152176

| Name of Appendix: | **Safety when removing, disinfecting and sterilizing biowaste** |
| --- | --- |
| Definitions |  |
| **EQ** | Environmental Quality |
| **TAU** | Tel Aviv University |
| **Sharps** | Needles, syringes, blades, broken glass equipment, etc., that came into contact with animals or with biohazard risks |
| **Biowaste collection bin** | A container with closure that is labeled with the international biohazard symbol and with text, in Hebrew or English, “Danger – Biohazard” on all sides and on the cover. The container will be a different color or shape from other collection bins |
| 1. **Laboratory**
 | The laboratory collection bin will be yellow, with a maximum capacity of 25 liters. |
| 1. **Central**
 | The central collection bin, for use by an outside company, will have a capacity of 220-240 liters. |
| 1. **Sharps**
 | The collection bin for sharp biohazard material will be hard, sealed, cannot be opened after it has been closed, and fireproof and sterilization-proof. |
| **Biowaste** | Laboratory waste that contains cultures and infectious agents, including biological agents that have been fixed in formalin, blood and bodily fluids, sharps that have been contaminated, bodies of infected animals, tissues, transgenic products, etc., animal secretions and their mediums with an infections entity. |
| **Designated bags** | Transparent polypropelene bags for collecting biowaste that can be put into an autoclave and have “biohazard” written on them in addition to the international symbol in orange. |

1. General
	1. Do not pour into the sink or the general sewage system cultures or liquids that might contain microorganisms that can spread infectious, or transgenic disease and their products (as stated in Directive 07-308A).
	2. Do not throw solids that came into contact with contaminated substances in the regular trash unless they have been disinfected or sterilized beforehand (as stated in Directive 07-308A).
2. Collecting and transferring biowaste on TAU property
	1. Laboratory collection bins will be placed in the laboratory and will be emptied when they are full or at the end of the work day.
	2. Laboratory collection bins will be lined with a designated bag.
	3. Biowaste for external treatment will be collected in the central bins.
	4. Waste that is designated for sterilization in an autoclave will be placed in designated bags. The bags will be kept in the laboratory collection bins until treatment (see paragraph 2.1 for time limit in the lab).
	5. Collection bins for waste containing sharps will be filled to only 75% of their volume. Do not reuse these containers.
	6. Waste for sterilization at TAU can be collected in the rooms where sterilization will take place, and the quantity cannot be greater than the quantity that can be sterilized in three working days and in a manner that does not interfere with or endanger those working there.
	7. Biowaste must not be kept for more than three days, except for waste that is kept in the freezer (<-4°C). Biowaste must not be stored for longer than 30 days in the freezer.
	8. Waste to be treated shall be transferred to the central collection bins or the sterilization rooms in buckets, to prevent dripping.
	9. Each bag or container being transferred for treatment shall include the name of the sender, the laboratory number and the date (see Appendix A).
	10. Do not transport people or other objects when moving biowaste in an elevator, and do not stop along the way. In buildings that have a freight elevator, general moving of biowaste shall be done only in the freight elevator.
3. Disinfecting and sterilizing biowaste at TAU
	1. Sterilization of waste shall be done according to Directive 07-328, “Safety in Disinfection and Sterilization.”
	2. Every bag or container of sterilized waste shall have a label that says “Sterilized” (see Appendix A).
	3. Disinfection using chemical agents will be done only if no chemical reaction is expected between the waste and the sterilization agent. Waste that has been sterilized using chemical agents will be sent to a designated treatment site (Ramat Hovav), except in cases where there is EQ authorization to send it to a site for domestic waste.
	4. Do not use an autoclave to sterilize biological waste that is mixed with chemical waste.
	5. The treatment of biowaste that is mixed with radioactive waste depends on the level and type of radiation. At radiation levels that require burial of the radioactive material, liquid disinfectants should be used before sending the waste for burial. The choice of disinfectant depends on the radioactive material. Do not use chloride compounds for disinfecting if there is a potential release of radioactive iodine due to chemical reaction. Both formalin and glutaraldehyde can be used instead. Do not use an autoclave to sterilize biowaste mixed with waste. Disinfect using chemical disinfectants that will not release the radioactive material. Consult with the radiation supervisor to discuss the hazards. Treated radioactive waste will be sent to a designated treatment site (The Nuclear Research Center).
	6. Sterilized waste according to the instructions will be sent to a domestic waste site.
	7. When pumping with a vacuum, install double traps that contain disinfectant material, as stated in Directive 07-308A.
4. Waste sterilization by an outside party
	1. The sterilization company must have all of the legal authorizations required (toxins permit, business license, EQ and Ministry of Health authorizations, and any other legal requirements). Furthermore, the company must be approved by the Safety Council to provide services for TAU customers.
	2. Transportation of waste by an outside entity within the TAU grounds must be accompanied by a representative of the person who ordered the service.
5. Handling animal carcasses
	1. Waste from laboratory animal carcasses, tissues and organs shall be destroyed by incineration.

**Appendix A**

The labels that are required for removal and sterilization of biowaste:

**1. Waste to be sterilized**

**Waste to be sterilized**

Name of sender

Researcher in charge

Room no. Building

Date

Risk level BL / ABSL / RG

**2. Sterilized**

**STERILIZED**