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		<p>LABORATORY WASTE HANDLING</p>	
		<p>No. Document</p>	
		<p>Edition</p>	<p>01</p>
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1. OBJECTIVE

Become a guideline in handling waste in the Biology FMIPA laboratory, especially practicum and research activities.

2. SCOPE

The implementation of this SOP applies to all biology and biology education laboratories at FMIPA UNJ.

3. DEFINITION

B3 waste is chemical waste with one or more characteristics, including:

- a) Explosive (eg: explosives)
- b) Flammable (eg fuel, solvent)
- c) Is reactive (eg: oxidizing materials)
- d) Dangerous/harmful (eg heavy metals)
- e) Cause infection (eg: bacteria / hospital waste)
- f) Is corrosive (eg: strong acid)
- g) Is irritative (eg: strong base)
- h) Toxic (eg: HCN, As)
- i) Carcinogenic, Mutagenic and Teratogenic (eg mercury, benzene derivatives)
- j) Radioactive Materials (eg: Uranium, plutonium, etc.).


Microorganism waste, namely bacterial cultures, molds, yeast, or tissue culture plantlets that are contaminated with bacteria or fungi and are no longer needed in laboratory activities.

Organic waste, namely animals and plants or their parts (such as fish, frogs, mice, internal organs, leaves) which are no longer used in laboratory activities.

Sharps waste, namely the remains of sharp equipment such as syringes, surgical blades, razor blades and glass shards that are no longer used in laboratory activities.


4. LEGAL BASIS

- 4.1. UU no. 1 of 1970 Concerning Occupational Safety
- 4.2. Government Regulation No.101 of 2014 concerning Waste Management Hazardous and toxic materials
- 4.3. Minister of Environment Regulation No 12 of 2020 Concerning Material Waste Storage Dangerous and Toxic

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5. TERMS OF SERVICE

- 5.1. Procedure for handling hazardous and toxic waste (B3)
1. Chemical waste is separated for each material and put into special waste jerry cans.
 2. Mixed chemicals are disposed of in special waste jerry cans and separated for each test using a different mixed material. The jerry cans are labeled with the names of the ingredients in the waste mixture
 3. Waste jerry cans are placed in corners to avoid contact with lab users and lined with trays to avoid contact with the floor.
 4. All waste stored in the data is the name, amount and date of disposal.
 5. Waste that has been collected in the laboratory will periodically be submitted to the waste management.
- 5.2. Handling of microbial waste
1. The rest of the microorganism waste was destructed by autoclaving at 121 °C for 25 minutes.
 2. Waste that has been destructed is put into waste plastic.
 3. Waste is disposed of in a large dump.
- 5.3. Handling of organic waste (living things and their parts)
1. Animal waste left over from laboratory activities is collected by each group.
 2. Animal waste is the responsibility of each group to be buried outside the campus environment.
 3. Plant waste left over from laboratory activities is collected by each group.
 4. Plant waste is disposed of in a large dump.
- 5.4. Handling of sharp waste
1. Sharps left over from laboratory activities are separated by type.
 2. Used syringes are put in separate jerry cans
 3. The scalpel scraps are put in a sealed glass bottle, then collected in a special sharps disposal area.

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6. PROCEDURE K3L FOR USERS OF THE BIOLOGY LABORATORY

NO.	PROCESS	EXECUTOR			QUALITY STANDARDS		RELATED DOCUMENT
		User	Head of lab	Laboratories	TIME	OUTSIDE	
1	Waste grouping	v					
2	Disposal of waste by group	v					
3	Record the waste that is disposed of	v					
4	Report to the laboratory regarding the waste that is disposed of	v		v			
5	Inform the collected waste		v	v			
6	Disposal of waste to the manager		v	v			

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7. EVENT ORGANISER

- 7.1. Lecturers and students in the biology clump, FMIPA and outside parties
- 7.2. PLP/ Laboratories
- 7.3. Head of Laboratory

8. INTERNAL MONITORING

- 8.1. Report the list of waste disposed of to the PLP/laboratory
- 8.2. Replace the waste disposal site when it is full
- 8.3. Dispose of collected waste to the manager

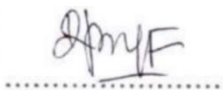
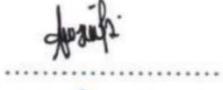



9. EXECUTOR PERFORMANCE EVALUATION


- 9.1. The head of the laboratory evaluates the handling of laboratory waste


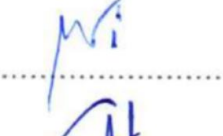

10. DOCUMENT CHANGE HISTORY

NO	REVISION TO	REVISION DATE	BEFORE REVISION	AFTER REVISION	MATTER
1	00	18 August 2022	-	-	1- 5
2					

11. ENDORSEMENT

	Name	Position	Signature	Date
Made by	Deselina F	PLP Biology Laboratory		28 August 2022
	Hazleni M, S.Si			
	Sayid R, S.Si			
Checked by	Ns. Sri Rahayu, S. Kep., M. Biomed.	Head of Lab. Biology		5 September 2022
	Ade Suryanda, M.Sc	Head of Lab. Biology Education		7 September 2022

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Endorsed by	Dr. Reni Indrayanti, M.Sc	Study Program Coordinator. Biology		12 September 2022
	Dr. Rusdi, M. Biomed	Study Program Coordinator. Biology Education		13 September 2022
	Dr. Supriyatin, M.Sc	Study Program Coordinator. Master of Biology Education		15 September 2022