

## **REGULATED MEDICAL WASTE GUIDELINES BIOLOGICAL SCIENCES DEPARTMENT**

The following guidelines are initiated in order for the Department of Biological Sciences to conform to the "Regulated Medical Waste Management Regulations" - VR 672-40-01 - from the Department of Environmental Quality, Waste Division, Commonwealth of Virginia. As indicated in the title of the newest regulation, what was regarded as "biohazardous or infectious waste" is now termed "Regulated Medical Waste". Characteristics of Regulated Medical Waste are: "Any solid waste, if it is identified by the health care professional in charge as capable of producing an infectious disease in humans. A solid waste shall be considered to be capable of producing an infectious disease if it has been or is likely to have been contaminated by an organism likely to be pathogenic to healthy humans, such organism is not routinely and freely available in the community, and if such organism has a significant probability of being present in sufficient quantities and with sufficient virulence to transmit disease."

Lists of Controlled Regulated Medical Wastes are as follows:

1. Cultures and stock of microorganisms and biologicals, including discarded etiologic agents, wastes from the production of biologicals and antibiotics.
2. Blood and blood products.
3. Pathological Wastes. All pathological wastes and all wastes that are human tissues, organs, body parts, or body fluids.
4. Sharps. Used sharps contaminated with organisms that are pathogenic to healthy humans and all sharps used in patient care.
5. Animal carcasses, body parts, bedding and related wastes. When animals are intentionally infected with organisms likely to be pathogenic to healthy humans for purposes of research, in vivo testing, production of biological materials or any other reason, all of the above mentioned wastes are regulated medical wastes.
6. Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any regulated medical waste.

### **SPECIFIC GUIDELINES FOR SUBMISSION OF BAGGED REGULATED MEDICAL WASTE FOR STERILIZATION**

1. All Regulated Medical Waste contained in bags must be submitted to the B.S.S.F. for sterilization in **approved red** Regulated Medical Waste bags, **double bagged**. (Please see the B.S.S.F. Manager before purchasing these bags, so the bags can be approved prior to your outlay of funds.) The B.S.S.F. will not provide these bags.
2. **No** glass or plastic pipettes may be placed in **red** Regulated Medical Waste bags.
3. **No** sharps may be placed in **red** Regulated Medical Waste bags.

4. Unless specifically used to cleanup a biohazard spill, **no paper towels** should be placed in red Regulated Medical Waste bags. Towels used to routinely clean a work surface before and after use, should be placed in "uncontaminated" waste receptacle.
5. All bags shall be filled no more than **3/4 full**.
6. All bags must be closed with closures or rubber bands, **prior** to submission to B.S.S.F., to allow steam penetration during sterilization, i.e., **do not tape bags closed tightly**.
7. Regulated Medical Waste bags will be accepted by the B.S.S.F. on **Wednesdays** only, no later than **10:00 am**. This policy allows the B.S.S.F. The required time to sterilize and dispose of bags.
8. All regulated medical waste generated by your laboratory must be disposed of (i.e., brought to the B.S.S.F. for sterilization) within 7 days of generation.
9. All regulated medical waste bags must include: the generator's room number, building, department, and general classification of contents of the bag, **clearly labeled on the bag prior to submission to the B.S.S.F.**
10. The **generator** of the Regulated Medical Waste **assumes all responsibility** for assuring the B.S.S.F. personnel that **absolutely no hazardous waste, i.e., chemicals, or radioactive waste** is contained in the red Regulated Medical Waste bags submitted for treatment, and must sign a log to that effect upon delivery of waste to BSSF for treatment

NOTE: If you are working with a known, biological pathogen, please inform the B.S.S.F. personnel of the pathogen, as a courtesy. The B.S.S.F. will treat ALL waste with Universal Precautions, but may be able to process or quarantine specific pathogens more readily if known.

### **SPECIFIC GUIDELINES FOR SUBMISSION OF SHARPS FOR STERILIZATION/INCINERATION**

1. **All sharps must** be submitted in a closed, **approved** sharps container to the B.S.S.F. upon filling of the container.
2. The B.S.S.F. must send these sharps off campus to a contracted vendor for incineration, as the Biological Sciences incinerator is **NOT** approved for **ANY** regulated medical waste, including human tissues.
3. **All sharps containers must** have the following information clearly labeled on the container, prior to submission to the B.S.S.F.: Room number, Building, Department.

## **AUTOCLAVE OPERATIONAL STANDARDS**

Whenever regulated medical waste is treated in a steam sterilizer, the waste shall be subject to the following operational standards (at one hundred percent steam conditions and all air evacuated):

1. Temperature of not less than 250 degrees Fahrenheit for 90 minutes at 15 pounds per square inch of gauge pressure,
2. Temperature of not less than 272 degrees Fahrenheit for 45 minutes at 27 pounds per square inch gauge pressure, or
3. Temperature of not less than 320 degrees Fahrenheit for 16 minutes at 80 pounds per square inch gauge pressure.

## **STERILIZATION CONTROLS AND RECORDS**

1. Each package of waste sterilized must have a tape attached that will indicate if the sterilization temperature has been reached. Waste is not satisfactorily sterilized if the indicator fails to indicate proper temperature was achieved during the process.
2. Steam sterilization units shall be evaluated under full loading for effectiveness with spores of *B. stearothermophilus* no less than once per month.
3. A log shall be kept at each steam sterilization unit that is complete for the proceeding three-year period. Entries shall include the date, time, and operator of each usage; the type and approximate amount (pounds) of waste treated; the post sterilization reading of the temperature sensitive tape, dates and result of calibration and monthly effective testing with *B. stearothermophilus*.

Note: Waste shall not be compacted or subjected to violent mechanical stress before sterilization. After sterilization it may be compacted in a closed container.

March, 2000  
Mary J. Hayward  
B.S.S.F.