

Hazardous Waste Labeling



Overview

In response to the United States Environmental Protection Agency (EPA) hazardous waste regulatory policy changes for academic laboratories, Weill Cornell Medicine is implementing the federal mandates **effective July 1, 2019**. Under the new rule, **all** hazardous waste containers must be marked with the words “Hazardous Waste” **and** indicate the hazard(s) associated with the waste contents. The new rules aim to help generators improve their management of hazardous waste, as well as protect the environment.

To comply with the updated regulation, Environmental Health and Safety (EHS) has designed new labels for hazardous waste and hazardous radioactive waste, which include OSHA’s Globally Harmonized System of Classification and Labeling of Chemicals (GHS) pictogram as hazard indicators. These new labels will replace the old yellow hazardous waste and hazardous radioactive waste labels; and standardize all hazardous waste labels that are to be used on every container of chemical waste. This EHS Update provides guidance on marking the new hazardous waste label using OSHA’s GHS hazard pictogram indicators.

The disposal procedures outlined in this update must be followed in conjunction with EHS Program Manual [5.2- Waste Disposal Procedures](#).

Applicability

All faculty, students, staff, visitors, and contractors at WCM who intend to dispose of chemicals must strictly adhere to the procedures identified in this update.

Responsibilities

Hazardous Waste Generators (generators) ensure that chemicals and empty containers are properly discharged, disposed of, recycled, and/or otherwise processed in compliance with this update and [WCM’s Waste Disposal Procedures](#). Generators must obtain all reference materials (e.g., Safety Data Sheets, EHS resources) to properly identify the hazard(s) of chemical wastes prior to disposing of chemicals and/or empty containers.

WCM Environmental Health and Safety (EHS) assists WCM personnel, providing technical assistance and guidance on hazardous waste management and disposal. EHS also ensures that the information provided to generators is concurrent with the laws and regulations governing the specific means of disposal.

Note: for specifics on hazardous waste disposal, please refer to the EHS Program Manual [5.2- Waste Disposal Procedures](#), or contact EHS.

Procedures

NEW HAZARDOUS WASTE LABEL

The new hazardous waste label, pictured on the right, must identify all hazardous waste generated at WCM.

Label components include:

- The words “Hazardous Waste”
- Contact name, contact number, principal investigator
- Hazard characteristics and GHS pictograms
- Each chemical constituent in the container

You may request printed labels from EHS or download printer-friendly labels from our [website](#).

HAZARDOUS WASTE					
Weill Cornell Medicine					
Contact Name:	Contact Number:				
Principal Investigator:					
Hazard Characteristics (check all that apply):					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other
Chemical Name(s):					
For assistance, contact Environmental Health and Safety 646-962-7233 ehs@med.cornell.edu https://ehs.weill.cornell.edu					



Environmental Health and Safety

TEL 646-962-7233 WEB weill.cornell.edu/ehs EMAIL ehs@med.cornell.edu

Weill Cornell Medicine | 402 East 67th Street, Room LA-0020 | New York, NY 10065



GLOBALLY HARMONIZED SYSTEM (GHS) CHEMICAL HAZARD IDENTIFICATION

The new hazardous waste labels incorporate the Global Harmonized System (GHS) pictograms indicated with red border below.

The icons on the label consist of:

- Flame pictogram for flammable liquids and solids
- Corrosion pictogram for corrosive substances
- Skull & crossbones pictogram for toxic substances
- Exploding bomb pictogram for unstable and/or reactive chemicals
- Health hazard pictogram for non-acutely hazardous substances

Health Hazard Carcinogens, respiratory sensitisers, reproductive toxicity, target organ toxicity, germ cell mutagens 	Flame Flammable gases, liquids, & solids; self-reactives; pyrophorics; 	Exclamation Mark Irritant, dermal sensitiser, acute toxicity (harmful) 
Gas Cylinder Compressed gases; liquefied gases; dissolved gases 	Corrosion Skin corrosion; serious eye damage 	Exploding Bomb Explosives, self-reactives, organic peroxides 
Flame Over Circle Oxidisers gases, liquids and solids 	Environment Aquatic toxicity 	Skull & Crossbones Acute toxicity (severe) 

HAZARDOUS WASTE CONTAINER LABELING REQUIREMENTS

When labeling chemical waste, please follow these guidelines, shown on the sample label below.

- The hazardous waste label must be attached to the container when it is initially used for waste (i.e., when the first drop is added).
- The individual generating the waste must complete the label; listing his/her contact information, as well as principal investigator.
- Wastes that are commingled must list all components in the contents section, including water and all trace materials. Approximate percentages (%) should be provided if possible for each component of the mixture.
- All components must be listed as soon as they are added to the container. The full name of the chemical must be listed (e.g., Waste Oil, Ethanol, Acetone, etc.). The appropriate box(es) must be checked for the hazard(s) associated with each component present in the waste container. To determine hazards, refer to the original reagent container labels and/or the SDS.
- Note: For more information, please refer to the EHS Program Manual [4.2- Chemical Hazard Communication](#).*
- All information on the label must be legible and accurate. The information on the label is essential to categorizing and packing the waste for final disposal.
- Once the container is full, a [Chemical Collection Request](#) should be placed on the EHS website to ensure prompt pickup. Waste pickups occur every Tuesday and Thursday.

HAZARDOUS WASTE	
Weill Cornell Medicine	
Contact Name: Jack Smith	Contact Number: 123-456-7891
Principal Investigator: Dr. Jane Doe	
Hazard Characteristics (check all that apply):	
<input checked="" type="checkbox"/> 	<input checked="" type="checkbox"/> 
<input type="checkbox"/> 	<input type="checkbox"/> 
<input type="checkbox"/> 	<input type="checkbox"/> 
Chemical Name(s): Methanol (30%), Acetic Acid (25%), Acetonitrile (25%), Water (20%)	
SAMPLE LABEL	
For assistance, contact Environmental Health and Safety 646-962-7233 ehs@med.cornell.edu https://ehs.weill.cornell.edu	





NEW HAZARDOUS RADIOACTIVE WASTE LABEL (DOUBLE SIDED)

The new hazardous radioactive waste label below, must identify all hazardous waste containing radioactive isotopes generated at WCM.

HAZARDOUS WASTE RADIOACTIVE MATERIALS		
Authorized User:	Dr. Jane Doe	
Contact Number:	123-476-7891	
Contact Name:	Jack Smith	
Hazard Characteristics (check all that apply):		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chemical Constituents, Amount (%) and pH:		
Methanol (30%), Folic Acid (5%), Sodium Acetate Buffer (20%), Water (40%) pH 6		
Isotope(s)	Estimated Activity (µCi)	Date of Estimated Activity
³ H	5.0 µCi	06/04/2019
¹⁴ C	2.0 µCi	06/04/2019
SAMPLE LABEL		
Notes: - Separate isotopes with half-life <90 days. - Do not use abbreviations or formulas. - Chemical constituents must total 100%.		
Waste Type / Physical Form: <input type="checkbox"/> Dry Activated Waste (DAW) - Solid Waste <input type="checkbox"/> Radioactive Liquid (Aqueous) Waste (Non-Hazardous Chemical + Radioactive Material) <input type="checkbox"/> Liquid Scintillation Vials (LSV) <input checked="" type="checkbox"/> Radioactive Mixed Waste (Hazardous Material + Radioactive Material) <input type="checkbox"/> Radioactive Biohazardous Waste <input type="checkbox"/> Animal Carcass		
Container Size: <input type="checkbox"/> 1 Gal <input checked="" type="checkbox"/> 5 Gal <input type="checkbox"/> 30 Gal <input type="checkbox"/> 55 Gal <input type="checkbox"/> Other _____ No. [] Weill Cornell Medicine Environmental Health & Safety (646) 962-7233		
DECAY IN STORAGE RECORD (OVER)		

RADIOACTIVE WASTE DECAY IN STORAGE RECORD	
Radionuclides with half-life <90 days	
This record must be retained for 3 years	
Date Container Sealed:	06/04/2019
Disposal Date:	06/05/2019
Background Survey:	200 CPM
Surface Survey:	200 CPM
Survey Instrument	
Model:	3 Ludlum
Serial Number:	67075
Your Name:	Jack Smith
DECAY IN STORAGE INSTRUCTIONS	
1. Seal liner or container lid with tape. 2. Record date container was sealed above. 3. Move container to storage location. 4. Store container for 10 half-lives. 5. Record all information listed above before disposal.	
For more information, please visit the EHS website: https://ehs.weill.cornell.edu/waste-disposal	
SAMPLE LABEL	

The front of the label includes:

- The words "Hazardous Waste"
- Authorized User, Contact number, Contact name
- Hazard characteristics and GHS pictograms
- Each chemical constituent, approximate percentage, and pH
- Isotopes, Estimated activity, and Date of estimated activity
- Waste Type/ Physical Form
- Container Size

When completing the front of this label, please follow the Hazardous Waste Container Labeling requirements in the preceding section and refer to the sample above for additional isotope information.

The back of the label includes:

- Date Container Sealed
- Disposal Date
- Background Survey
- Surface Survey
- Information of Survey Instrument

When completing the back of this label, please follow the guidelines detailed in EHS Program Manual [5.2-Waste Disposal Procedures](#).



References

- **USEPA Hazardous Waste Generator Improvements Rule:** <https://www.gpo.gov/fdsys/pkg/FR-2016-11-28/pdf/2016-27429.pdf>
- [40 CFR 260](#) & [49 CFR Part 172](#)
- **OSHA Hazard Communication:** <https://www.osha.gov/dsg/hazcom>
- **EHS Manual 5.2 – Waste Disposal Procedures:** https://ehs.weill.cornell.edu/sites/default/files/5.2wastedisposal_0.pdf
- **EHS Hazardous Waste Labels:** <https://ehs.weill.cornell.edu/forms-resources/labels-lists-signs>