



## **Biological and Infectious Waste Management Plan**

### **Definition of Infectious Waste**

According to the SC Department of Health and Environmental Control (DHEC), an infectious waste is any used material which is: generated in the health care community in the diagnosis, treatment, immunization, or care of human beings; generated in embalming, autopsy, or necropsy; generated in research pertaining to the production of biologicals which have been exposed to human pathogens; generated in research using human pathogens and which is listed in the categories below:

➤ **Sharps**

- Any discarded article that may cause puncture or cuts, including but not limited to: needles, syringes, Pasteur pipettes, lancets, broken glass or other broken materials, and scalpel blades.

➤ **Microbiologicals**

- Specimens, cultures, and stocks of human pathogenic agents, including but not limited to: waste which has been exposed to human pathogens in the production of biologicals; discarded live and attenuated vaccines; and discarded culture dishes/devices used to transfer, inoculate, and mix microbiological cultures.

➤ **Blood and Blood Products**

- All waste unabsorbed human blood, or blood products, or absorbed blood when the absorbent is supersaturated, including but not limited to: serum, plasma and other components of blood, and visibly bloody body fluids such as suctioned fluids, excretions, and secretions.

➤ **Pathological Waste**

- All tissues, organs, limbs, products of conception, and other body parts removed from the whole body, excluding tissues which have been preserved with formaldehyde or other approved preserving agents, and the body fluids which may be infectious due to bloodborne pathogens. These body fluids are: cerebrospinal fluids, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, semen, and vaginal/cervical secretions.

➤ **Contaminated Animal Waste**

- Animal carcasses, body parts and bedding when the animal has been intentionally exposed to human pathogens in research or the production of biologicals.

➤ **Other Waste**

- Any other material designated by written generator policy as infectious, or any other material designated by a generator as infectious by placing the material into a container labeled infectious. Any solid waste which is mixed with infectious waste becomes designated as infectious and must be so managed.

➤ **Infectious Waste Residues Resulting from Discharges**

- Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any infectious waste.

## Wastes NOT Classified as Infectious Waste

The following are excluded from the definition of infectious waste:

- a) **Hazardous waste** which is managed pursuant to the Hazardous Waste Management Regulations, R. 61-79
- b) **Radioactive material** which is managed pursuant to the Department Regulation 61-63, Radioactive Material (Title A).
- c) **Mixed waste** containing regulated quantities of both RCRA hazardous waste and source, special nuclear, or byproduct material subject to the Atomic Energy Act of 1954, as amended, are to be managed pursuant to all applicable regulations.
- d) **Infectious wastes generated in a private residence** except when determined by the Commissioner to be an imminent or substantial hazard to public health or the environment.
- e) **Etiologic agents or specimens being transported for purposes other than disposal to a laboratory** consistent with shipping and handling requirements of the U.S. Department of Transportation, U.S. Department of Health and Human Services, and all other applicable requirements.

## Infectious Waste Management

### Sharps Waste

1. Sharps include any device or item capable of cutting or piercing the skin or a biohazard waste autoclave bag (e.g., needles, syringes, Pasteur pipettes, pipette tips, scalpel and razor blades, blood vials, glass slides).
2. All sharps whether contaminated or not must be placed and maintained in rigid, leak-resistant and puncture-resistant biohazard sharps containers which are secured tightly to preclude loss of the contents.
3. Do not over-fill sharps containers. Once a container is  $\frac{3}{4}$  full, the sharps container should be closed and placed in a large biohazard box or



red wheeled cart for pickup by USC's infectious waste vendor.

4. Needles **must not** be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal.
5. Disposable sharps are recommended whenever possible. Non-disposable sharps **must be** placed in a hard walled container for transport to an area for decontamination (preferably autoclaving).

### Liquid Infectious Waste

1. All liquid infectious waste (e.g., human blood and body fluids, liquid culture media from infected cells, viral supernatant) must be placed, stored, and maintained before and during transport in a rigid or semi-rigid, leak-resistant container which is impervious to moisture.
2. Liquid infectious waste must be decontaminated prior to disposal (final volume of 10% bleach for at least a 30-minute contact time). If using bleach, waste can be disposed, using large amounts of water, down the lab sink into the sanitary sewer system.
3. For chemical decontamination of liquid infectious waste, if using a bleach solution (final concentration of 10%) a minimum of a 30-minute contact time is required.



**Note:** Liquid biological waste containing a different disinfectant than bleach or any other chemical constituent must be disposed as chemical waste. Bleach is not compatible with many other chemicals such as ammonia and acids. **Consult with EH&S with questions regarding proper disposal of any mixed waste.**

4. For steam sterilization (autoclaving), liquid waste should be collected in an appropriate container for autoclaving and the standard operating procedures for operating an autoclave for liquids should be followed. It is not recommended to autoclave large volumes of liquids.
5. Use either chemical decontamination **OR** steam sterilization but **NOT** both.
6. Animal perfusion liquids must be collected in a hazardous waste carboy labeled as "Perfusion Liquid Waste Only". This waste must be picked up as hazardous chemical waste due to the presence of paraformaldehyde and potentially other hazardous chemicals. Solid perfusion waste must be collected separate from the liquid waste.

### Solid Infectious Waste

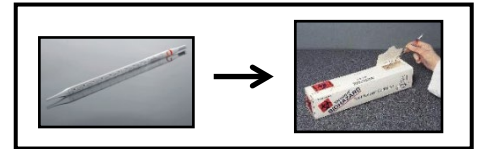
1. All solid infectious waste (plastic consumables, gloves, etc.) must be placed, stored, and maintained before and during transport in a rigid or semi-rigid, leak-resistant container which is impervious to moisture.
2. Containers must have sufficient strength to prevent bursting and tearing and withstand handling, storage, and transfer without impairing the integrity of the container.
3. Reusable or disposable containers are acceptable. Reusable containers must be properly disinfected after each use. Containers should be kept closed when not actively adding waste to the biohazard bag.



- Most types of solid infectious waste (i.e., waste not capable of puncturing an autoclave bag) should be collected in a **red or orange** color biohazard autoclave bag with sufficient strength to prevent tearing. Ensure sure that purchased bags are autoclavable. Dispose of all materials with the Universal Biohazard symbol as infectious waste.

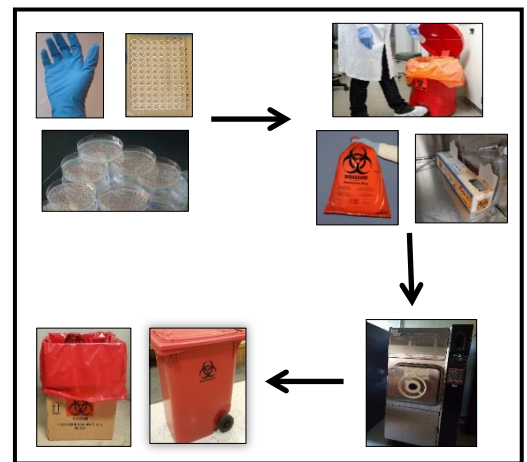


- There may be alternative containers that are more specifically designed for disposal of some types of solid infectious waste. For instance, collection of serological pipets, swabs, and larger objects may be disposed in a collection container at the point of generation that is constructed of sturdy, plastic-lined paperboard for leak-resistance. These containers can be autoclaved and have a re-closable flap.



- Infectious waste must be contained in containers that are appropriate for the type and quantity of waste generated.

- Biohazard bags must be autoclaved. Place bags in an autoclave-safe tray prior to autoclaving. After autoclaving, discard the red or orange bag in a large biohazard box with a red bag liner or a red biohazard waste wheeled cart for pickup by USC's infectious waste vendor.



- Infectious waste generated in the lab must be autoclaved and disposed on a regular basis.

- Do **NOT** autoclave infectious waste that is contaminated with chemicals. **NEVER** dispose of infectious waste in the regular waste stream.

### Animal Infectious Waste

- Waste generated from research animals (e.g., animal carcasses, body parts, blood, bedding) that may be contaminated with zoonotic infectious agents or human pathogens during research must be treated as infectious waste.
- Larger tissues, organs, and animal carcasses should be collected in red or orange biohazard bags but should **NOT** be autoclaved.
- All biohazard bags containing animal carcasses or body parts should be placed in the freezers located in the DLAR (animal) facility.

### **Biosafety Level 1 Waste Management**

#### BSL-1 Microbiological Waste (Including RG1 Agents or BSL-1 Recombinant DNA)

According to the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules*, the following requirements apply to non-exempt BL1 waste:

- All contaminated liquid or solid wastes are decontaminated before disposal (Appendix G-II-A1c).

According to *Biosafety in Microbiological and Biomedical Laboratories, 6<sup>th</sup> Edition*, the following requirements apply to Biosafety Level 1 (BSL-1) microbiological waste:

- Decontaminate all cultures, stocks, and other potentially infectious materials before disposal using an effective method, consistent with applicable institutional, local, and state requirements. (BMBL, 6th Edition; Section IV - Part A.15)

The following procedures should be used for disposal of Biosafety Level 1 microbiological waste:

- BSL-1 solid microbiological waste (including Risk Group 1 agents and BSL-1 recombinant DNA) must be collected and autoclaved in clear biohazard bags and then discarded in the red wheeled carts on the USC Columbia campus. (Note: Red or orange biohazard bags should still not be used in BSL-1 only labs since these labs do not generate infectious waste.)
- In BSL-2 labs that generate some BSL-1 waste, it is acceptable for these labs to dispose of all solid microbiological waste in red or orange biohazard bags in situations when it is difficult for the lab to properly segregate BSL-2 infectious waste from BSL-1 non-infectious waste in the lab.
- BSL-1 liquid microbiological waste (including Risk Group 1 agents and BSL-1 recombinant DNA) must be decontaminated using bleach (final volume of 10% bleach for at least a 30-minute contact time) prior to sanitary sewer disposal.

### Insects Used for Research

All insects (transgenic and wild-type insects) used in research must be rendered non-viable before disposal to protect the environment outside the research laboratory. All vials or bottles that may contain live insects must be sealed to prevent the escape of any insects. The preferred method for the termination of insects is to place the sealed primary bottles or vials containing the insects in a -20 °C freezer until the insects are no longer viable. Then bottles should be collected in a black bag for disposal. Labs must dispose of the waste in an outside dumpster (custodial staff will not dispose of this waste). Vials or bottles containing insects that are no longer needed for research must not be viable at the time they are collected in the bags and disposed in an outside dumpster. In situations that require removing the insects from the primary container for dissection or similar procedures, it is acceptable to place small insects (e.g., fruit flies) no longer required for research in ethanol for termination as an alternative to placing them back in the primary container for freezer storage.

### Transgenic Plant Materials

According to the *NIH Guidelines*, the following requirements apply to the disposal of transgenic plants, including seeds, soil, and other transgenic plant materials used for research at BL1 containment:

- Experimental organisms shall be rendered biologically inactive by appropriate methods before disposal outside of the greenhouse facility (Appendix P-II-A-1c.1).
  - This principle is based on the recognition that the organisms that are used pose no health threat to humans or higher animals. The intent is to minimize the possibility of an unanticipated deleterious effect on organisms and ecosystems outside of the experimental facility, e.g., the inadvertent spread of a pathogen or the unintentional introduction and establishment of an organism in a new ecosystem.
- Disposal of BSL1 transgenic plant materials should be done following the same procedures described above for other BSL-1 recombinant DNA waste, with the following considerations:
  - Autoclave transgenic plant materials at 121°C for minimum of 60 minutes.

- Soil from transgenic plant research should be double-bagged and transported in a durable leak-proof container to the autoclave. Autoclavable bags should be filled no more than 1/2 full and 250 ml of water should be added to facilitate steam penetration for effective decontamination. If the soil is already moist, extra water does not need to be added to the bag before autoclaving. The final weight after autoclaving should be no more than 15 lbs. An autoclave-safe tray with a solid bottom and walls must be used to contain the contents and prevent soil from spilling.
- Reusable horticulture supplies used with transgenic plants should be decontaminated.
- Any soil or other plant materials that are **NOT** used for transgenic plant research should be discarded in a durable trash bag and disposed by lab personnel in an outside dumpster. Custodial Services will not dispose of soil or other plant materials from research labs.

### **Infectious Waste Treatment**

- A written quality assurance plan must be implemented when conducting any onsite treatment
- Steam sterilization (autoclaving) – The following waste will be autoclaved prior to disposal:
  - Solid infectious waste that is not capable of puncturing the biohazard autoclave bags (e.g., culture plates and stocks)
  - Infectious waste that must be stored longer than 72 hours at room temperature
- Compactors or grinders will not be used to process infectious waste.
- Biological waste disposed in the red wheeled carts will be picked up by the USC's infectious waste vendor for incineration.

### **Autoclave Safety**

Autoclaves use high pressure and temperature to achieve effective sterilization and caution must be used when operating them. All users must be trained prior to use and this training must be documented and records maintained with other lab training documentation. Laboratories and departments are encouraged to use USC's [Autoclave Safety Training Guide](#) when developing a training program for their autoclaves. This guide provides general information for the safe use of autoclaves. Since there are multiple brands of autoclaves on campus that have different program settings and operating procedures, users must receive specific training for the autoclave(s) they will be using. The Department Chair is responsible for notifying Principal Investigators if hands-on autoclave training should be provided by each Principal Investigator for their lab staff or if a departmental trainer will conduct the training.

### **Infectious Waste Clean-Up Materials**

Laboratories conducting experiments involving biological hazards such as microorganisms, human-derived materials, and recombinant or synthetic nucleic acid molecules must have plans for handling accidental spills. The following items should be conveniently accessible in any lab using potentially infectious materials, and all lab personnel must know the location of these materials:

- 1) Gloves (latex or nitrile)
- 2) Lab coat or disposable gown
- 3) Safety glasses or goggles
- 4) Disinfectant solution\*
- 5) Tongs, forceps, dustpan, broom
  - A mechanical device must be used to remove sharps without using gloved hands
- 6) Absorbent materials (e.g., paper towels)
- 7) Signage to post at lab entrance for controlling access (“Biohazard Spill – Do Not Enter”)
- 8) Biohazard bags for collecting all contaminated materials generated during the cleanup, and a puncture-resistant biohazard sharps container if spill involves contaminated sharps
- 9) A copy of all applicable biological spill procedures

\* A freshly prepared 10% bleach solution is effective for the decontamination of most biological spills. Some laboratories have the potential for spills involving agents or materials that may be resistant to a 10% bleach disinfectant. In these cases, it is important for the lab to use an effective disinfectant. A list of selected EPA-registered disinfectants is available on the [EPA website](https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants) (<https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>).

### **Infectious Waste Clean-Up Procedures**

- 1) Alert people in the immediate area that a spill occurred (avoid spreading spilled material)
- 2) Put on appropriate personal protective equipment (e.g., gloves, lab coat, safety glasses)
- 3) If the waste spill involves a liquid, cover the spill with absorbent material (e.g., paper towels)
- 4) Carefully soak the paper towels and/or spilled material with disinfectant (avoid splashing)
  - A freshly prepared 10% bleach solution is appropriate for most infectious waste spills
- 5) Allow a 30-minute disinfectant contact time
- 6) Wipe down any contaminated surfaces with disinfectant
- 7) Remove broken glass or other sharps with a brush and dustpan, tongs, or forceps Place contaminated sharps in a puncture-resistant biohazard sharps container
  - Note: Sharps should already be inside a securely closed biohazard sharps container
- 8) Use absorbent material to wipe up the spill
- 9) Clean the area once more with absorbent material and disinfectant solution
- 10) Place contaminated disposable materials in a leak-proof biohazard bag for autoclaving, and properly decontaminate any non-disposable materials (e.g., safety glasses) prior to reuse
- 11) Remove gloves and thoroughly wash hands
- 12) Notify personnel when the clean-up has been completed

## **Biological Waste Management Guidelines**

### **Biosafety Levels (BMBL, 6<sup>th</sup> Edition)**

#### ***BSL-1, BSL-2***

- Decontaminate all cultures, stocks, and other potentially infectious materials before disposal using an effective method, consistent with applicable institutional, local, and state requirements. Depending on where the decontamination will be performed, the following methods are used prior to transport (BMBL, 6th Edition; Section IV - Part A.15):
  - Materials to be decontaminated outside of the immediate laboratory are placed in a durable, leak-proof container and secured for transport. For infectious materials, the outer surface of the container is disinfected prior to moving materials and the transport container has a universal biohazard label.
  - Materials to be removed from the facility for decontamination are packed in accordance with applicable local, state, and federal regulations.

#### ***BSL-2***

- Eye protection and face protection (e.g., safety glasses, goggles, mask, face shield or other splatter guard) are used for manipulations or activities that may result in splashes or sprays of infectious or other hazardous materials. Eye protection and face protection are disposed of with other contaminated laboratory waste or decontaminated after use. (BMBL, 6th Edition; Section IV - Part C.2).
- Do not wash or reuse disposable gloves, and dispose of used gloves with other contaminated laboratory waste (BMBL, 6th Edition; Section IV - Part A.7d).

### **NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules**

#### ***BL1, BL2***

- All contaminated liquid or solid wastes are decontaminated before disposal (Appendix G-II-A-1c).
- Contaminated materials that are to be decontaminated at a site away from the laboratory are placed in a durable leak-proof container which is closed before being removed from the laboratory (Appendix G-II-A-2a).

#### ***BL2***

- All wastes from laboratories and animal rooms are appropriately decontaminated before disposal (Appendix G-II-B-2i).
- Extreme caution should be used when handling needles and syringes to avoid autoinoculation and the generation of aerosols during use and disposal. Needles should not be bent, sheared, replaced in the needle sheath or guard, or removed from the syringe following use. The needle and syringe should be promptly placed in a puncture-resistant container and decontaminated, preferably autoclaved, before discard or reuse (Appendix G-II-B-2j).
- An autoclave for decontaminating laboratory wastes is available (Appendix G-II-B-4f).



## Animal Biosafety Levels (BMBL, 6<sup>th</sup> Edition)

### *ABSL-1, ABSL-2*

- Do not wash or reuse disposable gloves, and dispose of used gloves with other contaminated animal facility waste (BMBL, 6th Edition; Section V - Part A.10e).
- Needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal. Used, disposable needles and syringes are carefully placed in puncture-resistant containers used for sharps disposal immediately after use. The sharps disposal container is located as close to the point of use as possible (BMBL, 6th Edition; Section V - Part A.15b, ii and iv).
- Decontaminate all cultures, stocks, and other potentially infectious materials before disposal using an effective method, consistent with applicable institutional, local and state requirements. Depending on where the decontamination will be performed, the following methods are used prior to transport:
  - Materials to be decontaminated outside of the immediate animal room are placed in a durable, leak-proof container and secured for transport. For infectious materials, the outer surface of the container is disinfected prior to moving materials and the transport container has a universal biohazard label.
  - Materials to be removed from the facility for decontamination are packed in accordance with applicable local, state, and federal regulations. (BMBL, 6th Edition; Section V - Part A.18).

### *ABSL-2*

- Decontaminate work surfaces after completion of work and after any spill or splash of potentially infectious material with appropriate disinfectant. Decontaminate all potentially infectious materials before transport or disposal using an effective method. Spills involving infectious materials are contained, decontaminated, and cleaned up by staff who are properly trained and equipped to work with infectious material. A spill procedure is developed and posted within the animal facility (BMBL, 6th Edition; Section V - Part A.17).
- Develop and implement an appropriate decontamination program in compliance with applicable institutional, local, and state requirements.
  - Equipment is decontaminated before repair, maintenance, or removal from the animal facility. A method for decontaminating routine husbandry equipment and sensitive electronic or medical equipment is identified and implemented.
  - Decontamination of an entire animal room is considered when there has been gross contamination of the space, significant changes in usage, and for major renovations or maintenance shutdowns. Selection of the appropriate materials and methods used to decontaminate the animal room is based on the risk assessment.
  - Decontamination processes are verified on a routine basis. (BMBL, 6th Edition; Section V - Part B.3).
- Disposable PPE and other contaminated waste are appropriately contained and decontaminated prior to disposal (BMBL, 6th Edition; Section V - Part C.2c).

- Eye protection and face protection (e.g., safety glasses, goggles, mask, face shield, or other splatter guard) are used for manipulations or activities that may result in splashes or sprays from infectious or other hazardous materials when the animal or microorganisms is handled outside the BSC or another containment device. Eye protection and face protection are disposed of with other contaminated facility waste or decontaminated after use. (BMBL, 6th Edition; Section V - Part C.3).
- An autoclave is present in the animal facility to facilitate decontamination of infectious materials and waste. A validated alternative process (e.g., alkaline digestion, incineration) may be used for decontamination and disposal of carcasses (BMBL, 6th Edition; Section V - Part D.9).

**Plants (NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules)**

*The containment principles are based on the recognition that the organisms that are used pose no health threat to humans or higher animals (unless deliberately modified for that purpose), and that the containment conditions minimize the possibility of an unanticipated deleterious effect on organisms and ecosystems outside of the experimental facility, e.g., the inadvertent spread of a serious pathogen from a greenhouse to a local agricultural crop or the unintentional introduction and establishment of an organism in a new ecosystem.*

***BL1-P, BL2-P***

- Experimental organisms shall be rendered biologically inactive by appropriate methods before disposal outside of the greenhouse facility (Appendix P-II-A-1c.1).

***BL2-P***

- Decontamination of run-off water is not necessarily required. If part of the greenhouse is composed of gravel or similar material, appropriate treatments should be made periodically to eliminate, or render inactive, any organisms potentially entrapped by the gravel (Appendix P-II-B-1c.2).
- An autoclave shall be available for the treatment of contaminated greenhouse materials (Appendix P-II-B-2c.1)

**Storage of Infectious Waste**

- Storage shall be in a manner and location which affords protection from animals, vectors, weather conditions, theft, vandalism and which minimizes exposure to the public. Storage begins at the time the container is sealed.
  - a) The waste must not provide a food source or breeding place for insects or rodents.
  - b) The waste must be protected to maintain the integrity of the packaging and provide protection from weather conditions such as water, rain, and wind.
  - c) The waste must be stored in a manner to prevent a release or discharge of the contents.
- Outdoor storage areas must be locked (for example: roll-off containers, sheds, trailers, van bodies, or any other storage area).
- Storage areas must allow access to authorized personnel only.
- Storage areas must be labeled with the universal biohazard symbol sign.

- Infectious waste must be maintained in a non-putrescent state using refrigeration when necessary.
  - a) Generator onsite storage shall not exceed fourteen (14) days without refrigeration or thirty (30) days if maintained at or below 42 degrees Fahrenheit.
  - b) Once infectious waste leaves the university, the waste must be delivered to a treatment facility within fourteen (14) days without refrigeration or thirty (30) days if maintained at or below 42 degrees Fahrenheit.
  - c) Treatment facility onsite storage shall not exceed fourteen (14) days at ambient temperature or thirty (30) days if maintained below 42 degrees Fahrenheit.

### **Off-site Disposal**

- All infectious waste treated or untreated will be collected, transported and stored in the manner previously described above.
- The contractor will pick up and transport the infectious waste in leak-proof, fully enclosed containers to a site licensed by SC DHEC for treatment and disposal.
- The EHS infectious waste coordinator will ensure all manifests for these wastes transported offsite are completed and kept on file at least 2 years for SC DHEC inspectors to review.
- It is the responsibility of the contractor to maintain all valid permits relevant to transport, treatment, and disposal of infectious waste.

### **Infectious Waste Generator Requirements for Small Quantity Generators**

Small quantity infectious waste generators are those who generate less than 50 pounds of waste per calendar month. This includes all USC campuses, **except for USC-Columbia and USC- School of Medicine**. Small quantity generators must:

- Segregate infectious waste from other types of waste at the point of generation.
- Ensure proper packaging and labeling of waste that is transported offsite.
- Maintain all sharps in a rigid, leak-resistant, and puncture-resistant container designed for safe containment of sharps.
- Ensure containers of infectious waste intended for transport offsite shall be labeled in English with the universal biohazard symbol, the SC DHEC license number, and the date it was placed in storage or shipped.
- Use plastic bags inside containers that are red or orange and of sufficient strength to prevent tearing.
- Disinfect any reusable containers after each use.
- Ensure initiation of a manifest when waste is transported offsite.
- Prevent infectious waste that contains radioactive material from leaving the site where waste is generated.
- Manage infectious waste in a manner that prevents exposure to the public or discharge.

- Ensure waste is stored in a manner and location that affords protection from animals, vectors, adverse conditions (e.g., water, chemicals, fire, wind), theft, and vandalism.
- Ensure that any waste stored outside is locked.
- Offer infectious waste for transport offsite only to an SC DHEC licensed transporter.
- Maintain manifests records of infectious waste generated and shipped for last 2 years.

### **Requirements for Large Quantity and Extra-Large Quantity Generators**

Large quantity generators produce 50-999 pounds of waste per calendar month and extra-large quantity generators produce 1,000 pounds or more of waste per calendar month. **The School of Medicine is a large quantity generator, and the Columbia campus is an extra-large quantity generator of infectious waste.** In addition to the requirements for small quantity generators of infectious waste, large and extra-large generators must also adhere to the following additional requirements:

- Ensure onsite storage does not exceed 14 days without refrigeration or 30 days if maintained below 42 degrees Fahrenheit.
- Keep weight records of each box of infectious waste shipped for treatment or disposal.
- Keep the original manifests for at least 2 years.
- Ensure the DHEC license number is on the infectious waste manifest.
- Develop spill procedures for cleanup of infectious/biohazard waste spills.
- Ensure each infectious waste accumulation area has a biohazard waste sign, with black letters against a red background, on the door where the waste is kept.
- Have a designated infection control committee with the authority and responsibility for infectious waste management. This committee shall develop or adopt a written protocol to manage the waste stream from generation until offered for transport.

### **Roles & Responsibilities**

#### Biological Safety Office

- Maintain a Biological and Infectious Waste Management Plan that describes policies and procedures for laboratory personnel to properly dispose of biological and infectious waste.
- Provide guidance to laboratory personnel when questions arise regarding proper collection, storage, disposal, or compliance requirements for infectious waste. The type of waste generated may include liquid infectious waste, solid infectious waste, sharps, or animal waste.
- Conduct periodic laboratory safety inspections that include evaluating waste disposal practices.

#### Hazardous Waste Program

- Maintain an Infectious Waste Manual and Work Instruction for all infectious waste management and compliance activities conducted by EHS for USC main campus and USC School of Medicine.
- Management and compliance activities include, but are not limited to, the Infection Waste Control Committee, permits, small/large/extra-large quantity generator requirements, waste

transport and storage, coordinating waste pickups by vendor, off-site disposal, weighing containers, signing and maintaining manifests, reporting, and contingency planning.

- The EHS infectious waste coordinator will handle all biological or infectious waste emergencies. Emergency spill kits are maintained in the infectious waste truck and infectious waste cooler.

#### Laboratory Personnel

- Follow disposal procedures as defined in the Biological and Infectious Waste Management Plan.
- Report incidents regarding improper infectious waste disposal practices to the Biosafety Office.

#### School of Medicine Research Safety Coordinator

- Monitor infectious waste disposal practices at the USC School of Medicine and ensure all laboratory personnel are following proper infectious waste disposal procedures.