

Biosafety and Laboratory Disposal Guideline Intuitional Biosafety Committee (IBSC)

[This guideline has been endorsed in the meeting of the IBSC, held on 02/04/2019]

Initiation of the project:

1. Any research work involving biological agents which are under Risk Group 1 or above needs IBSC approval before initiation of the laboratory work. Application should be submitted through head of the department to IBSC and prescribed Biosafety Review form should be used for this form (**Annexure- I**).

2. The research work involving animals, and clinical samples need to be cleared by appropriate University Ethics Committee.

Functioning/handling and maintenance of the laboratory and personnel

1) Appropriate precaution should be taken during collection of samples.

2) Appropriate measure should be taken during storing of the risk group organism or samples.

3) The laboratory containment as per suitable biosafety level which is based on handling of biological agent of particular risk group as per “Regulations and Guidelines on Biosafety of Recombinant, DNA Research and Biocontainment, 2017”

4) Depending upon the work envisaged, organisms listed in higher risk groups (RG 2/3) may be handled in lower containment laboratory provided, if the work does not involve genes known to be involved in pathogenesis/carcinogenesis/production of toxins, etc. Accordingly, lower containment facility may be used with prior approval from IBSC.

5) Annual Medical surveillance report is required for those personnel working in the laboratory with Risk Group 2 or higher biological organism or hazardous substance. PhD supervisor/PI should ensure for the Medical surveillance report for those working under their supervision and keep available for IBSC. For this purpose, “Guidelines and Handbook for Institutional Biosafety Committees (IBSCs)- 2011” may be consulted.

Decontamination and Disposal

1. Segregation of different category of laboratory waste should be done at the point of laboratory waste generation. For details refer to “Bio-Medical Waste Management Rules, 2016”, Ministry of Environment, Forest And Climate Change, Government of India.

2. Every Biological laboratory should keep two types of waste bin (i) Yellow Bin (ii) Red Bin with “Non-biodegradable recycle” label.

3. **Yellow Bin** – This bin must be used for keeping the: (i) all types of biological waste after disinfection and sterilization and (ii) general categories of nontoxic chemicals waste as per “Bio-Medical Waste Management Rules, 2016”

4. **Red Bin** – This bin must be used for keeping all types non-degradable laboratory waste of plastic materials – like all types culture dishes, disposable pipette, syringes and other recyclable materials after proper disinfection and decontamination. The

segregation and disinfection of different type of laboratory waste must be done as per “Bio-Medical Waste Management Rules, 2016”.

4. All the waste should be wrapped in Non-chlorinated or autoclave safe /waste plastic bags of BIS standard and should be disposed regular basis to the designated waste bin of the building.

5. Every department /or building should designate particular area to keep three types large waste Bin:

Green Bin:

For biological and other waste collected from the Yellow bin of the different laboratories

Red Bin:

For plastic /recycled waste collected from the Red bin of the different laboratories

Blue Bin

:For metallic and glass and other waste [Not for e- waste]

Any type of non functional instruments or parts or junk materials should be disposed as per university junk disposal procedure. These items are strictly prohibited to dispose in any of these three bins .

Disposal of Hazards Chemical

1. The hazardous chemicals must be disposed to the specially designated shrink for hazardous chemical disposabl as per availability of the respective departments.

Radioactive work:

It is required to take necessary permission / necessary clearance for handling of Radioactive materials / isotope / materials suspected with radioactivity emission from the AERB. Such document needs to be submitted to IBSC for necessary purpose as per norms.

ANNEXURE – I
THE UNIVERSITY OF BURDWAN
Institutional Biosafety Committee
Biosafety Review Form

Title of the project/PhD program/Any other research program :

Name of the PI/PhD enrolled student :

Name of the Supervisor (for PhD program) :

Department :

Name of the funding agency (if any):

Duration of Project/PhD study (ongoing project) :

Start Date (if any) :

Name/s and types of the Biological Organism involved in the above research program
(Mention the Risk group as per DBT guideline 2017) :

Mention the Biological containment facilities that are available for the above research program as per the involving of biological agent of Risk group category based on DBT guideline 2017:

Abstract (400 words) : [mentioning the experimental procedure and involvement of the biological agents/materials] [separate sheet may be used]

Mention the procedure for disinfection / decontamination disposal of the biological /chemical/other hazardous waste involve in the aforesaid research / study purpose:

(Signature of PI/PhD Supervisor/ Head of the Dept.)

(Separate form need to be used for every research project/PhD program)

THE UNIVERSITY OF BURDWAN

Institutional Biosafety Committee (IBSC)

Chairman	:Prof. Nimai Chandra Saha, Vice Chancellor, BU
DBT nominee	:Dr. Sudit Shekhar Mukhopadhyay , NIT Durgapur
Member Secretary	:Prof. Anupam Basu, Deptt. Of Zoology, BU
Outside Expert	:Prof. Subrata Dey, Vice Chancellor, Brainware University
Biosafety Officer	:Dr. Gispati Chakrabarty, Health Centre, BU
Internal members	:Prof. Apurba Ratan Ghosh, Deptt. Of Environmental Science Prof. Tusar Kanti Maity, Deptt.of Botany, BU Prof. Anandamay Barik, Deptt. of Zoology, BU Dr. Indrani Chandra, Deptt. Of Biotechnology, BU Dr. Pradipta Saha, Deptt. Of Microbiology, BU

For any information and submission of Biosafety Review form, Contact:

Member Secretary
Institutional Biosafety Committee (IBSC)
Office of the IBSC
Department of Zoology
Golapbag
The University of Burdwan
Burdwan

For Medical surveillance, Contact :

Biosafety Officer
University Health Centre
The University of Burdwan
Burdwan

Necessary Further Information:

1. RCGM, Deptt. Of Biotechnology, Government of India
2. Regulations and Guidelines on Biosafety of Recombinant DNA Research & Biocontainment 2017
3. Guidelines and Handbook for Institutional Biosafety Committees (IBSCs),2011
4. Bio-Medical Waste Management Rules, 2016