for Conditionally Exempt Small Quantity Generator.
 - CESQGs are exempt from SOME of the regulations, not all of them.
- To qualify as a CESQG, your facility must generate less than 220 lbs of hazardous waste each month <u>and</u> less than 2.2 lbs of acute waste each month.
 - A drum of crushed lamps weighs about 600 lbs, so if your facility generates more than 1/3 drum per month, your facility is a SQG.
- CESQGs do not have a time limit on how long they can store hazardous waste. However, there is a limit of 2,200 lbs that can be stored onsite.

WHAT DO CESQG AND SQG MEAN? (continued)

- SQG stands for Small Quantity Generator.
- To qualify as a SQG, your facility must generate less than 2,200 lbs of hazardous waste each month and less than 2.2 lbs of acute waste each month.
- SQGs can usually only store hazardous waste onsite for up to 180 days, although there are special circumstances that allow storage for up to 270 days.

HOW TO MANAGE UNIVERSAL WASTE 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 universal waste 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 universal waste
- Remember that broken or crushed lamps are never universal waste; they are usually hazardous waste.





HOW TO MANAGE 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 universal waste 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 universal waste

HOW TO MANAGE YOUR USED OIL

- Label it "Used Oil"
- Close it Keep the container closed
- Contain it Use secondary containment
- Train staff
- You <u>cannot</u> burn used oil in the District
- Cooking oil is not regulated by DOEE. It <u>is</u> regulated by DOH.

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 the DOEE Hazardous Waste Branch
 - 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!
- The annual fee is due every March 1st.
- The annual self-certification of compliance is due every March 1st.

REMINDERS

As of October 23, 2015, the annual fee for conditionally exempt small quantity generators (CESQGs) will be \$250 unless the generator has less than 8 employees. For CESQGs with less than 8 employees, the fee is \$100.

This was added to the regulations to assist smaller businesses. In order to qualify for the \$100 CESQG fee, you must have less than 8 employees company wide.

EXAMPLES

WHAT NOT TO DO



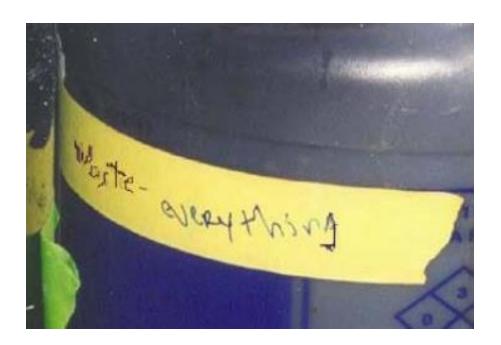




Universal waste lamps must be:

- » in boxes
- » which are closed
- » are labeled
- » and are dated

WHAT NOT TO DO



Labels must be meaningful!

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

SECONDARY CONTAINMENT FOR **SMALL** CONTAINERS OF USED OIL

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 OF USED OIL





These are suitable for use outdoors.

There are different styles available.

SECONDARY CONTAINMENT FOR LARGE CONTAINERS OF USED OIL (CONTUNUED)





These are <u>not</u> suitable for use outdoors.

A variety of configurations are available, pick one that works in your space.

SECONDARY CONTAINMENT FOR ABOVE GROUND STORAGE TANKS OF USED OIL





USED OIL LABEL EXAMPLES

Handmade and hand written labels are ok!









Don't forget that used oil must be in secondary containment, this example is <u>not</u> in secondary containment.

UNIVERSAL WASTE BATTERY LABEL EXAMPLES

Handmade and hand written labels are ok!







Remember to write the date on each label!

It may be easier to put small batteries in a container and label and date the container rather than labeling and dating each individual battery.

UNIVERSAL WASTE LAMP LABEL EXAMPLES





UNIVERSAL WASTE LAMPS FOR RECYCLING



Make sure the date is included

Handmade and hand written labels are ok!

Remember to write the date on each label!

HAZARDOUS WASTE LABEL EXAMPLES



Remember to write the date on the labels!

Handmade and hand written labels are ok!



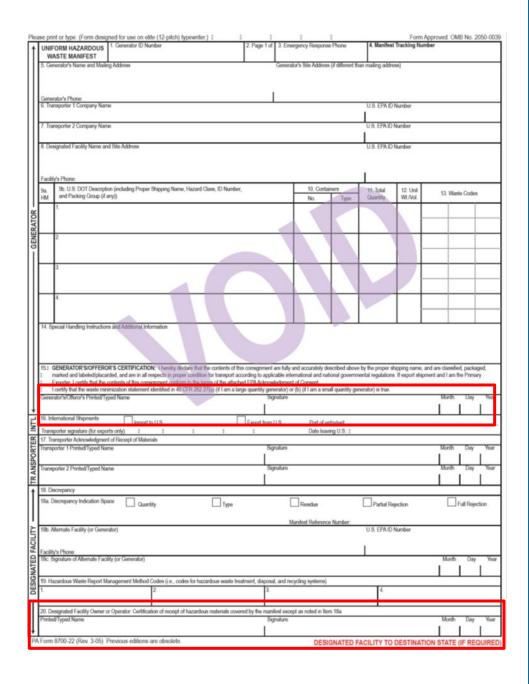
CONTAINERS OF USED OIL MUST BE CLOSED

A self-closing funnel may be used with above ground storage tanks or 55-gallon drums of <u>used oil</u> only.





This funnel is not self-closing



This is what a "Uniform Hazardous Waste Manifest" looks like

SQGs are required to use manifests, CESQGs are not.

You will get one copy when your hazardous waste items are picked up.

A final copy will be mailed to you when it arrives at the TSDF.

Both CESQGs and SQGs are responsible for the waste "from cradle to grave", the final manifest copy is your proof that the waste was delivered.

Manifests are a great tool for tracking waste "to the grave".

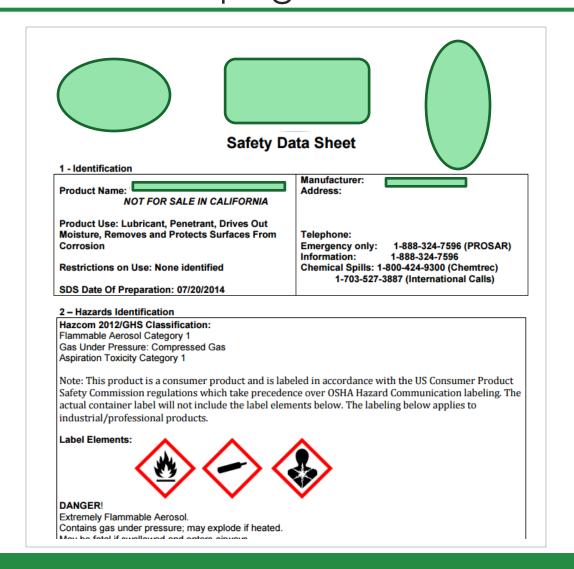
Universal waste items are not required to be transported with a manifest, a bill of lading or other document may be used.

This is an example of a "certificate of recycling" for universal waste items.

Note that you are responsible "from cradle to grave", and this example does not show the "grave" (where the items were delivered to).



WHERE IS THE INFO ON AN SDS? This is what the first page of an SDS looks like:



WHERE IS THE INFO ON AN SDS?

PH AND FLASHPOINT ARE ALWAYS CALLED OUT

9 – Physical and Chemical Properties				
Appearance:	Light amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%	
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F	
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)	
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F	
ivieiting/Freezing Point	Not established	Solubilities:	Insoluble in water	
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n- octanol/water:	Not established	
Flash Point:	122°F (49°C) Tag Closed Cup (concentrate)	Autoignition Temperature:	Not established	
Evaporation Rate:	Not established	Decomposition	Not established	

3	HAZARDS IDENTIFICATION		
3.1	Fire and Explosion		
	Flash point:	Tag open cup 44° Celsius (minimum)	
	Flammable/explosion limits:	(Low) 0.6% (High) 8.0%	
		(Solvent portion)	
	Extinguishing media:	CO ² , dry chemical, foam	

WHERE IS THE INFO ON AN SDS? CHECK THE 'DISPOSAL CONSIDERATIONS' FOR USEFUL INFORMATION

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. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

RESOURCES

Questions can be answered by contacting DOEE Hazardous Waste Branch at: (202) 671-3308

District Regulations and Law may be viewed online at: http://doee.dc.gov/node/14732

EPA Form 8700-12 can be found here:

https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Form%208700-12%20notification.pdf

Guide: How to Determine if Solvents That Can No Longer Be Used in the Workplace Are Hazardous Waste https://www.epa.gov/hwgenerators/guide-how-determine-if-solvents-can-no-longer-be-used-workplace-are-hazardous-waste

Department of Energy and the Environment website: www.doee.dc.gov

EPA Regulations may be viewed online at: https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-regulations#haz

EPA Assistance document for Managing Hazardous Waste for Small Businesses. This addresses only the Federal requirements: https://www.epa.gov/sites/production/files/2014-12/documents/k01005.pdf

Webinar about Federal RCRA C (hazardous waste) requirements only, hosted by WSPPN, and the State of Hawaii: http://wsppn.org/webinars/ http://wsppn.org/wp-content/uploads/2011/09/Haz-Waste-Webinar-March-20131.pdf

Link to ECHO, a national database listing all registered hazardous waste sites: http://echo.epa.gov/