

<b>Ordering and Receipt of Hazardous Materials including all CEMS Inventoried Substances</b>	<b>EHS-CEMS-SOP.01 rev.08</b>
	<b>Effective Date: May 18, 2006</b>
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## 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 Procard or 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 "2.8 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 CEMS. 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. Chemical purchases made through the Fisher Stockroom will be bar coded at the time of purchase.
  - 1.2.3. Other hazardous materials may not require bar coding and should be shipped directly to the laboratory. (See section 4.2)
  - 1.2.4. Hazardous materials purchased directly from a store must be bar coded under the direction of the responsible owner.
  - 1.2.5. Radioactive materials have additional procedures. (See Section 4.3)

## 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 [www.umass.cems.sr.unh.edu](http://www.umass.cems.sr.unh.edu)
- 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. **CEMS team** – Bar codes primary containers, enters data into CEMS, and delivers package to storage location. Location: UMass Room 179 Lederle Graduate Research Tower, 710 North Pleasant Street, Amherst, MA 01003 (577-3633)
- 2.5. **Ordering Personnel** – The individual that places the order via Procard or 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. **CEMS Inventoried Substance List**

<b>Shipped to LGRT 179 and CEMS Inventoried</b> (bar-coded by CEMS team)	<b>Shipped to Responsible Owner and CEMS Inventoried [4.2]</b> (bar-coded by CEMS team)	<b>Shipped to LGRT 179, NOT CEMS Inventoried</b> (not bar-coded) <b>Shipped to LGRT 179</b>
<p><b>Flammable/Combustible Liquids</b> (e.g. alcohols, solvents, lubricants, paint thinner, aerosols, paint)</p> <p><b>Flammable Solids</b> (e.g. magnesium, sodium, organic metallics)</p> <p><b>Oxidizers</b> (e.g. concentrated mineral acids, bromates, chlorates, permanganates)</p> <p><b>Organic Peroxides</b> - (e.g.. hydrogen peroxide &gt;8%, benzoyl peroxide)</p> <p><b>Poisons</b> – not included in the above categories (i.e. biological toxins, dyes, glazes, paints, adhesives, and specimen solutions)</p> <p><b>Corrosives</b> – (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><b>Controlled substances</b> – (e.g. Drug Enforcement Agency “DEA” listed)</p> <p><b>Growth Media</b></p> <p><b>Salts</b></p> <p><b>Non-hazardous Buffers</b></p> <p><b>Non-hazardous substances tracked for inventory purposes</b></p>	<p><b>Compressed Gases</b> – including liquefied gases</p> <p>Chemical Packages weighing greater than <b>60 pounds</b></p> <p><b>Hazardous Retail Items bought directly from a store</b> – used as an integral part of the function of the laboratory (e.g. paint thinners, paints, ceramic glazes)</p>	<p>Materials expended within 1 to 2 days – <b>working solutions</b></p> <p><b>Molecular Biological Reagents and Enzyme preparations</b></p> <p><b>Biological Materials</b> to include biohazardous materials – (e.g. plant or animal tissue, reproducing biological organisms, bacteria, viruses, fungi, and yeast)</p> <p><b>Radioactive Materials</b> – ordered via Purchase Order and <u>shipped to LGRT 179</u></p> <p>Materials stored and shipped on <b>dry ice</b></p> <p><b>Shipped to Responsible Owner , NOT in CEMS</b></p> <p><b>Retail Products</b> – used for routine household-like activities (e.g. cleansers, dish soap)</p>

### 3. Roles and Responsibilities

- 3.1 **CEMS team** –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(3:30pm)) 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 Attention Line (Procard) or 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 CEMS.
- 3.4 **Vendor** – Properly packages the hazardous materials and provides the carrier with the proper shipping address, in most cases LGRT179. The package must include an invoice or packing list, which will list the name and quantity of hazardous material, the responsible owner, storage location and the UMass delivery destination (if delivery will be made to a different location other than the storage location).

### 4. Procedures

#### 4.1. Hazardous Materials Shipped to CEMS, LGRT 179

- 4.1.1. Order hazardous materials including all CEMS inventoried substances via normal Purchase Order or Bankcard procedures. Blanket POs are no longer allowed.
- 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 2.9) need to be delivered to LGRT 179 for tracking purposes
- 4.1.4. Direct the vendor to ship the Substances to the following address:
  - 4.1.5. CEMS requires the following information to appear on the packing slip for delivery and bar coding purposes:

**University of Massachusetts**  
**Room 179 Lederle Graduate Research Tower OR LGRT 179**  
**710 North Pleasant Street**  
**Amherst, MA 01003**  
**ATTN: Responsible Owner(PI), Storage Location, Researcher “See 4.1.5”**

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

**CEMS 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. **Bankcard**

Ordering personnel shall supply the vendor with the Lederle Graduate Research Tower 179 address and the Attn line information and request that both appear on the shipping label and packing slip. Abbreviate building names if there are space constraints.

Examples 1

**University of Massachusetts**  
**Room 179 Lederle Graduate Research Tower**  
**710 North Pleasant Street**  
**Amherst, MA 01003**  
**Attn: Bill Smith, Morrill IV N 451, Lee**

Example 2

**UMass-Amherst**  
**LGRT 179**  
**710 N. Pleasant St**  
**Amherst, MA 01003**  
**Attn: DV, LGRT 1503, Jung**

4.1.7. **Purchase Orders (Standard or Marketplace)**

4.1.7.1. Shipping Address: Change the 'Ship To Default' in the [1. Define Requisition] section to "CHEMS" this will auto-populate the above shipping address. Change the 'Accounting default location' to your laboratory location. Only one shipping destination and location per PO is allowed. (Use the 'Justification/Comment' box for multiple storage locations)

4.1.7.2. **Attention:** List the "Responsible Owner (PI), Storage Location, Researcher" in the 'Justification/Comments' Box located in the [3. Review and Submit] section (Remember to click the <send to vendor> checkbox).

Note: The attn box, located in [1. Define Requisition], defaults from your requester ID and does not print on the PO.

4.1.7.3. **Category Code** (Account Code) Use 739630 – Chemicals, except radioactive chemicals.

4.1.7.4. Contact the Purchasing Dept for "PeopleSoft" access and specific procedures

4.1.8. 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 Bankcard. In all cases the storage location must be listed.

4.1.9. CEMS

4.1.9.1. CEMS will receive bar code and enter the substances into the CEMS database.

4.1.9.2. 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 LHSS  
# of Containers in the Package  
Any Discrepancies or problems with the package  
Any Failed Deliveries

4.1.9.3. CEMS will deliver the package to the storage location or a designated delivery location. CEMS will ensure same day delivery if the package is received before 3:30PM. CEMS will make at least one morning and one afternoon delivery per day (more if allowed).

4.1.9.4. If no one is available to accept the shipment it will be returned to LGRT 179 and a delivery notice listing the date and time will be left on the door. Contact CEMS to arrange for pick-up or delivery. (577-3633)

## 4.2. Hazardous Materials Shipped Directly to the Departments

- 4.2.1. Order the hazardous material via normal Purchase Order or Bankcard procedures.
- 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 to call CEMS (577-3633) for someone to go to the lab and bar-code /inventory the substance(s).
  - 4.2.4.1. Chemicals that weigh over 60 pounds.
  - 4.2.4.2. Hazardous Chemicals bought directly from a store to be used as an integral part of the laboratory.
  - 4.2.4.3. 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](#).

## 4.3. Radioactive Materials

- 4.3.1. All researchers ordering Radioactive Isotopes must have a permit issued by the “Radiation Use Committee” (RUC) which authorizes the researcher to use specific quantities of isotopes. If you are a new user, contact Environmental Health and Safety (EH&S) via phone 545-2682 or website [www.ehs.umass.edu](http://www.ehs.umass.edu).
- 4.3.2. The Researcher must have a radioisotope protocol for the requested RAM before placing the order.
- 4.3.3. Obtain a Purchase Order Number.
  - 4.3.3.1. Radioactive materials shall not be purchased with a Procard. Only line-item specific Purchase Order Requests or a Blanket Order may be issued.
  - 4.3.3.2. Use Category Code (Account Code) 739650 – Radioactive Materials.
  - 4.3.3.3. Each shipment of radioactive materials shall be delivered directly to the following address:  
University of Massachusetts  
Room 179 Lederle Graduate Research Tower  
710 North Pleasant Street  
Amherst, MA 01003  
ATTN: Responsible Owner (PI), Storage Location, Researcher
  - 4.3.3.4. EH&S, Radiation Services personnel will deliver the shipment to the respective ordering department.
- 4.3.4. Researcher calls Radioactive Material supplier to place the order.
- 4.3.5. Notify EH&S via the following “WEB” page form: [http://ehs.umass.edu/ehsForms/Results/ramOrderNotification\\_SubmissionForm.asp](http://ehs.umass.edu/ehsForms/Results/ramOrderNotification_SubmissionForm.asp) which can also be found on the EHS website [www.ehs.umass.edu](http://www.ehs.umass.edu).