**Biological Waste Handling Procedures**

All biological waste in the research area will be handled and disposed of in accordance with federal, state, and local regulations as well as University policy. Materials containing recombinant DNA, synthetic nucleic acids, and genetically altered living organisms and their products are considered biohazardous waste. Any materials to be decontaminated outside of the research area will be transported in a durable, leak-proof, closed container.

All personnel who handle biological waste will successfully complete “Biosafety and Bloodborne Pathogens Training,” “ASU Autoclave Training Video,” and “Hazardous Waste Management Training” available at: <https://cfo.asu.edu/ehs-training>. For this research, biological waste will be treated using the following decontamination methods (select all that apply):

[ ]  Chemically decontaminated (e.g., bleach, quaternary ammonia compounds)

[ ]  Thermally inactivated (e.g., steam autoclave)

[ ]  Collected in biohazard containers for EHS pickup

[ ]  Other method (Contact EHS at 480-965-1823 to discuss further)

The specific procedures for biological waste management for this research are as follows:

**Liquid biological waste:** An appropriate chemically compatible disinfectant or a spore-tested steam autoclave will be used to decontaminate the waste (select all that apply).

[ ]  An appropriate disinfectant (e.g., bleach, Lysol, Virex) will be added to the liquid biological waste to obtain the final concentration (e.g., 1:10, 1:25) and contact time per manufacturer’s guidelines. **List disinfectant, concentration, and contact time:**

[ ]  A spore-tested steam autoclave will be used to disinfect the liquid biological waste (only if bleach or other hazardous chemicals are NOT present in the solution). **List autoclave location and cycle parameters**:

After decontamination, the liquid waste is considered chemical waste. Submit an online waste-pickup request at <https://cfo.asu.edu/waste-mgmt-and-shipping> or drain dispose if pre-approved by EHS. Contact Environmental Affairs at 480-965-1823 to request drain disposal approval. **List EHS approval date**:

**Solid biological waste**: A spore-tested steam autoclave will be used to decontaminate the waste or waste will be collected in biohazard drums and picked up by EHS (select all that apply).

[ ]  Solid biological waste will be collected in an autoclavable biohazard bag (or heat-safe container) and decontaminated using an appropriate cycle in a spore-tested steam autoclave (only if bleach or other hazardous chemicals are NOT present in the materials to be autoclaved). After autoclaving, the waste will be placed in a red biohazard drum. Submit an online waste-pickup request when the red drum is two-thirds full at <https://cfo.asu.edu/waste-mgmt-and-shipping>. **List autoclave location and cycle parameters:**

[ ]  No autoclave is available. The solid biological waste will be collected in double-lined, red biohazard bags and subsequently placed into a red biohazard drum. Submit an online waste-pickup request when the red drum is two-thirds full at <https://cfo.asu.edu/waste-mgmt-and-shipping>.

[ ]  Solid human and animal waste may require special handling procedures. Please contact EHS Environmental Affairs at 480-965-1823 to discuss further.

All spills, injuries, equipment failures, or waste handling issues will be reported to EHS at 480-965-1823 and the individuals listed below.

**List names and contact numbers:**

For guidance on proper autoclave use and procedures for spore testing consult the ASU Autoclave Manual at <https://www.asu.edu/ehs/documents/asu-autoclave-safety-manual.pdf>

The EHS Biosafety/Biosecurity and Environmental Affairs teams are available to discuss biological waste handling procedures at 480-965-1823.