

INFECTIOUS WASTE MANAGEMENT PLAN
West Virginia School of Osteopathic Medicine,
Fredric W. Smith Science Building

I. FACILITY –

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400 Lee Street North
Lewisburg, Greenbrier County
West Virginia 24901

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II. OBJECTIVES OF THE WASTE MANAGEMENT PLAN

The objectives of this plan are to:

- A. Provide a safe environment for visitors, students, faculty and staff in the Fredric W. Smith Science Building (hereafter referred to as the SSB).
- B. Proper management of infectious medical waste in accordance with the West Virginia Infectious Waste Rule 64-CSR-56 and the Occupational Safety and Health Administration Health Regulations on Exposure to Bloodborne Pathogens.

III. HANDLING OF INFECTIOUS MEDICAL WASTE

A. Packaging for treatment

All infectious medical waste, except free liquids, sharps and plastic or glass pipettes, shall be placed into a leak-proof orange/red plastic bag that meets the American Society for Testing and Materials drop weight test (ASTM-D-959-80) of 125 pounds. The bags shall have the international biohazard symbol on them and also contain the words "Biohazard" or "Biohazardous Materials". Free liquids shall be contained in break resistant, tightly capped containers. These shall have the international biohazard symbol on them and the words "Biohazard" or "Biohazardous Materials" on them. Heavier materials shall be supported in double-walled corrugated fiberboard boxes. These boxes shall have the international biohazard symbol on them and the words "Biohazard" or "Biohazardous Materials" on them.

Contaminated needles, sharps, and pasteur pipettes shall be collected at the point of generation in rigid leak-proof and puncture-resistant sharps containers that have the international biohazard symbol on them and the words "Biohazard" or "Regulated Medical Waste" on them.

Contaminated plastic serological pipettes shall be segregated from other biohazard waste and placed into Bio-bins™. Bio-bins™ are closeable, autoclavable, waterproof, laminated paper boxes that are constructed for use with non-sharp biohazardous waste. Bio-bins™ have the international biohazard symbol and words "Biohazard" or "Biohazardous Materials" on them.

Bags, boxes, liquid containers and sharps containers shall not be filled beyond 75% of their total capacity. All bags, boxes, and sharps containers must be labeled with the origin of the waste and the signature of the operator processing the waste. Each SSB laboratory will identify and implement procedures for the proper segregation of waste at the source and will be mindful to not over-classify the waste.

- B. Handling: Regulated medical waste for removal by Stericycle, a licensed biohazardous materials waste removal company.

Each SSB laboratory shall transport the closed, full (to fill line printed on box), sharps container to room J114 for placement in a double-walled corrugated fiberboard box lined with a large red biohazard bag. The bag will be closed when it is full and/or weighs ≤ 50 pounds. At that point the box shall be sealed, appropriately labeled, and picked-up by Stericycle waste removal company in no more than 30 days. Infectious whole animals or gross sections of animals (e.g. whole organs) will be disposed of as

infected animal waste via Stericycle. Infectious animal waste will be bagged in red or clear biohazard bags, sealed, and placed in a labeled, designated freezer in room J207 while awaiting pick up by Stericycle.

C. Handling: Regulated medical waste treatment on premises.

Potential regulated medical waste generated at the WVSOM Clinical and Translational Science Center will be transported to the SSB in secondary containment that is non-porous, disinfectable, lidded, and labeled appropriately with the universal biohazard symbol.

All unautoclaved infectious medical waste that is in bags or Bio-bin™ boxes shall be transported utilizing secondary containment to room J114A and placed into a large rigid, lockable, leak-proof and puncture resistant red bin marked with biohazard labels to await autoclaving. The secondary containment vessel shall be non-porous, disinfectable, and labeled appropriately with the universal biohazard symbol. The large red collection bin, when full, or within 30 days of waste being placed in it, will be wheeled to the autoclave room (J231C) of the SSB.

The autoclave room technician will be responsible for the sterilization and disposal of all biohazardous waste materials. During the handling of non-sterile biohazardous materials, the technician will at a minimum wear a lab coat and gloves, and observe all BSL1/BSL2 operating procedures. Goggles shall be used when there is a risk of splashing. Individual lab technicians will wear disposal nitrile (or other synthetic) gloves and lab coats during the handling and transportation of biohazardous materials.

The SSB is expected to generate between 50 and 100 pounds of infectious medical waste per month.

1. Labeling – The label on each bag or Bio-bin™ box shall contain the following information
 - The name, address and business telephone and fax numbers of the facility at which the waste was rendered noninfectious.
 - Date treated and the method of treatment.
 - Weight of the treated noninfectious medical waste.
 - A signed and dated certification stating: “I hereby certify under penalty of law that this waste has been rendered noninfectious in accordance with procedures required by Infectious Medical Waste, 64 CSR 56.”

2. Treatment – All unautoclaved infectious medical waste that is in labeled bags, boxes, or glass containers shall be steam-sterilized at 121.1° C (250° F) and 15 pounds pressure for 90 minutes. The autoclaves shall be tested at least every 40 hours of operation with *Bacillus geostearothermophilus* spore tests. The autoclaves shall be inspected quarterly by a licensed qualified technician from a licensed qualified sterilizer company and all necessary maintenance and upgrades made. Only the autoclave located in SSB Animal Quarters, Room 231C will be used for the sterilization of infectious medical waste.

Liquid infectious biomedical waste, if not autoclaved, will be chemically disinfected with a volume of sodium hypochlorite (household bleach) to equal a 10% solution for a minimum of 30 minutes.

3. Disposal – Each solid infectious medical waste that will be steam sterilized and rendered noninfectious will be weighed (before autoclaving), with the date weighed and the name of the person doing the weighing recorded in the log book. Labeled non-infectious treated waste will be disposed of in the regular waste stream. All labeled liquid infectious medical waste that has been steam sterilized and rendered noninfectious may then be disposed of into the sanitary sewer. All chemically treated liquid waste will be disposed of into the sanitary sewer.

- D. At no time shall the SSB at West Virginia School of Osteopathic Medicine knowingly accept infectious medical waste from another facility. All infectious medical waste generated at this facility shall be properly packaged and labeled before leaving the premises.

- E. Storage of Infectious Sharp Medical Waste to be removed by Stericycle.
The designated storage area shall be Room J114A. Access to the facility is restricted, it is vermin-proof and water-proof, and has been identified as a Biohazardous Storage Area with a sign prominently posted on the door. The filled boxes containing closed sharps containers in the storage area shall be picked up quarterly by Stericycle, a licensed biohazardous waste removal company.

- F. Waste Removal - the SSB at West Virginia School of Osteopathic Medicine shall contract with a licensed biohazardous materials waste removal company to remove infectious sharps medical waste and infectious animal waste to be disposed of according to local, state and federal regulations. At this time the SSB shall contract with Stericycle, Inc.

The corporation office is: Stericycle, Inc.
28161 N. Keith Drive
Lake Forest, IL 60045
(847) 367-5910

The disposal facility is: Stericycle, Inc.
88 W. Airport Industrial Park Road
Parkersburg, WV 26104
(304) 464-1224

Their permit/license # is: IMW-99-06-CM001

This licensed biohazardous materials waste removal company shall dispose of the infectious medical waste and infectious animal waste by off-site autoclaving and/or incineration as required.

- G. Contingency Plan - In the event that the SSB shall be unable to autoclave their infectious medical waste, our currently contracted licensed biohazardous materials waste company shall be contracted with to provide collection, treatment and disposal of the infectious medical waste generated at the SSB. In the event that the licensed

biohazardous materials waste removal company should be unable to provide collection and disposal of the SSB infectious medical waste, we will contract with another licensed biohazardous waste disposal company to provide collection, treatment and disposal of the infectious medical waste generated at the SSB

- H. Separation - All medical waste shall be separated at the point of generation, including sharps, infectious materials and glass. Solid infectious medical waste shall be placed into orange biohazard bags or Bio-bin™ boxes. Liquid infectious waste shall be placed into leak-proof, break-resistant tightly capped containers. Contaminated broken glass and sharps shall be placed into a leak-proof and puncture-resistant container. Non-contaminated waste shall be placed into the regular trash. Non-contaminated broken glass shall be placed into boxes labeled as containing uncontaminated broken glass and placed into the regular trash.
- I. Volume Reduction - Training shall be provided to educate personnel as to the proper segregation of infectious versus noninfectious waste.

IV. TRANSPORTATION OF INFECTIOUS MEDICAL WASTE

A. Internal Transportation - All infectious medical waste shall be transported through the SSB in closed containers. At no time shall any infectious medical waste be transported without being enclosed in a proper container.

B. External Transportation - External transportation of infectious medical waste from the SSB shall only be done by a licensed biohazardous materials waste removal company to their off-site treatment facility.

V. TRAINING

- A. The West Virginia School of Osteopathic Medicine Office of Research and Sponsored Programs shall be responsible for training employees on the proper handling and treatment of infectious medical waste. All employees involved in research, laboratory work, housekeeping or maintenance shall be required to complete modules on the OSHA Occupational Exposure to Bloodborne Pathogens Standards, and other appropriate modules in the Collaborative Institutional Training Initiative (CITI) Program.

VI. DISPOSAL PLAN

A. Stericycle, Inc. agrees to provide the SSB with biohazardous sharps materials waste collection and disposal, and infectious animal waste collection and disposal through quarterly pickups, or whatever schedule is deemed appropriate, at the SSB, 400 Lee Street North, West Virginia School of Medicine, Greenbrier County, West Virginia, 24901. Stericycle, Inc. shall supply the SSB with suitable containers containing red liners with Biohazard labels. No more than 50 pounds of waste may be placed in each container. Stericycle has also agreed to provide the SSB with transportation and incineration of infectious animal waste materials.

B. Manifest - All infectious medical waste to be collected by and disposed of off-site by Stericycle, Inc. which shall generate a manifest to track the material. (See Attachment B). In accordance with the West Virginia Infectious Waste Rule 64-CSR-56, all manifest records will be retained for a minimum of three years.

C. Transportation - All infectious medical waste collected and transported off-site by Stericycle, Inc. shall be in an enclosed, licensed and identified vehicle specifically used for this purpose. All transportation shall be in accordance with all State and Interstate Regulatory Agencies.

D. Handling - The infectious medical waste that Stericycle, Inc. shall contract to remove shall be placed into the containers so as not to puncture them. Stericycle, Inc. shall be responsible for replacing the containers with additional containers and liners as necessary.

E. Disposal of Waste - Disposal of the infectious sharp medical waste shall be by off-site autoclaving and/or incineration and land filling by Stericycle, Inc., as required by applicable state and federal laws. Infected animal carcasses will be incinerated by Stericycle.