

# **BIOMEDICAL WASTE MANAGEMENT POLICY**

Managing biomedical waste in a safe and environmentally responsible manner is a key focus of the Environmental Compliance and Sustainability office.

#### 1.0 PURPOSE

In an effort to better manage our biomedical wastes, Berry College has implemented this Biomedical Waste Policy. The purpose of this policy is to provide information to the employees and students of Berry College regarding the identification, handling, storage, and disposal of biological and medical wastes generated by Berry College. The goal of the policy is to handle biomedical waste in a safe and environmentally sound manner as well as to comply with local and federal regulations.

### 2.0 INTRODUCTION

While medical waste is not regulated under the current federal RCRA regulations, there are federal requirements for medical waste under the Clean Air Act and the Federal Insecticide, Fungicide, and Rodenticide Act. Biomedical Waste in Georgia is regulated by Georgia Code 391-3-4-.15 and Chapter 391-3-4—Rules for Solid Waste Management. Biomedical wastes are regulated by the federal and state environmental agencies and are no longer disposed of in the regular waste stream. The pickup of biomedical waste is coordinated through the Environmental Compliance and Sustainability office in order to ensure proper disposal by a certified contracted vendor.

#### 3.0 APPLICABILITY

This policy applies to the entire Berry College community, but is especially pertinent for employees working in science laboratories, the Ladd Center, and housekeeping. Employees in the aforementioned departments are most likely to handle biomedical waste materials and therefore shall be familiar with this policy. Since the Berry College Biomedical Waste Management Policy applies directly to several departments on campus, the control of the program and the proper handling of the hazardous waste will be a joint effort between the Environmental Compliance and Sustainability office and the School of Mathematical & Natural Sciences, the Ladd Center, and the Physical Plant, and Aramark.

#### 4.0 DEFINITION

## Biomedical waste means and includes the following:

- Pathological waste: all recognizable human tissues and body parts except teeth, which are removed during surgery, obstetrical procedures, autopsy, and laboratory procedures.
- Biological waste: blood and blood products, exudates, secretions, suctionings, and other body fluids, which contains free liquids and cannot or are not directly discarded into a municipal sewer system.
- Cultures and stocks of infectious agents and associated biologicals including cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer inoculate and mix cultures.
- Contaminated animal carcasses, body parts, their bedding, and other wastes from such animals which are infected with or which have been exposed to infectious agents, capable of causing disease in man.

- Sharps: any discarded article that may cause punctures or cuts. Such waste includes, but is not limited to, items such as needles, IV tubing and syringes with needles attached, and scalpel blades.
- Chemotherapy waste: any disposable material which has come in contact with cytotoxic/antineoplastic agents (agents toxic to cells) and/or antineoplastic agents (agents that inhibit or prevent the growth and spread of tumors or malignant cells) during the preparation, handling, and administration of such agents. Such waste includes, but is not limited to, masks, gloves, gowns, empty IV tubing bags and vials, and other contaminated materials. The above waste must first be classified as empty which means such quantity that it is not subject to other federal or state waste management regulations prior to being handled as biomedical waste.
- Discarded medical equipment and parts, excluding expendable supplies and materials included in the above paragraphs, which have not been decontaminated, and that were in contact with infectious agents.

#### 5.0 GENERATION OF BIOMEDICAL WASTE

Unless otherwise exempted, GA Rule 391-3-4-.15 shall apply to all persons generating or handling biomedical waste, including but not limited to: ambulatory service centers, blood banks, clinics, county health departments, dental offices, funeral homes, health maintenance organizations, hospitals, laboratories, medical buildings, physicians' offices, veterinary offices, research and manufacturing facilities, nursing homes, and biomedical waste transportation, storage, treatment, and disposal facilities.

 Partial exemption: facilities which generate less than 100 pounds per month of biomedical waste shall be exempt from all provisions of GA Rule 391-3-4-.15 except that they shall comply fully with the provisions of GA Rule 391-3-4-.15.
 For purposes of this rule, a facility is defined as one or more persons generating biomedical waste who share common waste management services including, but not limited to, bulk storage containers.

- Total exemption: in no case shall a person be a generator of biomedical waste if
  those wastes are generated from single family residential premises or a singlefamily dwelling unit in the self-care and treatment of family members living in
  those premises or units and disposed of as residential solid waste.
- All requirements of this Rule shall apply to persons or facilities that generate 100 pounds or more of biomedical waste per month.

#### 6.0 STORAGE AND CONTAINMENT OF BIOMEDICAL WASTE

- Containment of biomedical waste shall be in a manner and location which
  affords protection from animals, rain and wind, does not provide a breeding
  place or a food source for insects and rodents, and minimizes exposure to the
  public.
- 2. Biomedical waste shall be segregated by separate containment from other waste at the point of origin.
  - Biomedical waste, except for sharps, shall be placed in containers which
    are impervious to moisture and have strength sufficient to preclude
    ripping, tearing, or bursting under normal conditions of use. The
    containers shall be securely closed so as to prevent leakage or
    expulsion of solid or liquid wastes during storage, handling, or
    transport.
  - Sharps shall be contained for storage, transportation, treatment, and subsequent disposal in leak proof, rigid, puncture-resistant containers that are taped closed or tightly lidded to preclude loss of contents.
- 3. Rigid containers of discarded sharps and all other disposable containers used for containment of biomedical waste shall be red or orange in color or clearly identified with the universal biohazard symbol or clearly marked with the word "Biohazard."
- 4. Biomedical waste contained in disposable containers as prescribed above, shall be placed for storage, handling, or transport in disposable or reusable pails, cartons, boxes, or drums, dumpsters, or portable bins. The containment system shall have a tight fitting cover ad be kept clean and in good repair. The containers may be of any color and shall be conspicuously labeled with the

universal biohazard symbol and the word "Biohazard" on the sides so as to be readily visible from any lateral direction when the container is upright.

- Reusable containers used for shipment of biomedical waste shall be thoroughly washed and decontaminated each time they are emptied.
- Reusable pails, drums, dumpsters, or bins used for containment of biomedical waste shall not be used for other purposes except after being decontaminated by procedures as described above and after the universal biohazard symbol and word "Biohazard" are removed.

For any questions or concerns contact the Environmental Compliance and Sustainability office. All containers, storage locations, and other containment measures shall be coordinated and approved by the EHS office.

# 7.0 TRANSFER OF BIOMEDICAL WASTE TO OFF-SITE TREATMENT OR DISPOSAL FACILITIES

- Any generator of biomedical waste shall transfer custody of the waste only to a collector who is operating under authority of the regulations.
- Biomedical waste shall not be transported in the same vehicle with other solid
  waste unless the biomedical waste is contained in separate, fully enclosed, leakproof containers within the vehicle compartment or unless all of the waste is to
  be treated as biomedical waste.
- Biomedical waste shall be delivered for storage, including intermediate transfer, and treatment only to a facility or location for which there is a valid and appropriate operating permit.
- Surfaces of transport vehicles that have contacted spilled or leaked biomedical waste shall be decontaminated.
- Equipment used to transport waste from the generator to the off-site treatment or disposal facility may not destroy the integrity of the container.
- Vehicles used for the transport of biomedical waste shall not be used for transportation of food or food products.

#### 8.0 TREATMENT OF BIOMEDICAL WASTE

If treated in accordance with the following procedures, the waste shall no longer be considered biomedical waste and may be combined and handled with regular solid waste. Biomedical waste shall be treated by one of the following methods prior to disposal at a permitted solid waste disposal facility.

- Incineration in a thermal treatment technology facility that provides complete combustion of waste to render it nonpathogenic.
- Decontamination by heating with steam under pressure (autoclave) so as to render the biomedical waste noninfectious.
- Other methods as may be approved by the Director.
- Fluid or semisolid waste may be discharged to a sewage treatment system that
  provides secondary treatment of waste if approved by the agency responsible
  for the operation of the sewage treatment system.
- Biomedical wastes consisting of recognizable human anatomical remains shall be treated at a permitted thermal treatment technology facility or other approved facility.
- Steam decontamination may not be used for treatment of chemotherapy waste.
   All facilities treating regulated quantities of biomedical waste must, at a minimum,
   comply with the above criteria. Commercial biomedical waste treatment facilities may
   not construct or operate a biomedical waste treatment facility without first obtaining a
   solid waste handling permit.

On-site biomedical waste treatment facilities are required to obtain a solid waste permit-by-Rule, and must comply with all applicable requirements. Commercial biomedical waste treatment facility means a facility that accepts over 25% of its biomedical waste form other, off-site facilities, which are not owned by the facility owning the treatment or disposal facility, generally for a fee.

#### 9.0 DISPOSAL OF BIOMEDICAL WASTE

- Biomedical wastes treated in accordance with the regulations shall be properly disposed of at a properly permitted facility, unless otherwise approved by the Director.
- Biomedical waste from generators of less than 100 pounds per month shall be properly disposed of at a municipal solid waste landfill or treatment facility

permitted under authority of these Rules or other facilities approved by the Director.

• The disposal of untreated biomedical waste, from generators of more than 100 pounds per month, by landfilling, is prohibited.

# **10.0 REFERENCES**

- Authority O.C.G.A. Secs. 12-8-20 et seq., 12-8-23. History. Original Rule entitled "Biomedical Waste" was F. Jun. 29, 1989. Amended: F. Sept. 4, 1991; eff. Sept. 24, 1991. Amended: F. Jun. 7, 1993; eff. Jun. 27, 1993.
- "Georgia Biomedical Waste." Hospitals for a Healthy Environment (H<sub>2</sub>E). http://cms.h2e-online.org/ee/rmw/rmw-regulations/state-rmw-regulations/georgia
- Rules of Georgia, Department of Natural Resources, Environmental Protection Division, Chapter 391-3-4 Solid Waste Management