



UNIVERSITY

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“CELEBRATING DREAMS”

HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT POLICY



Message from Vice Chancellor

Dear Students, Faculty, and Staff,

At ITM University, Gwalior, we are deeply committed to fostering a sustainable and environmentally responsible campus. As part of this commitment, I am pleased to introduce our comprehensive Policy on Management of Degradable and Non-Degradable Waste. This policy reflects our dedication to minimizing our environmental impact, promoting sustainable practices, and ensuring the well-being of our community and the planet.

Waste management is not just an operational necessity; it is a moral obligation that each of us shares. The effective management of waste, both degradable and non-degradable, is critical to reducing pollution, conserving resources, and protecting our natural environment. Our policy is designed to address these challenges by implementing best practices in waste segregation, disposal, recycling, and overall waste reduction across the university.

This policy outlines clear guidelines and responsibilities for every member of the ITM University community. From proper waste segregation at the source to the responsible disposal of hazardous materials, every step we take is vital in creating a cleaner, safer, and more sustainable campus. I urge each of you to familiarize yourself with this policy and actively participate in its implementation.

Together, we can make a significant difference. By adhering to these guidelines, we not only contribute to a healthier environment but also set an example for sustainable living that extends beyond our campus. I am confident that with your support and commitment, ITM University will continue to lead by example in environmental stewardship.

Let us all take pride in our collective efforts to manage waste responsibly and build a greener future for our university and our world.

Thank you for your cooperation and dedication.

Vice Chancellor
ITM University Gwalior

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HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT POLICY

ITM University, Gwalior is committed to promoting environmental sustainability by ensuring proper handling, segregation, and disposal of various types of waste generated on campus, including biodegradable, non-biodegradable, biological, chemical, radioactive, and e-waste. This policy outlines the university's approach to managing these waste types in compliance with national and international regulations, thereby protecting public health and the environment.

Objective

The objective of this policy is to:

- Provide guidelines for the safe handling, segregation, collection, storage, and disposal of biodegradable, non-biodegradable, biological, chemical, radioactive, and e-waste.
- Ensure compliance with local, national, and international regulations for hazardous waste management.
- Minimize the environmental and health risks associated with improper waste disposal.

Scope

This policy applies to all university departments, laboratories, research facilities, and administrative units that generate waste, including biological, chemical, radioactive, and e-waste.

Waste Segregation and Management

Biodegradable and Non-Biodegradable Waste

- **Biodegradable Waste:** Includes food waste, plant material, and other organic materials. This waste will be processed through composting units or sent for environmentally safe disposal.
- **Non-Biodegradable Waste:** Includes plastics, metals, and other non-decomposable materials. This waste will be segregated and sent to certified recycling centers or landfills.

Biological Waste Handling and Disposal

- **Definition:** Includes tissues, blood, body fluids, and other organic materials generated from laboratory experiments or medical procedures.
- **Segregation:** Must be segregated at the source in color-coded biohazard bags and containers.
- **Handling and Storage:** Must follow biohazard safety protocols, with secure storage areas.
- **Disposal:** Certified bio-medical waste disposal agencies will handle biological waste, with proper records maintained for auditing purposes.

Chemical Waste Handling and Disposal

- **Definition:** Includes hazardous chemicals, solvents, acids, alkalis, and laboratory reagents.
- **Segregation:** Must be segregated based on hazard class. Proper labeling and documentation of chemicals are mandatory.
- **Handling and Storage:** Special containers must be used, and separate areas should be designated for storage to prevent reactions.
- **Disposal:** Certified chemical waste disposal agencies will ensure safe disposal following regulatory guidelines.

Radioactive Waste Handling and Disposal

- **Definition:** Includes materials emitting ionizing radiation used in research, teaching, and medical applications.
- **Segregation:** Classified into low-level, intermediate-level, and high-level waste, stored in shielded containers.
- **Handling and Storage:** Requires protective gear and clearly marked storage areas.
- **Disposal:** Licensed agencies will be contracted for safe transport and disposal, complying with the Atomic Energy Regulatory Board (AERB) guidelines.

E-Waste Handling and Disposal

- **Definition:** E-waste includes discarded electronic devices such as computers, mobile phones, printers, batteries, and other equipment containing hazardous materials.
- **Segregation:** E-waste must be segregated from other waste types and stored in dedicated e-waste bins or containers.
- **Handling and Storage:** E-waste must be handled carefully to avoid damage that may release hazardous substances (e.g., lead, mercury). Storage areas for e-waste should be secure and protected from moisture and extreme conditions.
- **Disposal:** The university will collaborate with authorized e-waste recyclers for the collection and recycling of e-waste. Vendors must provide certifications for the safe disposal or recycling of the collected e-waste.

Waste Collection and Disposal Protocols

Collection

All waste (biodegradable, non-biodegradable, biological, chemical, radioactive, and e-waste) must be segregated at the source into clearly labeled containers. Collection schedules will be designed based on the type of waste generated by departments or facilities.

Disposal

Waste disposal will be managed through partnerships with certified disposal companies, which will handle the transportation and destruction of waste materials in compliance with Central Pollution Control Board (CPCB) guidelines and other relevant regulations.

Roles and Responsibilities

Waste Management Committee

- **Function:** A dedicated Waste Management Committee will oversee the implementation of this policy. The committee will collaborate with departments and external agencies to ensure the safe and compliant handling of all waste types, including e-waste.
- **Members:** The committee will consist of representatives from academic and administrative departments, health and safety officers, and external consultants, if necessary.

Departmental Responsibilities

- Each department or laboratory must appoint a waste management coordinator to ensure compliance with this policy.
- Departments handling biological, chemical, radioactive, or e-waste must conduct regular training for staff and students on safe handling, storage, and disposal protocols.

Monitoring and Auditing

Monitoring:

The Waste Management Committee will regularly monitor compliance with waste management practices across the campus. Each department will submit a bi-annual waste audit report.

Auditing:

The university will conduct annual audits to ensure compliance with waste disposal regulations. Records of waste generation, segregation, and disposal must be kept by each department and made available for review during audits.

Training and Awareness

Regular training sessions will be conducted for faculty, students, and staff on the following:

- Safe handling and disposal of biological, chemical, radioactive, and e-waste.
- Use of personal protective equipment (PPE) in waste management.
- Emergency protocols for handling hazardous waste spills or accidents.

Incident Reporting

All incidents related to improper waste handling or disposal, including spills or exposure to hazardous materials, must be reported to the Waste Management Committee immediately. An incident report must be filed, and corrective actions will be taken to prevent future occurrences.

Compliance and Penalties

Non-compliance with this policy will result in penalties, which may include:

- Suspension of lab or research activities.
- Disciplinary actions against responsible personnel.
- Fines or penalties imposed by regulatory bodies for environmental violations.

Policy Review and Amendments

This policy will be reviewed annually by the Waste Management Committee to ensure its relevance and effectiveness in handling waste safely and sustainably. Amendments may be made as needed to reflect changes in environmental regulations or waste disposal technologies.

WASTE MANAGEMENT AT ITM UNIVERSITY, GWALIOR

Solid Waste Management:

The Solid Waste generated from the various departments and institutes of ITM University mainly consists of Papers, Packaging (Plastic) material, cardboard, and waste food. The other major source of solid waste is garden waste such as dried leaves and green cuttings. ITM University has developed a practice of segregating waste at its generation and has provided a two-bin system (i.e. Dry Waste and Wet Waste) in all buildings. The waste dry waste is then taken to the Incinerator for burning under controlled conditions. Thus the dry waste is managed by controlled burning. A place is earmarked in the campus wherein garden waste is dumped in large pits and naturally composted in the due course of time is used as manure to maintain the lush greenery and in agricultural lands.



Compost Pits

Liquid Waste Management

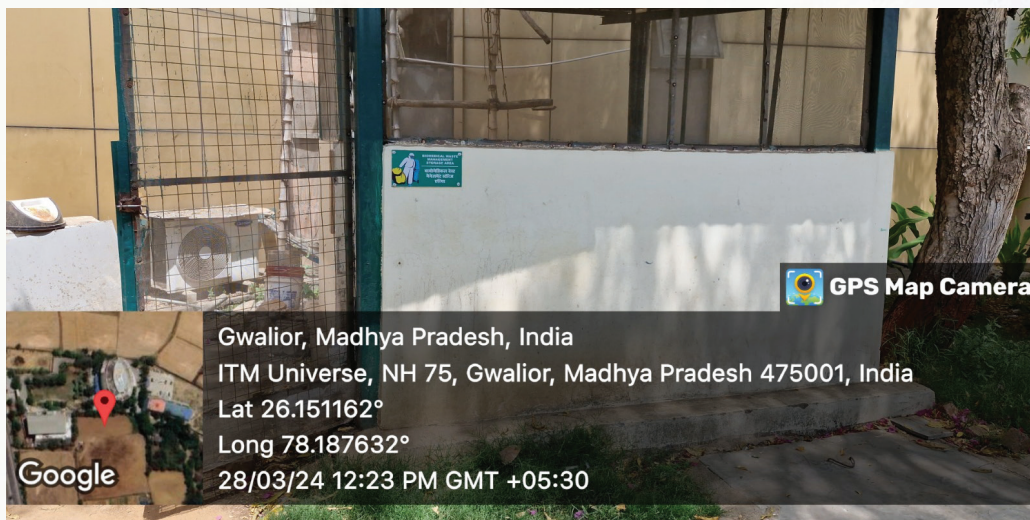
ITM University has installed a 550 KLD capacity Integrated Wetland System for the treatment of Sewage. The quality of treated effluent is well within stipulated limits by the pollution control board. There are total 35 Soak Pits/ Septic Tanks were installed underground for the final disposal and management of sewage generated from the respective buildings



Septic tanks at various places in campus

Biomedical Waste Management

The university prioritizes proper biomedical waste management to ensure the safety and health of its community. Through stringent protocols and dedicated facilities, biomedical waste is segregated, collected, and disposed of according to regulatory guidelines. Education and training programs empower staff and students to handle biomedical waste responsibly, minimizing environmental and health risks. The university's proactive approach underscores its commitment to fostering a safe and healthy campus environment. Further sent to incineration for further management which is been outsourced.



Biomedical waste collection area



External Bio-Medical Waste Carrier van

E Waste Management

The university implements robust e-waste management practices to responsibly handle electronic waste. Through awareness campaigns and designated collection points, students and staff are educated and encouraged to properly dispose of their old electronic devices. Partnering with certified recyclers ensures that e-waste is recycled or disposed of in an environmentally friendly manner, aligning with the university's commitment to sustainability and environmental stewardship.



E Waste collection area sent for recycling

Waste Recycling System

Reduction and reuse of resources is a unique tradition of ITM University. Paper being a major waste material, emphasis is given to recycling it. All papers generated through project submissions are reused for another side.

The manure is created out of the flowers, nonedible fruits buds, and leaves by using a natural process in campus. The used bottles, waste iron, and bus tyres are recycled in many ways and are made into decorative items, feeding for birds, etc.



Photos of Unused tyres and made sofa, chairs

Review and Revision

This policy will be reviewed periodically to ensure its effectiveness, relevance, and alignment with legal requirements. The University will engage relevant stakeholders, including student and employee representative bodies, in the review process. Necessary revisions will be made to address emerging issues, changes in legal requirements, or feedback from the ITM University community