



WASTE MANAGEMENT POLICY

2024-25

Shobhit University

**Babu Vijendra Marg, Adarsh Institutional Area, Gangoh,
Distt. Saharanpur - 247341**

1. Introduction

Waste management is a crucial aspect of maintaining environmental sustainability, ensuring public health, and complying with national and international waste disposal regulations. University generates a significant amount of waste from various activities, including administrative work, laboratories, hostels, and medical facilities. Effective waste management policies help in minimizing environmental impact, reducing health risks, and optimizing resource utilization through recycling and safe disposal practices.

This policy aims to establish systematic procedures for handling different types of waste, including solid waste, liquid waste, biomedical waste, e-waste, and chemical waste, ensuring that the university adopts a responsible and sustainable approach to waste disposal.

2. Objectives

The objectives of this waste management policy are as follows:

- To ensure proper segregation, collection, storage, treatment, and disposal of waste generated within the university premises.
- To comply with national and international waste management regulations and environmental guidelines.
- To promote recycling, waste reduction, and sustainable disposal methods.
- To train and educate students, faculty, and staff on safe and responsible waste disposal practices.
- To reduce environmental pollution and promote hygiene and safety within the campus.
- To integrate sustainable waste management strategies into the university's environmental and social responsibility framework.

3. Waste Classification and Management Procedures

The university generates various types of waste, each requiring specific handling procedures to ensure safe and efficient disposal. This policy classifies waste into five main categories:

- Solid Waste
- Liquid Waste
- Biomedical Waste

- E-Waste
- Chemical Waste

Each category follows a systematic approach to segregation, collection, treatment, and disposal.

A. Solid Waste Management

Solid waste includes general waste such as paper, plastics, food waste, packaging materials, and garden waste. It is one of the most common types of waste produced in educational institutions.

Handling Procedures

1. Segregation

- Biodegradable waste (food scraps, garden waste) will be collected in green bins.
- Non-biodegradable waste (plastics, paper, metals) will be disposed of in blue bins.

2. Collection and Storage

- Daily collection by housekeeping staff.
- Temporary storage in designated waste collection centers.

3. Treatment and Disposal

- Recycling paper, plastics, and metals through authorized recyclers.
- Safe disposal of non-recyclable waste through authorized waste management organizations.

B. Liquid Waste Management

Liquid waste includes wastewater from laboratories, kitchens, hostels, and sewage. Proper treatment ensures environmental safety and prevents contamination of water bodies.

Handling Procedures

1. Segregation

- Domestic wastewater (from kitchens, bathrooms) is treated separately.
- Laboratory wastewater is stored in designated disposal units.

2. Collection and Storage

- Drainage systems direct domestic wastewater to sewage treatment plants (STPs).
- Hazardous chemical wastewater is collected in leak-proof containers.

3. Treatment and Disposal

- STPs process domestic wastewater before its safe discharge or reuse.
- Neutralization and dilution of chemical wastewater before disposal in accordance with environmental regulations.

C. Biomedical Waste Management

Biomedical waste includes waste from hospitals, research laboratories, and Ayurveda hospital, such as syringes, gloves, dressings, and herbal residues. Improper disposal can lead to health hazards and environmental contamination.

Handling Procedures

1. Segregation

- a. Color-coded bins as per Biomedical Waste Management Rules:
 - Yellow: Human anatomical waste, soiled waste.
 - Red: Contaminated plastic items.
 - Blue: Glassware, metallic body implants.
 - Black: General waste.

2. Collection and Storage

- a. Biomedical waste is collected in designated bins.
- b. Temporary storage in designated biomedical waste areas with proper labeling.

3. Treatment and Disposal: Safe disposal of incinerating infectious waste through authorized waste management organization.

D. E-Waste Management

E-waste includes obsolete or damaged electronic items such as computers, printers, batteries, and medical devices. Improper disposal leads to hazardous environmental consequences.

Handling Procedures

1. Segregation

- Separate bins for e-waste collection.
- Identification and proper storage of recyclable and non-recyclable e-waste.

2. Collection and Storage

- Secure storage areas for electronic waste.
- Periodic collection by authorized e-waste disposal agencies.

3. Treatment and Disposal

- Recycling reusable components.
- Safe disposal through government-approved e-waste recyclers.

E. Chemical Waste Management

Chemical waste includes hazardous chemicals from laboratories, Ayurveda hospital, and pharmaceutical research laboratories. Proper handling is necessary to prevent pollution and health risks.

Handling Procedures

1. Segregation:

- Categorization into hazardous and non-hazardous chemical waste.
- Labeling containers with proper chemical names and hazards.

2. Collection and Storage

- Storage in sealed, leak-proof containers.

- Designated storage areas with adequate safety measures.

3. Treatment and Disposal

- Neutralization of acids and bases before disposal.
- Disposal through authorized hazardous waste management agencies.

4. Waste Disposal Compliance and Training

- a. **Regulatory Compliance:** The university will adhere to government regulations such as the Biomedical Waste Management Rules 2016, Hazardous Waste Rules, and E-Waste Management Rules to ensure legal and ethical waste disposal.
- b. **Training and Awareness:** Regular training programs will be conducted for students and staff on proper waste management practices, including safe disposal methods, recycling techniques, and waste reduction strategies.

5. Future Sustainability Initiatives

The university aims to enhance its waste management strategies by implementing future sustainability initiatives:

1. **Waste-to-Energy Projects:** Setting up biogas plants for biodegradable waste.
2. **Green Procurement Policy:** Encouraging eco-friendly and recyclable materials for campus use.
3. **Zero-Waste Campus Initiative:** Implementing a long-term plan to make the university a zero-waste campus by reducing, reusing, and recycling waste efficiently.
4. **Collaboration with Environmental Organizations:** Partnering with government agencies, NGOs, and private waste management firms for advanced waste treatment solutions.
5. **Encouraging Student Participation:** Engaging students through eco-clubs, sustainability campaigns, and research projects on waste management.

