



# Standard Operating Procedure (SOP) for Bio-Medical Waste (BMW) Management

**1. Purpose:** This Standard Operating Procedure (SOP) is designed to establish a practical framework for Bio-Medical Waste (BMW) Management at THDCIL in compliance with the Bio-Medical Waste Management Rules 2016. It outlines the responsibilities and procedures for the collection, segregation, transportation, treatment, and disposal of BMW generated at THDCIL projects/units.

2. Scope: This SOP is applicable comprehensively to all Projects/Units/Offices of THDCIL.

**3.** Duties of the Occupier(THDCIL) : It shall be the duty of every occupier, defined as a person with administrative control over institutions generating BMW, to ensure:

3.1. Infrastructure for segregation of BMW in coloured bags or containers within the premises.

3.2. Phasing out chlorinated plastic accessories and implementing a Bar-Code System for BMW containers.

3.3. Segregation of liquid chemical waste at source and pre-treatment or neutralization.

3.4. Proper disposal of solid waste other than BMW under relevant waste management rules.

3.5. Ensuring occupational safety for healthcare workers, including personal protective equipment and immunization.

3.6. Taking precautions to avoid adverse impacts on human health and the environment.

3.7. Reporting major accidents related to BMW handling to the State Pollution Control Board (SPCB) and the Ministry of Environment, Forest and Climate Change.

## 4. Procedure for Authorization:

4.1. Every occupier must obtain authorization from the State Pollution Control Board (SPCB) by applying in Form II.

4.2. Authorizations are deemed valid if not objected by SPCB within 90 days.

4.3. Refusals must be justified in writing with an opportunity for the applicant to be heard.

## 5. Treatment and Disposal:

5.1. BMW shall be treated and disposed of following Schedule I and complying with the standards provided in Schedule II.

5.2. Segregated waste is to be handed over to CBMWTF if available within 75 Km; otherwise, BMW treatment equipment must be established as per authorization.

5.3. Recyclables from pre-treated or treated BMW, such as plastics and glasses, shall be recycled through registered/authorized recyclers.

#### 6. Segregation, Packaging, Transportation, and Storage:

6.1. Segregation of BMW must occur at the point of generation into containers or bags labelled as per Schedule IV.

6.2. Bar codes and GPS must be used for tracking BMW transportation.

6.3. Microbiology waste and clinical laboratory waste shall be pre-treated before packing and sending to CBMWTF.

#### 7. Maintenance of Records, Documentation, and Annual Report:

7.1. Maintain records related to BMW generation, collection, storage, transportation, treatment, disposal, and handling.

7.2. Submit an annual report to SPCB and upload it on the company's website.

7.3. Report major accidents related to BMW handling to SPCB and include them in the annual report.

**8. Review and Revision:** This SOP shall be reviewed annually or as required to align with any changes in waste management rules and regulations. All units of THDCIL must comply with this SOP to ensure effective BMW management.

#### 9. Continuous Improvement:

THDCIL shall continually assess and improve its Bio-Medical Waste Management practices to minimize environmental impact and promote sustainability.

# 10. Appendix: Responsibilities and Timeline

Steps	Responsibility	Concerned Department	Target Date
01	Send a reminder letter to the project site to provide the information.	Corporate Environment Department: THDCIL-Nodal Department	Next working day of succeeding month of the reporting quarter
02	Collect information in consultation with the Medical department/ HR&A/ Services/ any other relevant department (as applicable).	Department:	Within 7 days
03	Collect information from respective departments at the project site and provide the waste data to the Project Nodal Department on/before the 7 <sup>th</sup> date of succeeding month of the reporting quarter.		

Steps	Responsibility	Concerned Department	Target Date
04	Provide the waste data in the Excel sheet to Corporate Nodal Department.	1	On/before 15th date of succeeding month of the reporting quarter.
05	Collect and analyze data received from respective project nodal officers, manage data on a quarterly basis, and appraise waste data to the concerned authority.	Environment Department:	On a quarterly/annual (FY) basis

