

Michigan Technological University

TECHNICAL GUIDE: The Four L's of Collecting Hazardous Waste

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SCOPE:

These rules apply to all listed or characteristic hazardous wastes generated on Michigan Tech properties during Michigan Tech's maintenance, research, teaching, or outreach activities.

REGULATIONS:

Michigan Tech's [Hazardous Waste Collection and Disposal Procedures](#)

PROCEDURES:

Follow these guidelines for managing hazardous wastes in a **Satellite Accumulation Area (SAA)** (in most cases a laboratory or shop) to comply with the Michigan Department of Environment, Great Lakes, and Energy (EGLE), formerly the Department of Environmental Quality (DEQ), rules and regulations.

The Four L's of Collecting Hazardous Waste - Labels, Leaks, Lids, and Location

Labels - A Container of [Listed or Characteristic Hazardous Waste](#) has very specific EGLE labeling requirements while in the SAA (laboratory or shop). When the first drop of waste is collected, the container MUST be labeled with:

- The words "Hazardous Waste"
AND
- The chemical contents (spelled out) **OR** the EPA waste codes*
AND
- (A new requirement) An indication of the hazards in the container.**

*Adding the EPA codes is recommended since it shows we've done a waste characterization (a waste characterization is required at the TIME OF GENERATION with documentation kept on file for 3 years).

**The hazard(s) can be described using words (such as ignitable, oxidizer, corrosive, toxic, etc), or using [GHS pictogram\(s\)](#), [DOT label\(s\)](#), or a [NFPA 704 label](#).

Fillable [large](#) and [small](#) labels are available at ehs.mtu.edu/forms-procedures/hazardous-waste.

Leaks - Hazardous wastes must be collected in compatible containers and maintained in good condition. Containers picked up for waste collection will NOT be returned.

- Leaking containers must be replaced.
- Store waste containers in secondary spill containment.

Lids - Accumulation containers must be closed except to add, remove, or consolidate waste.

- Containers picked up for waste collection must have leakproof lids.
- Vented caps for 4L solvent bottles containing wastes that might off-gas are available at University Chemical Stores (see [Safety, Bottle cap, PSI vented](#))
- DO NOT leave funnels sitting in an open waste carboy or bottle. A funnel that screws onto and seals the opening with a lid that can be securely closed is acceptable, as long as it is only open when waste is being added.
- Tubing that feeds wastes into a container directly from the equipment needs to be sealed (with provisions made for pressure relief).

Location - EGLE states "It is permissible to accumulate ... container(s) at the point of generation as long as the operator has control of the processes generating the waste."

- The waste container needs to stay near the waste source; it may NOT be stored in another room.
- There is no time limit for accumulation as long as the waste is being regularly added to the container. Regularly review whether it is "actively" being used or if it should be removed.
- [Request a pickup](#) when the lab has accumulated 5 gallons of a specific waste unless you've received prior permission to accumulate more than one 5-gallon container at a time. If 55-gallons of hazardous waste are accumulated, it must be removed within 3 calendar days.

COMPLIANCE:

- Department of Environment, Great Lakes, and Energy; [Hazardous Waste and Liquid Industrial By-Products](#).
- Michigan Guide to [Environmental, Health, and Safety Regulations](#).

FOR ADDITIONAL ASSISTANCE:

For questions about waste characterization, labeling, or pick up options contact wastepickup-l@mtu.edu or lab-operations-l@mtu.edu.

REFERENCES/SUPPORTING DOCUMENTATION:

- Part 111 - Department of Environment, Great Lakes, and Energy; Materials Management Division; [Hazardous Waste Management](#).