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EMERGENCY RESPONSE PROCEDURE AND CONTINGENCY PLAN FOR LMO		


EMERGENCY RESPONSE PROCEDURE AND CONTINGENCY PLAN FOR LIVING MODIFIED ORGANISM (LMO)

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REVISION HISTORY

Revision Number	Revision Date	Description of Amendment / Change

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1. OBJECTIVE

The purpose of this procedure is to help minimize or rectify incidents of the individuals involved in the laboratory or the surroundings.

2. SCOPE


This SOP covers all procedures involving the contingency plan at the Kulliyyah of Science.

3. DEFINITION

1. IUM - International Islamic University Malaysia
2. KOS - Kulliyyah of Science
3. IBBC - Institutional Biosafety and Biosecurity Committee
4. SOP - Standard Operating Procedure
5. SO - Science Officer
7. LMO - Living Modified Organism
8. PIC - Person in-charge
9. PPE - Personal Protective Equipment
10. HSE - Health, Safety and Environment

4. RESPONSIBILITY

- 4.1 All laboratory users shall be responsible to comply with this safe operating procedure.

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5. PREREQUISITES

- 5.1 All laboratory users are required to understand the procedures and adhere to them. They must also wear suitable Personal Protective Equipment (PPE) such as covered shoes, lab coats, rubber gloves, masks (when required), and goggles (when required).

6. PROCEDURES

6.1 General Emergency Response Procedure


- 6.1.1 Identify the type(s) of LMO you are working with.
- 6.1.2 Identify the location of the fire extinguisher, eye wash, and safety shower in the lab and understand how to use them.
- 6.1.3 Be familiar with the evacuation procedures and exits.
- 6.1.4 Notify the technical staff in charge immediately after any injury, fire, explosion, or spill, no matter how small.
- 6.1.5 Know the emergency contact number.

Emergency contact numbers:

Laboratory Management Office	: +609-570 2610
IUM FH Clinic	: +609-570 4444
IUM OSEM	: +609-570 5555
Fire Fighter (Bomba)	: +609-513 0994
Emergency line	: 999

6.2 First Aid Measures

- 6.2.1 In case of skin contact with LMO:
- Take off immediately all contaminated clothing.
 - Rinse skin with water/ shower.

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6.2.2 In case of eye contact with LMO:

- i. Rinse out with plenty of water.
- ii. Remove contact lenses if worn.

6.2.3 If swallowed with LMO:

- i. Drink water (two glasses at most).
- ii. Consult a doctor if feeling unwell.

6.2.4 In case of puncture wounds, cuts and abrasions contacted with LMO:


- i. Notify the technical staff in charge / Biosafety Officer. Get help from the first aider (the technical staff himself normally is the first aider).
- ii. Control bleeding by using direct pressure with a clean towel.
- iii. Elevate the injured area to reduce blood flow as well as swelling.
- iv. Wash the hands and any affected area with tap water.
- v. Apply an appropriate disinfectant to the skin.
- vi. The affected individual should remove protective clothing.
- vii. Seek medical attention if necessary.

6.2.5 In case of inhalation of potentially LMO infectious aerosol release:

- i. Immediately vacate the affected area, and any exposed person(s) should be referred for medical advice.
- ii. Inform the Person Incharge / Biosafety Officer.
- iii. Do not allow anyone to enter the room for an appropriate amount of time (e.g. 1 hour) to allow the aerosol to be carried away and for heavier particles to settle.
- iv. If the laboratory does not have a central air exhaust system, the entry should be delayed (e.g., 24 hours).
- v. Put the signage indicating that entry is forbidden.
- vi. After the appropriate time, the decontamination procedure should be carried out and supervised by the biosafety officer with proper protective clothing and respiratory gear.

Immediately consult the doctor if any indication of immediate medical attention and special treatment is needed.

Cross-reference with the IIUM-HSE-PROC-08: Emergency Preparedness and Response

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Cross-reference with the IIUM-HSE-PROC-12: Incident Management

7. REFERENCE

- 7.1 Biosafety, D. O. (2010). Biosafety Guidelines Contained Use Activity of Living Modified Organism. Putrajaya, Malaysia: The Ministry of Natural Resources and Environment Malaysia.
- 7.1.1 WHO, (2004). *Laboratory Biosafety Manual 3rd Edition World Health Organization. World Health Organization 3rd Edition.* Geneva.
- 7.2 IIUM-KOS-SOP-40: Personal Protective Equipment Management
- 7.3 IIUM-HSE-PROC-08: Emergency Preparedness and Response
- 7.4 IIUM-HSE-PROC-12: Incident Management

8. APPENDIX

N/A.