Weber State University

Biohazardous Waste Guide

Appendix to the WSU Biosafety Program

WEBER STATE UNIVERSITY
Environmental Health & Safety

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Introduction

Laboratory personnel and principal investigators (PIs) are responsible for identifying and packaging biohazardous waste, including all recombinant or synthetic DNA/RNA waste, before properly decontaminating and/or disposal. Procedures to identify, package, transport and decontaminate biohazardous waste are detailed below.

Definition

Waste that because of its characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or pose a substantial present potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. The following materials are defined as biohazardous:

- Sharps Waste that may cause puncture or cuts
- Human and nonhuman primate blood, tissue, body fluids and cell lines
- Cultures and stocks of pathogenic agents
- Recombinant or synthetic nucleic acids (rDNA)
- Laboratory waste items that have come into contact with a biohazard
- Animal waste, carcasses and body parts that have been exposed to rDNA or any biohazard
- Human pathological waste
- Plant waste, including all transgenic plants, seeds, spores, plant debris and soil materials, and any plant exposed to plant pathogens

Packaging Biohazardous Waste

Solid Biohazardous Waste

- Collect in plastic autoclavable waste bags with a biohazard symbol
- Contain the bag inside a rigid, leak-proof container that has a biohazard symbol itself or allows the bag's biohazard symbol to be visible
- If autoclaving, tie bags loosely to allow steam to penetrate

Biohazardous lab glass and plastic

- Collect in a container that cannot be punctured such as a sturdy cardboard box or plastic bucket lined with a biohazard bag.
- Label the container with a biohazard symbol

Sharps Waste

- Collect in red plastic sharps containers with a biohazard symbol and tight-fitting lid
- When the container is no more than two-thirds full, close and seal the lid and request a Hazardous Waste Pickup from www.weber.edu/ehs
- Do not mix with any other type of waste

Liquid Biohazardous Waste

- Collect in a leak-proof, rigid container labeled with a biohazard symbol
- If transporting, close and seal containers, and place in a leak-proof secondary container

Treatment and Disposal

On-Site Sterilization (Autoclave)

If you have access to an autoclave, you can treat and dispose of certain biohazardous waste yourself. Steam sterilization with an autoclave effectively inactivates most infectious agents. Non-durable goods that have been autoclaved appropriately can be placed in a regular garage bag, seal and place in regular trash. All autoclave operators must be trained on safety information and any site-specific procedures.

Chemical Disinfection

Certain low volume liquid biohazardous waste can be rendered non-infectious before disposing in the sanitary sewer. Use the following procedure to treat any free-flowing liquid biohazardous waste:

- Collect in a leak-proof, rigid container labeled with a biohazard symbol
- If transporting, close and seal containers, and place in a leak-proof secondary container
- Add chlorine bleach to equal a final concentration of 10 percent bleach
- Let the solution sit for at least 30 minutes before disposing via the sewer

Disposal

For all other biohazardous waste that is not practical to treat on site will be disposed of at an approved treatment and disposal site. Submit a Hazardous Waste Pickup Request from www.weber.edu/ehs.

APPENDIX A