Microbiological Waste Management

Microbiological waste includes:
1. discarded cultures and stocks of infectious agents and associated biologicals
2. discarded cultures of specimens from medical, pathological, pharmaceutical, research, clinical, commercial, and industrial laboratories
3. discarded live and attenuated vaccines, but excluding the empty containers thereof
4. discarded, used disposable culture dishes
5. discarded, used disposable devices used to transfer, inoculate, and mix cultures

ON-SITE TREATMENT
Acceptable Methods of Treatment of Microbiological Waste
Steam Sterilization
1. temperature of at least 121ºC
2. pressure of at least 15 psi
3. time of at least 30 minutes
Chemical Disinfection
1. use a chemical agent which is registered with the EPA as a disinfectant and in accordance with the manufacturer’s instructions or
2. immerse the waste for not less than 3 minutes in:
   a. a freshly prepared solution of household bleach diluted 1:10 with water or
   b. a solution of 70% by volume of 2-propanol (isopropyl alcohol)
(Waste which has been immersed in a liquid disinfectant must be thoroughly drained before disposal.)

Disposal of Treated Microbiological Waste
1. Microbiological waste must be treated in accordance one of the acceptable methods listed above. If treated waste is in a liquid form it can be disposed through the sanitary sewer after chemical disinfection.
2. Place a strip of autoclave tape across the biohazardous symbol before being the sterilization cycle.
3. Place the labeled bag into the trash container labeled “Treated Waste”
4. Fill in the your information on the autoclave log book

OFF-SITE TREATMENT
Wastes to be transported off-site for treatment must be packaged securely in the Stericycle fiberbox containers available from EHS

Disposal of Untreated Microbiological Waste
1. Waste container must be filled and weight no more than 40lb
2. The red interior liner must be hand-tied closed and the top of the box must be securely folded shut. If the waste material is frozen or had the potential to leak, you must use two red bed liners before folding shut.
3. Write your lab name and extension on the exterior of the box
4. Fill out the Hazardous Waste Pickup form
(http://safety.rice.edu/Waste/Waste_Pickup_Request/) or:
5. Leave the box in the
   a. BRC - autoclave room
   b. Main Campus – GRB loading dock