UAB Campus Medical Waste Management Plan

PURPOSE: To set forth guidelines for the safe management of medical waste throughout the University of Alabama at Birmingham (UAB) campus.

SCOPE: This plan is intended to support non-clinical campus operations-including, but not limited to-teaching and research activities that generate medical waste, as defined by the Alabama Department of Environmental Management (ADEM), the Department of Transportation (DoT), and UAB policy, below. Medical waste shall be properly managed from the points of origin to the ultimate disposal.

ASSOCIATED INFORMATION:

I. **Definitions** per the Alabama Department of Environmental Management Land Division 17-Medical Waste Program, Chapter 335-17-1, Medical Waste (ADEM), 49 CFR 173.134 Hazardous Materials Regulations and UAB policy:

Medical waste shall be interpreted to mean:

A. **Animal Waste:** Carcasses and body parts, regulated bulk blood and body fluids, and surgical waste from animals exposed to human infectious agents as a result of the animal(s) being in contact with biologicals and pharmaceuticals in testing, production and research.

Note: At UAB, all animal carcasses, blood, and body parts shall be treated as medical waste and returned to the area designated by the Animal Resources Program (ARP) for disposal by UAB or its contractors.

B. **Blood and Body Fluids:** All human bulk blood, bulk blood components (serum and plasma) and bulk specimens of blood, tissue, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid from clinical and research laboratories.

Note: ADEM has interpreted bulk blood to mean a volume of blood that is fluid to the point of leaking but does not include materials that are stained or tainted with blood. Accordingly, ADEM uses the example of plastic tubing that contains enough blood that can flow out of the tubing would be sufficient quantity to be considered “bulk blood”. Tubing that has a residue or stain of blood, but not fluid, would not be considered medical waste. **For all research studies at UAB**, any material contaminated with human blood and/or body fluids is treated as medical waste.

C. **Microbiological Waste:** Discarded cultures and stocks of human infectious agents and associated microbiologicals **that do not qualify as Category A waste material**; human and animal cell cultures from medical and pathological laboratories; waste from production of biologicals; discarded live and attenuated vaccines; culture dishes and devices used to transfer, inoculate, and mix cultures.

IMPORTANT: Infectious waste containing (or contaminated with) viable Class A infectious organisms must be inactivated prior to disposal as Medical Waste. **See Table below** for agents listed as Category A. If an autoclave is used to inactivate waste the autoclave must be validated after every 40 hours of use (a log must be present to track use).

Indicative Examples of Infectious Substances Included in Category A in Any Form Unless Otherwise Indicated (3.6.2.2.2.1)		
	All Material	**CULTURES ONLY**
Crimean-Congo haemorrhagic fever virus	X	
Ebola virus	X	
Flexal virus	X	
Guanarito virus	X	
Hantaan virus	X	
Hantavirus causing hemorrhagic fever	X	
Hendra virus	X	
Kyasanur Forest disease virus	X	
Junin virus	X	
Lassa virus	X	
Machupo virus	X	
Marburg virus	X	
Monkeypox virus	X	
Nipah virus	X	
Omsk haemorrhagic fever virus	X	
Sabia virus	X	
Variola virus	X	
African swine fever virus		X
Avian paramyxovirus Type 1–Velogenic Newcastle disease virus		X
Bacillus anthracis		X
Brucella abortus		X
Brucella melitensis		X
Brucella suis		X
Burkholderia mallei–Pseudomonas mallei–Glanders		X
Burkholderia pseudomallei/Pseudomonas pseudomallei		X
Chlamydia psittaci–avian strains		X
Classical swine fever virus		X
Clostridium botulinum		X
Coccidioides immitis		X
Coxiella burnetii		X
Dengue virus		X
Eastern equine encephalitis virus		X
Escherichia coli, verotoxigenic		X
Foot and mouth disease virus		X
Francisella tularensis		X
Goatpox virus		X

CONTINUED from previous page	All Material	CULTURES ONLY
Hepatitis B virus		X
Herpes B virus		X
Highly pathogenic avian influenza virus		X
Human immunodeficiency virus		X
Japanese Encephalitis virus		X
Lumpy skin disease virus		X
Mycobacterium tuberculosis		X
Mycoplasma mycoides–Contagious bovine pleuropneumonia		X
Peste des petits ruminants virus		X
Poliovirus		X
Rabies virus		X
Rickettsia prowazekii		X
Rickettsia rickettsii		X
Rift Valley fever virus		X
Rinderpest virus		X
Russian spring-summer encephalitis virus		X
Sheep-pox virus		X
Shigella dysenteriae type 1		X
Swine vesicular disease virus		X
Tick-borne encephalitis virus		X
Venezuelan equine encephalitis virus		X
Vesicular stomatitis virus		X
West Nile virus		X
Yellow fever virus		X
Yersinia pestis		X
*CULTURE ONLY = agents that are considered Category A as cultures only (i.e., only when they are intentionally propagated). Note: Pathogens not listed may also be considered “Category A” if they are capable of causing permanent disability or life-threatening disease in otherwise healthy humans or animals. If there is any doubt as to whether or not a substance meets the criteria it must be considered “Category A.”		

D. **Pathological Waste:** All discarded human tissues, organs and body parts which are removed during surgery, obstetrical procedures, autopsy, laboratory, embalming, or other medical procedures, or traumatic amputation.

E. **Renal Dialysis Waste:** All liquid waste from renal dialysis contaminated with peritoneal fluid or with human blood visible to the human eye. Solid renal waste is considered medical waste if it is saturated, having the potential to drip or splash regulated blood or body fluids.

F. **Sharps:** Any used or unused discarded article that is capable of cutting or penetrating the skin or can cut or puncture packaging material during transportation and has been or is intended for use in animal or human medical care, medical research or in laboratories using microorganisms. (Ex: hypodermic needles, IV tubing with needles attached, scalpel blades and syringes with or without needles attached). Glassware, glass blood vials, glass pipettes, and similar items that are contaminated with blood, body fluids, or microorganisms are to be handled as sharps.

Note: These items are to be placed directly into designated and approved sharps containers located as close to the work area as possible. After they are full and properly closed, they are packaged for disposal by UAB's medical waste contractor.

Other glass items that are not contaminated with blood or body fluids or other hazardous materials are to be discarded in rigid, puncture-resistant containers which are labeled "glass only" or "broken glass only" as appropriate. These containers will be removed from the facility by environmental services and disposed of in the landfill.

G. **Surgical Waste:** All materials discarded from surgical procedures which are contaminated with human bulk blood, blood components, or body fluids, included but not limited to disposable gowns, dressings, sponges, lavage tubes, drainage sets, underpads, and surgical gloves.

H. **Recombinant Waste:** All material contaminated with recombinant or synthetic nucleic acid molecules.

I. **Medical Waste Storage Areas:** Defined per ADEM Admin Code R. 335-17-.02(23) as *the containment of medical waste at the generating facility or some alternative place for a temporary or extended period of time at the end of which the waste is treated or stored elsewhere. Placing waste in a container at the point of generation such as a patient's room, operating room, a laboratory, or a designated room within a research area (staging area) would not be considered as a "storage area" under this code.*

II. Education and Training

A. An education program designed to provide information about the types of medical waste encountered in the workplace and identify appropriate procedures, personal protective equipment, and precautions used for handling and disposing of medical waste in accordance with UAB, the Alabama Department of Environmental Management and the US Department of Transportation requirements is available through the UAB Department of Environmental Health & Safety to all employees who manage or have contact with medical waste. This training must be renewed every 3 years. Visit UAB Campus Leaning to access training.

Training Required for any contact with medical waste:

- **Basic Biosafety Training (ID: E-5VNQVM):** How to conduct a biological risk assessment for safe work with infectious organisms
- **Medical Waste Management for Labs (ID: E-7VR7VE):** How to properly dispose of medical waste at UAB
- **Bloodborne Pathogen Training (ID: E-E04XRO):** Bloodborne Pathogen (BBP) Standard awareness and annual refresher training (if medical waste involves contact with BBP).

B. Consultation and response to questions regarding medical waste issues will be provided on request by contacting UAB Biosafety at biosafety@uab.edu.

III. Coordination and Implementation of Medical Waste Management

A. The UAB Medical Waste Management Plan is designed to be in compliance with local, state, and federal regulations. The UAB Biosafety Program, operating in the Department of Environmental Health & Safety reviews and revises the plan yearly, and as regulations and guidelines mandate.

B. Updates to this plan are periodically reviewed and endorsed by the UAB IBC.

C. The UAB Biosafety Manager Coordinated Medical Waste Accounts and Pickup Sites and serves as a liaison between UAB campus medical waste generators and Stericycle.

IV. References:

- Alabama Department of Environmental Management Land Division-Solid Waste Program, Division 17, Code 335-17, January 2012.
- US Department of Transportation Hazardous Materials Regulation 49 CFR 173.134.
- CDC, National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th Ed. Washington, DC: US Department of Health and Human Services, Public Health Service, CDC; DHHS publication no. (CDC) 2007.