

WASTE MANAGEMENT POLICY



Deen Dayal Upadhyaya Gorakhpur University
A⁺⁺ Accredited by NAAC (3.78 CGPA); <https://ddugu.ac.in>
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Introduction

The Deen Dayal Upadhyay Gorakhpur, Gorakhpur Waste Management Policy is described in this document. It specifies the measures that are underway to minimize the generation of solid and liquid waste and to promote its segregation, collection, and transportation as well as its safe disposal, recycling, wastewater treatment, reuse, and safe disposal of effluent produced on campus.

In the framework of this policy, wastes include the following: construction waste, e-waste, plastics, hazardous waste, leaves, household waste, organizational waste (paper, plastic, recyclable materials (paper, card board, food waste, glass, metals), and wastewater. The policy will, among other things, take environmental concerns into account when implementing technology alternatives for waste to energy and compost.

Policy for waste Management

The university is dedicated to handling garbage generated on its campus in a timely, economical, ecologically safe way that complies with all applicable environmental laws. The institution will adhere to the Gorakhpur Nagar Nigam (GNN) norms and the waste management rules as set forth by the state of Uttar Pradesh (UP).

This policy's purview will include wastewater and solid waste (such as papers, plastics, e-waste, and hazardous trash) produced on the university's campus. It will be applicable to all university guests, students, faculty, staff, and other staff members who live on campus, as well as to other visitors.

The Strategic Plan of DDU Gorakhpur University has this waste management policy. The goal of the policy is to guarantee that all waste (solid, wastewater, and e-waste (Policy for E Waste, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur) produced on campus is managed and disposed of safely and effectively in compliance with environmental laws. It also aims to show the university's dedication to implementing and providing the best waste management practices—reduce, recover, recycle, and dispose—thus minimizing the waste's detrimental effects on the environment. The Policy emphasizes that any decisions on procurement, building construction or renovation, or both must take the environment into account. The main goals of the policy are to maintain a clean, sanitary, and habitable environment in the campus. The University is dedicated to implement a waste management procedure that is both responsible

and effective, and that complies with the environmental standards necessary for a sustainable society.

In order to help dispose of and recycle as much waste as possible, the University needs to provide the appropriate arrangements, facilities, infrastructure, logistics, and disposal/recycling infrastructure. All students, staff, and families of staff members should make sure that they take advantage of these facilities.

The waste hierarchy is illustrated in Figure 1 as a pyramid. Figure 1 emphasizes that the first action that should be taken to reduce waste generation is waste minimization. This can be accomplished by providing information on trash reduction and segregation at the source, collecting waste and then making sure it is transported and disposed of using technology within the institution or in accordance with Gorakhpur Nagar Nigam's arrangement. The university will promote reuse of certain products like paper, glass, cardboard, plant leaves and grass, construction and demolition waste, and other non-hazardous waste in an effort to decrease trash production. The State Pollution Control Board or licensed companies experienced in managing hazardous wastes must provide sufficient support for the environmentally acceptable disposal of hazardous wastes produced on university property.



Fig 1 Waste Hierarchy Pyramid

The following principles will serve as a foundation for the DDU Gorakhpur University's Waste Management Policy:

- A. Reduction and reuse at source
- B. Effective segregation at source

- C. Waste recycling
- D. Waste to composting
- E. Waste-to-Energy
- F. Waste disposal

Plastic Waste Reduction

The University will acknowledge the negative effects of producing and disposing of plastic garbage. Since plastic pollution may adversely impact the aquatic ecosystem, the university will take steps to minimize plastic usage and waste on campus. The following plans will be implemented:

- a. To reduce plastic waste on campus, compostable catering materials will replace single-use plastics in catering (food packaging, throwaway coffee cups, and cutlery) in the university canteen and other cafes.
- b. To reduce the consumption of single-use disposable cups, university employees and students will have a choice of reusable cups.
- c. With the goal to reduce waste from used plastic bottled water, reusable glasses will be used to serve water at conferences and other events.
- d. To promote bottle reuse, water coolers, RO plants, and aqua guards will be placed across the campus for use by staff and students.

Objectives

The University specifically aims to eliminate using "single use" plastics on campus by 2027 and dispose of all solid and liquid waste generated on campus responsibly by utilizing a combination of alternative materials.

- a. By prohibiting the sale or use of disposable water bottles on campus.
- b. By restoring and simultaneously ensuring that e-waste is disposed of properly.
- c. Before releasing the wastewater into the public sewers, treat the wastewater from homes and businesses in a small wastewater treatment plant. The processed wastewater can then be used for electronic waste management and gardening.

Responsibilities

For effective implementation of the university's waste management policy, the roles and responsibilities of following various stakeholders shall be as under:

1. The Vice Chancellor will designate the person who will serve as the Nodal Officer, and that person will be in charge of making sure the waste management policy is followed generally. He or she will be responsible for overseeing the implementation and logistics support for the collection, sorting, transportation, treatment, disposal, and recycling of the solid and liquid waste produced by the institution.
2. Heads of Department will ensure:
 - a. Papers, plastic, cardboard, hazardous waste, and laboratory waste should all be collected and disposed of according to departmental guidelines.
 - b. Ensure that hazardous waste is separated, stored safely, and disposed of in compliance with applicable laws in every department.
 - c. Identifying qualified or experienced individuals to carry out the hazardous waste management plans.
 - d. To guarantee a smooth flow of sewage and wastewater to the sewers, all wastewater infrastructure (toilets, urinals, sinks in laboratories, etc.) and other relevant accessories in their respective departments are in satisfactory condition.
3. Class Representative and Students Responsibility:
 - a. The Class Representative will be in charge of preserving the classrooms, laboratories, corridors, infrastructure, and dormitory clean and will counsel other students against putting trash, plastic, and other materials into these areas. If there is an issue with housekeeping, they should report it immediately to the department head or the concerned department's staff.
 - b. Every university student is responsible for maintaining the cleanliness of their individual classrooms, labs, streets, hallways, facilities, and dorms on campus. If there is a problem with housekeeping, they have to report it right away to the Warden, the Class Representative, or the relevant department/hotel employees.

4. Dean Student Welfare:

The DSW shall ensure and coordinate the cleanliness of all the hostels and compliance of this Waste management policy through the respective wardens.

5. Hostel Wardens:

The wardens shall ensure the cleanliness of all the hostels and compliance of this Waste management policy. They shall ensure that all treatment/disposal arrangement installed in their respective hostels are operational all the time. They shall ensure that all the wastewater infrastructure (toilets, urinals, sinks in laboratories etc) and devices in their respective hostels are in working condition so as to ensure smooth flow of sewage/wastewater to the sewers. He/she shall be responsible for arranging and implementing all possible infrastructure and logistics needed for ensuring full compliance of the policy.

6. In-charge Maintenance Department and Estate Officer:

- a. This infrastructure/includes; bins, brooms, wipers/moppers, phenyl/disinfectant, vehicle/trolley to transport the waste (in both campuses), workers, compost plant, landfill, safety of workers and Liaoning with the vendors/contractors/Gorakhpur Nagar Nigam etc.
- b. He/she shall also be responsible for arranging of all waste collection/transport and disposal infrastructure. He/she shall ensure the coordination of safe disposal of wastewater, solid waste (including plastics, paper, card board etc) generated in the university including the requisite designs in line with the environmental legislations.
- c. He/she shall ensure arrangement for installing the waste to energy plant- in form of biogas/compost plant, incinerator, boilers etc including the requisite designs of the same in line with the environmental legislations.
- d. He/she shall ensure identification, collection, segregation, reuse and safe disposal of e-waste generated in the university. He/she shall ensure the coordination of safe disposal of wastewater, solid waste (including plastics, paper, card board etc) generated in the university including the requisite designs in line with the environmental legislations.
- e. He/she shall ensure the coordination of safe disposal of hazardous waste generated in the university in line with the environmental legislations.

7. Every waste generator in the university
 - a. He/she shall, Segregate and store the waste generated by them in separate bins meant for biodegradable, non-bio-degradable and hazardous wastes and handover the wastes to authorised waste pickers/waste collectors as per the directions or notification by the university/GNN from time to time.
 - b. Wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or in suitable wrapping material as instructed by the university and place the same in the bin meant for dry waste or non-bio-degradable waste/dispose of in the waste bins installed in their respective girl hostels.
 - c. Store the horticulture and garden waste generated from university premises in own premises and dispose of as per the directions of the GNN issued from time to time not throw, burn or burry the solid waste generated, in classrooms, offices, laboratories, corridors, streets, roads, canteen etc in open drains/sewers.
 - d. Not organize an event or gathering of in the university without informing the concerned department head and Maintenance section at least three working days in advance.
 - e. The organiser of such event shall ensure segregation of waste at source and handing over of the same to the waste collector.
 - f. Work in close partnership with the university/GNN to ensure segregation of waste at source as prescribed, facilitate collection in separate-coloured bins, handover recyclable material to either the authorised waste pickers or the authorized recyclers.

Operational Methodology

The operational methodology can be categorized into two:

Primary Collection

The University shall ensure:

- a. source segregation of waste, to channelize the waste to wealth by recovery, reuse and recycle. This shall be done at the level of each academic department, laboratories, hostels, administrative block, main building, canteen, hostel mess etc.
- b. Shall ensure three colored bin system (for Green Waste, Dry Waste, Hazardous Waste).

- c. make arrangement for door-to-door collection of segregated solid waste from all households including hostels and academic area.
- d. establish a system to identify organizations of waste pickers or informal waste collectors to facilitate their participation in solid waste management.

Secondary Collection

The University shall:

- a. ensure three bins at every Secondary Collection Point.
- b. setup secondary storage facilities in campus of the university, with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste.
- c. provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, and textile from the source of generation or from material recovery facilities.

8. Transportation of Waste

In this, the University shall,

- a. transport segregated bio-degradable waste to the processing facilities like compost plant, bio-methanation plant or any such facility.
- b. make arrangement for in-house and on-site processing of such waste.
- c. transport non-bio-degradable waste to the respective processing facility or material recovery facilities or secondary storage facility.
- d. ensure transport of waste in segregated form in covered vehicles

Special tasks

1. The university will implement the following on immediate basis:
 - a. Proper collection and Segregation of domestic and institutional waste and timely transportation.
 - b. Daily Road sweeping-of roads, class room, departments and hostels.
100% collection at fixed time 365 days in a year.
 - c. Penalize the polluters/defaulters through a monetary fine.
 - d. Ban the sale and use of plastic carry bags (of thickness less than 50 microns) within the university.

2. Organize effective “Information, Education and Communication (IEC)” and “Capacity Building” programs.
 - The success of any Waste Management Plan depends upon the extent of public/community participation. Thus, the university shall undertake capacity building by training students, housewives and other staff of the university. It shall also organize Information, Education and Communication (IEC) activities.
 - The **main objectives of IEC** shall be to make people understand and will specifically, these includes the concept and need for segregation at source, the need to waste storage at source in separate receptacles - one for biodegradable and another for recyclable, the role of citizens in primary collection of waste from the household and handing over to waste collectors, the need to use litter bins on road sides and public places, the impact of solid waste on public health and the environment.

Implementation

For effective implementation of the WMP, there shall be a **Waste Management Policy Implementation Committee (WMPIC)**.

The constitution of the same shall be as follows :

- a) Nodal Officer, Waste Management Policy
- b) All Heads of Departments
- c) Dean of Student Welfare
- d) All Hostel wardens
- e) In charge/ Coordinator, Maintenance

Periodic Review

The Waste Management Policy will undergo periodic review to ensure it remains up-to-date with evolving best practices and reflects the University's commitment to sustainability.