



## DIVISION OF MATHEMATICS, SCIENCE & ENGINEERING

### Laboratory Glass and Used Container Policy

December 2014

#### **A. PURPOSE**

The purpose of the Laboratory Glass and Used Container policy is to manage glass, hard plastics, and used containers in the teaching and research laboratories and laboratory preparation areas. In particular, containers and discarded laboratory glassware (broken or not) must be managed to prevent injury and environmental contamination from improper disposal.

1. This policy does not include personal glass, aluminum, or plastic food and beverage containers; these materials are restricted in laboratories, and are only to be used in clean areas of the preparation area and are assumed to be appropriately recycled.

#### **B. SCOPE**

1. This policy applies to all Departments within the Science/Mathematics (SM) Building that use any and all containers, laboratory glassware, and hard plastics, intact as well as broken, that may or may not have contained hazardous substances.

#### **C. RESPONSIBILITIES**

1. Deans, Directors, and Department Heads are responsible for:
  - Ensuring departmental compliance with all the procedures outlined in this policy.
2. Supervisors, faculty, and staff responsibilities include:
  - Knowing the provisions of the Laboratory Glass/Used Container Policy.
  - Ensuring student compliance with this program in their work area(s).
  - Arranging for immediate emergency response, if necessary, for injuries.
  - Reporting accidents or unsafe conditions to the Department Head or Dean.
3. Student Aides/Students are required to:
  - Know and understand the provisions of the Laboratory Glass/Used Container Policy.
  - Report accidents or unsafe conditions to the supervisor, faculty, or staff member.
  - Wear Personal Protective Equipment and utilize engineering controls when recommended and provided.

#### **D. PROCEDURES**

1. Broken Laboratory Glassware
  - Place all broken, decontaminated (clean) glass into a specially-marked, rigid container designed for this purpose (see Glass Disposal Containers below). If the broken glass is contaminated, then the Hazardous Waste Procedures must be followed. The container must be lined with a leak-resistant liner (e.g. polyethylene or polypropylene). The container must be clearly marked "BROKEN GLASS."
2. Broken or used, hard plastic materials
  - Same as glassware (above).

### 3. Used Containers

- Used Containers are defined as any empty container that previously contained a chemical, food (*lab-use food*), animal specimen, or petroleum product. Containers include plastic and glass bottles, metal and plastic buckets, and plastic bags. Containers are considered contaminated until they are purposely decontaminated. Empty decontaminated containers must be discarded or can only be used to collect hazardous waste. Containers should not be repurposed for any other uses.
- Remove or empty all materials from the container by using the methods commonly employed to empty the container (pumping, pouring, etc.).
- Empty containers that held aqueous liquids or solid materials (i.e. acids or bases) must be rinsed thoroughly. If the container previously held a hazardous chemical, the rinse solution must be collected as hazardous waste.
- Empty containers that held volatile liquids are considered hazardous waste. You may not dispose of a volatile liquid by evaporation.
- Containers that are contaminated with hazardous residues that cannot be removed must be disposed of as hazardous waste.
- Empty compressed gas cylinders should be returned to the vendor, or picked up and properly disposed of by a hazmat company.
- Deface empty container by placing an "X" across the label or by removing the label.
- Secure lids on all containers before placing them into the appropriate disposal receptacle.
- Place all glass containers, intact as well as broken, into a specially-marked, rigid container (see below). The container must be lined with a leak-resistant liner (e.g. polyethylene or polypropylene).
- Unbroken plastic and metal containers, not contaminated with hazardous waste residues, can be discarded directly into the general trash.
- Always discard glass, plastic, and metal containers originating in the laboratories and laboratory preparation areas as described above. Do not discard laboratory glass into a regular recycling container.

### **E. APPROVED GLASS DISPOSAL CONTAINERS**

1. Table Model 8" x 8" x 10", with cover; Fisher Catalogue No. 120097B or similar
2. Floor Model 12" x 12" x 27", with cover; Fisher Catalogue No. 120097A or similar

### **F. REVIEW AND UPDATE**

1. This Laboratory Glass and Used Container Policy will be reviewed and updated annually.