

## Animal Facility SOP 8.2

### Waste Management

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#### I. Purpose

This SOP for biological waste management does not supersede the requirements for radioactive and/or hazardous chemical waste management. If your biomedical waste is mixed waste (i.e. contaminated with chemicals or radioactive materials) that waste will need to be disposed of according to the recommendations of Triumvirate, and/or the Environmental Health and Safety (EHSS).

#### Types of Biomedical Wastes

- Solid Biomedical Waste (i.e. plasticware, tubing, pipette tips, gloves)
- Sharps Waste (i.e. needles, glass, scalpels, razor blades)
- Liquid Biomedical Waste (i.e. cultures, stocks, vaccines)
- Pathological Waste (i.e. human tissues, blood and other body fluids)
- Animal Waste (i.e. carcasses, tissues, bedding)
- Chemotherapy Agent Wastes (i.e. any disposable material that has come into contact with cytotoxic/antineoplastic agents including gloves, vials, IV tubing)
- Discarded Contaminated Equipment (i.e. centrifuges, shakers, biosafety cabinets)

#### Definitions

##### II. Solid Biomedical Waste (non-sharps)

Solid biomedical waste should be placed in a red-bag lined biohazard box (shown to the right), provided by Environmental Services. To request additional biohazardous waste containers, or to request waste pick-ups, contact EHSS Laura O'Donnell. - 443.885.3320; After Hours - 443.885.310 or mobile 410-725-7213  
[Laura.Odonnell@morgan.edu](mailto:Laura.Odonnell@morgan.edu) or Triumvirate 410-636-3700 [mcoutu@triumvirate.com](mailto:mcoutu@triumvirate.com)



- Liquids or soggy materials should NOT be placed inside the red-bag lined boxes.
- No loose sharp items should be placed in these containers which would puncture the red bags.
- Do not overfill the boxes. **The boxes should be removed when 2/3 full.** These containers have a 50 lb maximum weight limit.
- Any material of higher hazard ( $\geq$ BSL2) should be decontaminated prior to placement into these containers. BSL2+ designated laboratories should always follow this practice.

- Biohazard waste boxes or containers should not be left in unsecured areas (e.g., in hallways or on loading docks) where non-trained personnel or personnel with unknown health status may encounter them. Biohazardous waste, by definition, is a hazardous material and must remain secured at all times
- Items which are not biological waste or potentially contaminated with biological materials should NOT be placed in the biohazardous waste containers.
- Do not combine the contents of one box into another or lift the bag out of the box.
- Alternate intermediary biohazard waste containers can be used, provided that:
  1. Containers are clearly marked as biohazardous waste with color-coded labels (e.g., by using red bags or biohazard stickers).
  2. The waste in these containers are removed promptly after use and not allowed to linger in these intermediary waste containers.
  3. Containers are capable of being decontaminated and are decontaminated often.
  4. No sharps are disposed of in these intermediary containers (sharps must be directly placed into authorized sharps containers).
  5. The waste is transferred to the authorized waste receptacle by the laboratory staff (not the Services staff).

## II. Sharps Waste

Following use of a sharp item (i.e. needle or blade), the needle should **NOT** be recapped (or in the case of a blade, returned to the sleeve); the sharp should be placed in a red sharps container.

There are two types of sharps containers available upon request from Environmental Services. To request additional sharps waste containers, or to request waste pick-ups, please contact EHSS 443.885.3320; After Hours - 443.885.3103. These are shown below:



Each of these containers all comply with OSHA BBP standard requirements dictated for sharps containers. These are: closable, puncture-resistant, leak-proof on the sides and bottom, labeled and/or color-coded.

- Soggy items and small amounts of liquids (e.g., a few ml of blood remaining in a tube) can be disposed of in these containers. Larger volumes of liquids should be handled as liquid waste.
- Containers should be easily accessible and located close to work areas where sharp materials are used.
- The containers must be maintained upright.

- These containers need to be replaced routinely. Do not allow these containers to become overfull. **These containers should be closed and removed when 2/3 full.**
- Do not remove the lids from these containers or force objects into them.

### III. Liquid Biomedical Waste

- MUST be decontaminated before disposal according to your laboratory or clinic SOPs.
- Liquids that have been autoclaved or decontaminated using bleach can be disposed of using the sanitary sewer system.
- Special procedures may be required to deactivate toxins, prior to disposal.
- **NOTE:** Decontamination with a chemical other than bleach may require special disposal procedures; contact the Chemical Safety Office for guidance by **contacting EHSS [Laura.Odonnell@morgan.edu](mailto:Laura.Odonnell@morgan.edu); 443-885--3919**
- Caution should be taken not to dispose of any material which may clog sewer disposal pipes.
- All vacuum aspirator traps/flask MUST have either a filter or secondary overflow two flask disposal system to protect vacuum lines from entry of biological fluids
- Chemicals to clean floors should not be touched without any gloves, eye equipped.
- After use of the mop and bucket rinse it out and put up a wet floor sign for safety.
- Lifting ladders will be in storage room 116X for needed use.

### IV. Pathological Waste

Any item which is identifiable as a human or animal body part or an animal carcass needs to be disposed of pathological waste. These items must be incinerated.

All animal carcasses are packaged and labeled according to Biological Hazard Compliance procedures and placed in one of the necropsy freezers in 116S.

### V. Animal Waste

- Proper disposal of animal carcasses is described in the pathological waste section.
- Animal bedding is disposed of based on the hazards. Contact animal facility manager for the proper disposal procedures.
- Animal waste that is classed as Biohazard waste is put in a bag in the red box and must be tied and disposed of when the bag becomes 2/3rd full. Close the box (tape closed) and fill it out for pick up. Contact Triumvirate through the online chemical inventory system; and put a request for waste to be collected.
- The green and white bio bins must be closed when the box becomes 2/3rds full. Fill out the box for pickup and contact Triumvirate through the online chemical inventory system.
- Animal bedding generated from ABSL-2 or conventional animal housing can be disposed of in the regular trash.
- Animal bedding that may contain chemotherapeutic agents, other high hazard chemicals or radioactive materials (e.g., BrdU) may require special disposal procedures (i.e. bedding contaminated with chemotherapeutic agents cannot be autoclaved). Contact Triumvirate through the online chemical inventory system; and put a request for bedding waste to be collected. **This waste will be collected the first Monday of the month.**

### VI. Discarded Contaminated Equipment

- Equipment that has come into contact with hazardous biological materials will need to be decontaminated prior to disposal, transport, surplus, etc. The method of decontamination is dependent upon the equipment and the biohazard that the equipment has come into contact with.
- Your laboratory SOPs should indicate a disinfection method suitable for the agents used in your laboratory. If you are unsure of the method to use, EHSS 443.885.3320.
- Be sure to follow the instructions for the disinfectant (i.e. concentration, contact time).
- The need for gaseous decontamination of a Biosafety cabinet (BSC) must be evaluated by the EHSS prior to moving. Should a BSC require decontamination, arrangements must be made in advance with EHSS 443.885.3320 to perform this service before the BSC can be moved.
- Ongoing identification and evaluation of hazards call for periodic inspections and reporting of potential hazardous conditions or “near miss” incidents. -Contact EHSS Laura O’Donnell to arrange inspections with Triumvirate