



Environmental Health & Safety

Ordering and Receipt of Hazardous Materials including all CEMS Inventoried Substances

1. Purpose and Applicability

- 1.1. This document provides the procedures required for the ordering and receipt of hazardous materials and other substances tracked through the CEMS (*Chemical Environmental Management System*) inventory database. Procedures for using a Purchase Order will be described. Hazardous Materials should be handled by trained personnel and the majority of these materials will require bar coding. It is important that the inventoried materials be entered into the CEMS database correctly to include storage areas, hazards and the responsible owner, especially for safety and emergency response reasons. (This information also helps to maintain regulatory compliance to the US EPA's Emergency Planning and Community Right to Know Act, 40 CFR Part 355 and OSHA's Hazard Communication Regulations 29 CFR 1910.1200).
- 1.2. Various procedures will be used when ordering laboratory items, including variances in the "Ship To" address. See "*Figure 1: CEMS Inventoried Substance List*" for product examples.
 - 1.2.1. Most substances will need to be recorded into the CEMS inventory database, and thus, shipped to Environmental Health & Safety. A trained staff member will receive and bar code the primary container, enter the material onto the CEMS database, and then deliver it to the appropriate storage location as noted on the packing slip. (See section 4.1)
 - 1.2.2. Other hazardous materials may not require bar coding and should be shipped directly to the laboratory. (See section 4.2)
 - 1.2.3. Hazardous materials purchased directly from a store must be bar coded under the direction of the responsible owner.

2. Definitions

- 2.1. **Carrier** – Transports materials from a vendor to the University (e.g. UPS, FedEx, DHL)
- 2.2. **CEMS** – Web-based Inventory Database located at ([place location of UMD site here](#))
- 2.3. **Laboratory** – Any room operated by the University of Massachusetts that will store hazardous materials and/or non-hazardous CEMS inventoried substances. Examples include the traditional science laboratories as well as art studios, film developing rooms, theater set design rooms, etc.
- 2.4. **Environmental Health & Safety** – Bar codes primary containers, enters data into CEMS, and delivers package to storage location. Location: 203 New Research 285 Old Westport Road, N. Dartmouth, MA 02747
- 2.5. **Ordering Personnel** – The individual that places the order via Purchase Order
- 2.6. **Responsible Owner** – The individual ultimately responsible for the hazardous material. This in most cases will be the PI.
- 2.7. **Storage Location** – The building and room number where the substance will be stored

2.8. **Vendor** – The Company where the order is placed. In some cases the vendor will act as a distributor and will have a package shipped directly from the manufacturer.

2.9. **Receiving** – University Receiving Department managed by the Purchasing Department

Figure 1: CEMS Inventoried Substance List

<p>Shipped to 203 New Research and CEMS Inventoried (bar-coded by EH&S)</p>	<p>Shipped to Responsible Owner and CEMS Inventoried (bar-coded by owner)</p>	<p>Shipped to Responsible Owner, NOT in CEMS (not bar-coded)</p>
<p>Flammable/Combustible Liquids (e.g. alcohols, solvents, lubricants, paint thinner, aerosols, paint)</p> <p>Flammable Solids (e.g. magnesium, sodium, organo metallics)</p> <p>Oxidizers (e.g. concentrated mineral acids, bromates, chlorates, permanganates)</p> <p>Organic Peroxides - (e.g.. hydrogen peroxide >8%, benzoyl peroxide)</p> <p>Poisons – not included in the above categories (i.e. biological toxins, dyes, glazes, paints, adhesives, and specimen solutions)</p> <p>Corrosives – (e.g. acids or bases which are corrosive to the skin and other materials having a pH less than 5.5 or greater than 11.0)</p> <p>Controlled substances – (e.g. Drug Enforcement Agency “DEA” listed)</p> <p>Growth Media</p> <p>Salts</p> <p>Non-hazardous Buffers</p> <p>Non-hazardous substances tracked for inventory purposes</p>	<p>Compressed Gases – including liquefied gases</p> <p>Chemical Packages weighing greater than 60 pounds</p> <p>Hazardous Retail Items bought directly from a store – used as an integral part of the function of the laboratory (e.g. paint thinners, paints, ceramic glazes)</p>	<p>Retail Products – used for routine household-like activities (e.g. cleansers, dish soap)</p> <p>Materials expended within 1 to 2 days – working solutions</p> <p>Molecular Biological Reagents and Enzyme preparations</p> <p>Biological Materials to include biohazardous materials – (e.g. plant or animal tissue, reproducing biological organisms, bacteria, viruses, fungi, and yeast)</p> <p>Radioactive Materials – ordered via Purchase Order and <u>shipped to Draper Hall</u></p> <p>Materials stored and shipped on dry ice</p>

3. Roles and Responsibilities

- 3.1 **Environmental Health & Safety** –Receives the package, barcodes the primary containers, repacks in original box, and distributes the inventoried substances in a timely fashion (same day, or next business day if received after 3PM) to the appropriate location.
- 3.2 **Ordering Personnel** – Must provide the vendor the appropriate information for the proper ordering, shipment, and final storage location. The Ordering Personnel will include in the Comment Panel (Purchase Order) the Responsible Owner (PI), Storage Location (building and room number), and Researcher.
- 3.3 **Responsible Owner** – Responsible for the receipt of the hazardous material into the storage location. Signatures of Responsible Owners or authorized personnel will be required. Bar codes new containers not shipped through Environmental Health & Safety

4. Procedures

4.1. Hazardous Materials Shipped to Environmental Health & Safety 203 New Research

- 4.1.1. Order hazardous materials including all CEMS inventoried substances via normal Purchase Order.
- 4.1.2. Only CEMS inventoried substances shall be placed on this order. Other laboratory supplies must be placed on a different order and should be delivered directly to the using department via Distribution Services.
- 4.1.3. Exception: Hazardous Materials, not bar coded (see Column 3 in Figure 1) may be delivered to LGRT 125 for tracking purposes
- 4.1.4. Direct the vendor to ship the Substances to the following address:
 - University of Massachusetts**
 - 285 Old Westport Rd**
 - North Dartmouth, MA 02747-2300**
 - ATTN: Responsible Owner(PI), Storage Location, Researcher** “See 4.1.5”
- 4.1.5. Environmental Health & Safety requires the following information to appear on the packing slip for delivery and bar coding purposes:

*Name of **Responsible Owner** (Usually the PI)*
Storage Location (Building and Room Number)
***Researcher, grad student, post doc** (if space allows)*

Environmental Health & Safety must have the Attention Line information in order to deliver the package to the correct laboratory and to enter the chemicals into the CEMS inventory database

- 4.1.6. In some cases the responsible owner may wish the CEMS inventoried substance be delivered to a destination other than the final storage location. Please list this destination in the "Justification/Comments" box on a Purchase Order and where appropriate when placing an order through a Procard. In all cases the storage location must be listed.
- 4.1.7. Environmental Health & Safety
 - 4.1.7.1. EH&S will receive, bar code and enter the substances into the CEMS database.
 - 4.1.7.2. They will repack the primary container into the original shipping package and place a distribution label on the outer package listing:
 - The Storage Location
 - The Names on the packing slip
 - The Date the package was received by EH&S
 - # of Containers in the Package
 - Any Discrepancies or problems with the package
 - Any Failed Deliveries
 - 4.1.7.3. EH&S will deliver the package to the storage location or a designated delivery location. EH&S will insure same day delivery if the package is received before 3PM. EH&S will make at least one morning and one afternoon delivery per day.
 - 4.1.7.4. If no one is available to accept the shipment it will be returned to 203 New Research and a delivery notice listing the date and time will be left on the door. Contact EH&S to arrange for pick-up or delivery.

4.2. Hazardous Materials Shipped Directly to the Departments

- 4.2.1. Order the hazardous material via normal Purchase Order.
- 4.2.2. Other laboratory supplies may be placed on the same order.
- 4.2.3. The "Ship To" address will list the preferred destination of the responsible owner, however a person trained in the receipt of hazardous materials should accept the package.
- 4.2.4. The Responsible Owner or his/he designee is responsible for bar coding CEMS inventoried substances.
 - 4.2.4.1. Bar Code and write the substance onto the "Chemical Inventory Receipt Log" (EHS-CEMS-FRM-01), which will be picked up by Environmental Health & Safety or enter the substance directly into the CEMS database <Add Inventory>.
 - 4.2.4.2. Chemicals that weigh over 60 pounds.
 - 4.2.4.3. Hazardous Chemicals bought directly from a store to be used as an integral part of the laboratory.
 - 4.2.4.4. Hazardous substances that are integral to a process and remain in the same location may be bar coded just once at the storage location. Examples include fixed tanks, photographic fixers, ceramic clays, gas cylinders etc. If a different chemical is substituted or there is a significant change in the properties of the chemical a new bar code must be used and the old bar code shall be placed onto the "Chemical Inventory Disposal Log" (EHS-CEMS-FRM-01).

