Ira C. Darling Center for Research, Teaching and Service



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LABORATORY WASTE PROCEDURES & HAZARDOUS WASTE GENERATOR TRAINING OUTLINE

This document presents general guidelines for laboratory waste at the DMC. Contact DMC staff for additional information.

CHEMICAL WASTES- Chemical wastes shall <u>never</u> be disposed of into the DMC plumbing/ septic system or onto the ground or surrounding property. Numerous federal, state, and local regulations govern the generation and disposal of chemical wastes; as such, any and all wastes containing chemicals, regardless of concentration or perceived hazards, must be handled by the DMC Hazardous Waste Manager. <u>Prior</u> to producing any chemical waste, you must notify the DMC Hazardous Waste Manager for waste determination and/or Hazardous Waste Training.

CHEMICAL CONTAINERS: Some chemical containers are considered chemical wastes, even when empty. Contact DMC Hazardous Waste Manager prior to disposing of empty chemical containers.

BIOLOGICAL WASTES- Wastes produced in designated biohazardous or quarantined laboratories must be disposed of according to the regulations for biohazardous wastes. Contact DMC Haz-Waste Manager.

Biological wastes which are not biohazardous (i.e. dead sea critters or parts) <u>may not</u> be discarded into general area trash cans or the dumpster. Contact DMC staff for assistance with the disposal of biological wastes and marine organisms.

SEAWATER WASTES- Wastes containing large volumes of seawater may not be suitable for disposal into DMC plumbing/ septic or Flowing Seawater systems. Contact DMC staff for assistance with the disposal of seawater wastes.

RADIOACTIVE WASTES- Radioactive wastes must be handled by the DMC Hazardous Waste Manager.

UNIVERSAL WASTES- Regulated Universal Wastes must be handled by DMC maintenance personnel, and/or DMC Hazardous Waste Manager. Regulated Universal Wastes include:

Lamps/bulbs (fluorescent, HID) Monitors (TV, Computer)

Metal-acid batteries (Pb, NiMH, NiCD) Mercury containing devices (switches, thermometers)

*E-Waste- although not regulated as Universal waste, Electronic or E-Wastes are collected and disposed of by DMC maintenance personnel. E-wastes include most electronic devices and all other equipment containing circuit boards.

SHARPS/ GLASSWARE- Sharps may be governed under the regulations for Biohazardous Wastes, or simply classified as dangerous due to their ability to cause injury (i.e. broken glassware, plastic and glass pipets, razor blades, etc.). To protect trash collectors, non-biohazardous sharps must be disposed of in sealed, puncture resistant containers.

RECYCLABLE MATERIALS- Glass, cardboard, and paper are all recyclable materials at the DMC. Large quantities of these items must be separated prior to disposal. Contact DMC staff for additional information.

OIL- Certain types of oil can be recycled at the DMC, while some is considered chemical waste. Contact DMC Hazardous Waste Manager for more information.

TRASH CANS AND DUMPSTER- In general, all other wastes not mentioned here can be disposed of in the general trash; however, some items may not be suitable for disposal in this manner. All general trash must be bagged prior to entering the dumpster. Items which may cause tearing or ripping of small trash bags should be placed in appropriate containers prior to bagging. Large or heavy items such as wood, metal, office/laboratory equipment, etc. should be collected for transport to the dump. Contact DMC staff for additional information.

HAZARDOUS WASTE GENERATOR TRAINING OUTLINE

Many of the wastes listed on the previous page may be regulated as Hazardous Wastes. Documented training is required for those individuals generating and/or accumulating Hazardous Wastes.

All generators of Hazardous Waste must comply with the Environmental Protection Agency and State of Maine rules that govern Hazardous Waste management. Each laboratory or work area is considered to be a Satellite Accumulation Area (SAA) if it accumulates Hazardous Waste.

Generation of Hazardous Waste

- Follow all SEM guidelines, policies, and procedures regarding SAA-Hazardous Wastes (http://sem.umaine.edu/files/2014/10/Satellite-Accumulation-Area-Procedure.pdf)
- Drain disposal or evaporation of Hazardous Wastes is forbidden.
- Wear appropriate personal protective equipment (PPE); at minimum wear chemically resistant gloves, eye protection, long pants, and closed-toed shoes.

Management of Hazardous Waste Containers

- Package Hazardous Waste in clean, sturdy, compatible, non-leaking containers.
 NOTE: Food/beverage containers are not acceptable for packaging chemicals or Hazardous Waste.
- Use the smallest container that meets the need.
- Only one container is allowed for each type of waste.
- Keep all containers tightly closed.
- Provide secondary containment capable of containing 110% of the waste (in the largest container).
- Attach a Hazardous Waste label to each container.
- Complete entire label, include specific information regarding chemical constituents and concentrations, and document the date waste collection begins
- Do not store waste containers in fume hoods.

Management of Satellite Accumulation Area (SAA)

- Keep area clean and organized.
- Document weekly* SAA inspections (Note: weekly instead of daily SAA inspections as of 2016).
- Notify DMC Hazardous Waste Manager:
 - When you begin generating Hazardous Waste.
 - When Hazardous Waste containers are full.
 - o When you stop generating Hazardous Waste.
 - If any spills occur.

Authorized Hazardous Waste Generator

The individual named here has completed the required training for the generation of Hazardous Wastes and maintenance of a Satellite Accumulation Area (SAA) at the Darling Marine Center.