Proper waste disposal serves several functions, such as making sure hazardous materials do not affect humans and also to ensure that the waste is handled in an environmentally friendly manner.

At UAB there are several ways that waste can be disposed. This latest edition of the OH&S Safety Shorts is designed to explain the various waste streams and help you, as the originator of this waste, decide which disposal method is appropriate.

**“Red bag” waste:**
Red bag, which may also be referred to as “autoclave bag waste”, is treated using microwave technology. This process is not capable of grinding small items therefore, only materials properly classified as “red bag waste” should enter into this waste stream. A designation of what is considered “red bag waste” can be found here [http://www.healthsafe.uab.edu/pages/biosafety/biosafetymanual.pdf](http://www.healthsafe.uab.edu/pages/biosafety/biosafetymanual.pdf)
View section 11.

**Sharps container waste:**
Sharps waste is items such as contaminated broken glass, syringes (with or without needles attached, new or used), scalpel blades, etc… All sharps waste is incinerated and must be placed in approved, designated sharps containers. Since this waste is treated differently from red bag waste it should be kept visually separate from red bag waste. Full sharps containers should be placed ON TOP of red bags if it is to be placed in the same red medical waste barrel as the red medical waste bags.

**Chemical waste:**
Once chemical waste is picked up from the laboratories it is taken to the Hazardous Materials Facility for evaluation. Since there are so many different properties to chemicals, the fate of the chemical waste depends on its physical and chemical properties, its purity (i.e. whether it is mixed with other chemicals), its approved EPA disposal method, etc. In general, relatively pure solvents that do not contain certain chemicals are bulked into 55 gallon drums and are used as fuel in permitted incinerators. The remainder of the waste is packaged by hazard class in drums and plastic pales by a licensed hazardous waste disposal company and sent for disposal by either incineration or other approved methods. All chemicals, even small amounts, should never be disposed of “down the drain” unless prior approval has been granted by the Chemical Safety Program.
**Chemotherapy (Yellow Barrel Waste):**
Certain toxins, carcinogens, or chemicals causing reproductive hazards are not regulated by the EPA, but pose significant hazard to the environment or those working with them. These must be disposed of by incineration. Since most medical waste is microwaveable, waste requiring incineration is placed in yellow barrels rather than the traditional red medical waste barrels. Examples include ethidium bromide, mitomycin C, cyclophosphamide, BRDU, streptozotocin, or chemicals of unknown toxicity.

**Radioactive waste:**
Radioactive waste is transported to the UAB hazardous materials facility. Some radioactive waste is allowed to decay to natural background levels and then disposed of as non-radioactive waste. In accordance with regulations of the Alabama Department of Public Health, Office of Radiation Control, some radioactive waste is disposed of in the sanitary sewer, or incinerated. Finally, in some instances, if the radioactive waste is not disposed of by one of the previously mentioned methods, it can be sent to a radioactive waste disposal site, in permitted and approved containers.

**Animal waste:**
Carcasses of animals should be kept in a designated holding area until such time disposal is required. The carcasses should be in placed in purpose specific bags and then placed inside of yellow barrels. The yellow barrel designation indicates that the carcasses are for incineration. The Hazardous Materials Facility (HMF) has a specially designed incinerator for this purpose.

**Non-hazardous “regular” waste:**
All materials than bear no potential hazard should be placed in appropriate waste receptacles. This material is handled by Environmental Services staff and ultimately ends up at the county landfill. This would also include uncontaminated broken glass. Broken glass should be placed in a sturdy box capable of supporting the weight of the glass and labeled with the words “broken glass”.

**Non-hazardous waste with patient information:**
Any paper waste that could potentially have confidential patient information must be shredded. If your area handles waste with this type of information on it you must have a method for sanitizing this waste of any information that could identify a patient. For more information refer to the HIPAA regulations and mandatory training here [http://www.hipaa.uab.edu/training.htm](http://www.hipaa.uab.edu/training.htm)

**Select Agent waste:**
All select agent use at UAB is tightly controlled. If you are a registered select agent user, the waste stream for that material is specifically outlined in training that you would have received prior to your approval to use the material.

**Universal Waste:**
Certain wastes that contain hazardous constituents, but are in such common use, are deemed universal waste. This allows for greater accumulation times and slightly less accountability in terms of their disposal. This includes waste such as nickel cadmium batteries; fluorescent light bulbs, which contain small amounts of mercury; mercury
switches; cathode ray tubes; etc. For the most part, universal wastes are either recycled for their precious metal content or reused.

**Mixed Hazard waste:**
Mixed waste contains a chemical constituent that makes it hazardous and also has a radioactive component. The chemical component could be something like hexane, making it ignitable. Since it is technically a hazardous chemical waste the limitations of storage time apply, however it must be handled by a contractor that is licensed to handle mixed radioactive waste and can only be disposed of at licensed radioactive waste disposal facilities.

**Animal bedding waste:**
*Infectious* – All potentially infectious animal waste is collected and then treated on-site by steam sterilization. After this process, the waste is disposed of as non-hazardous waste. This process DOES NOT include waste potentially contaminated with chemical hazards.

*Chemical hazard animal waste* - All chemically contaminated animal waste is collected on site and disposed of in yellow bags and then placed in yellow barrels destined for the incinerator at the HMF.

*Non-infectious* - Any animal waste that is considered non-infectious, as long as it has no other hazardous material i.e. chemical shedding hazard, is treated by placing the waste in the regular waste stream. The regular waste is handled by both Animal Resources Program (ARP) staff as well as Environmental Services staff.

*Radioactive hazard animal waste* - Radioactively contaminated animal waste must either be decontaminated or held for decay.

*Animal work containing multiple hazards* - Animal waste containing more than one type of hazard (infectious, chemical, radioactive) must be evaluated by Occupational Health and Safety prior to generation to determine the appropriate handling and disposal requirements.