

APPENDIX B: IUB and Regionals Specific Waste Handling Guidelines

Biological Waste Management in Research Laboratories Procedures for Indiana University Bloomington and Regional Campuses

The biological waste management program for research laboratories at IUB and Regionals is administered by Indiana University Environmental Health and Safety in accordance with state regulation 410 IAC 1-3 and other applicable regulations. The guidelines below are to be followed for the disposal of all research-related biological waste. However, ***if a research protocol includes specific waste disposal procedures or additional precautionary measures, the protocol procedures must be followed.***

Type of waste	Waste disposal
<p>ALL research waste generated in the following lab categories: BSL-1 , BSL-2 , and ABSL-2</p> <p><i>* Exception: All transgenic plants in non-exempt BSL-1 and BSL-2 labs must be rendered biologically inactive but not necessarily by autoclave.</i></p> <p>**ABL-1 waste will be required to be decontaminated on an as needed basis when IUEHS Biosafety has determined that it may be contaminated.</p> <p>Examples: all wild type and genetically modified microorganisms, cell and tissue culture, fluids, human tissues, fluids, gloves, paper towels, animal bedding, food, and water</p>	<p>Solid: Waste Procedure #1</p> <p>Liquid: Waste Procedure #2</p>
<p>All animal carcasses and tissues: Transgenic, wild type, wild-caught, and experimentally infected vertebrate animals.</p>	<p>Waste procedure #3</p>
<p>Biologically contaminated sharps</p>	<p>Waste procedure #4</p>
<p>Fixed tissues, in which fixing has facilitated inactivation of potentially infectious agents</p>	<p>Waste procedure #5</p>
<p>Human fluids not defined as bloodborne pathogens (vomit, urine, feces, saliva) and all materials contaminated with these fluids where there is no visible blood.</p>	<p>Waste procedure #6</p>

APPENDIX B (CONTINTUED) - IUB and Regionals Waste Procedures

1. Non-sharps biohazard waste
 - a. All untreated biohazard waste needs to be labeled with a biohazard symbol so that lab staff and others are aware that the waste is biohazardous and needs to be decontaminated before final disposal.
 - b. Biohazard waste needs to be placed into bags that are transparent, rated for autoclave use, and marked with a biohazard sticker. Appropriate bags are available from vendors such as VWR (product #14220-012) or Fisher (product #01-826B).
 - c. Before autoclaving:
 - i. Loosely close the bag in a manner that will prevent waste materials from being released and still allow air exchange between the interior of the bag and the ambient environment.
 - ii. Place autoclave tape over the biohazard sticker or other highly visible location on the bag.
 - d. Before final disposal:
 - i. Ensure the autoclave tape visibly indicates proper autoclaving occurred.
 - ii. Ensure that all biohazard markings on the waste clearly indicate that the waste has been treated via autoclave tape tagging. If autoclave tape was not placed over the biohazard sticker clearly deface the label with black marker or remove the biohazard sticker from the bag.
 - iii. Place the autoclaved bag into the non-hazardous waste stream in the building according to building requirements. If there is not an autoclave with sufficient capacity for the waste accessible to you by internal building routes, contact EHS for your respective campus.
2. Place liquid materials into a suitably sized vessel. Add an appropriate chemical disinfectant and allow adequate contact time for deactivation. Contact EHS Biosafety for agent-specific procedures. After decontamination, dispose of treated liquids down the drain with copious amounts of water to the sanitary sewer.
3. Place carcasses and tissues that may putrefy or decay with an objectionable odor into a red biohazard bag. If the biohazard bag is not opaque, put the carcass in an opaque bag first. Double bag the materials if necessary to avoid perforations in the outer bag. Seal the bag and place in freezer. **Contact the animal care facility for the respective campus for further instructions.**
4. Place sharps in a puncture-proof container – either a commercially available **clear** biohazard sharps container or a sturdy cardboard box or plastic container. Needles, scalpels, razor blades, and biologically contaminated glass are required to go into biohazard sharps containers. Serological Pipettes and plastic pipette tips can be placed in biohazard sharps containers, lined and labeled cardboard boxes or other plastic containers that can withstand autoclaving. Seal the container or box and attach a strip of autoclave tape. After autoclaving, mark out or remove any biohazard symbols or tags and place in the waste container located in the autoclave room or the building dumpster. If using a cardboard box, tape the seams before placing in dumpster. All sharps containers are to be disposed of when no more than 2/3 full and must have a lid that is closed and secured prior to disposal. ****Do not use red sharps containers. Red sharps containers cannot be placed in building dumpsters.****
5. Place preserved specimens in an appropriate container with a lid that will seal. Seal the container and attach a completed *Waste Chemical Tag or Label*. Request pickup from EHS for your respective campus.
6. Liquids can be absorbed, bagged in any regular trash bag, and placed in the building dumpster or disposed as liquid into the sanitary sewer. Solids should be bagged in regular trash bags and placed in the building dumpster.