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GMR Nagar,RAJAM-532 127 Vizianagaram (Dist.) Andhra Pradesh T+91 (8941) 251 592/251 593/ 252 989 F+91 (8941) 251 591 W www.gmrit.edu.in

Policy on Waste Disposal Covering Hazardous Materials

1. Introduction

GMRIT being an educational institution, the key operation does not significantly impact the environment. The institute aim is to promote the concept of "Zero waste campus" with an objective to reduce the environmental impact of solid waste through its philosophy of 5S's-(Sort, Set, Shine, Standardize, and Sustain) and 3R principle, namely Reuse, Reduce, and Recycle. Waste collection and scientific management play an extremely important role in the global cleanliness and sustainability drive along with people's health and the conservation of resources. As an institute, we feel utmost responsible to encourage the students to understand the model of solid waste management considering the present scenario. Thus, initiation of solid waste management strategies was undertaken in the campus. Planning the waste management and recycling for all of the kinds of waste generated in a region is an enormous task. To manage these wastes via scientific approach, proper understanding and logistic planning are the two essential keys to develop an effective end product out of waste.

GMRIT has policies, processes and practices on waste disposal covering hazardous waste disposal. This policy pertains to all hazardous and non-hazardous waste (dry - scrap waste, paper and cardboard, garbage and other office waste and plastic waste, wet - food waste from canteens, other organic waste such as grass, leaves etc. The hazardous waste generated in campus is divided into three different types for their management and disposal, which is as follow:

Solid Waste: The waste is generated by all sorts of routine activities carried out in the institute. It includes paper, plastics, glass, metals, foods, etc. The waste is segregated at each level and source. The administrative supervisor in each block ensures that the waste in each floor is collected at designated time intervals. The block housekeeping staff in each floor collects the waste in the dustbins provided at each floor. The floor dustbins are emptied in movable containers/dustbins provided for each block and is taken to the dumping yard provided by the institute. The institute has contacted an authorized vendor who collects the waste from the

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designated place, segregate them, recycles them and disposes them at the landfills authorized by the government.

Liquid Waste: Liquid wastes generated in campus are of two types: (i) Sewage waste (ii) Laboratory, Laundry and Cafeteria effluent waste.

The above waste is treated through a network of Sewage Treatment Plants (STPs). After treatment, treated water is subject to basic filtration followed by its reuse at different use purposes including horticulture, farm irrigation, toilet flush and cooling plant. A separate treatment unit is developed to cater laundry effluent. The operation and maintenance of sewage and effluent treatment plant is taken care by a dedicated and expert team which ensures efficient functioning of treatment unit. In winter and rainy seasons treated water is used to recharge groundwater.

e-waste: Desktop, Printer, Camera, Wi-fi devices, used Blank Cartridges, Speakers, Mouse, Keyboard, UPS, Projector Screen and Biometric Machine etc. are recycled properly. The institute maintains an inventory of all electronics items catered by IT departments and monitors its optimal performance and disposal after service period. Instead of buying a new machine buy-back option is taken for technology upgradation. The e-waste generated from hardware which cannot be reused or recycled is being disposed-off through authorized vendors as mentioned below

2. Scope:

The scope of this policy shall cover the solid (including papers, plastics, e-waste, hazardous waste) and wastewater generated in the campuses. It shall be applicable to all employees (faculty and staff) and their family members residing in the campus, students, guests and others visiting the campus. Waste processing is carried out with the 3R principle, namely Reuse, Reduce, and Recycle. The 3R principle is implemented through reducing the use of single-use materials, E-waste drops boxes, waste sorting. Hazardous and toxic waste at GMRIT is handled separately by grouping, collecting, and submitting it to certified third parties. The waste reduction hierarchy: recover, reduce, reuse and recycle.

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- √ Reducing usage of natural resources and materials,
- ✓ Recovering resources as much as possible,
- ✓ Reusing waste wherever practicable,
- ✓ Recycling materials whenever possible and thus move towards a circular economy

This is applied at every stage of our operations to minimize all types of waste, including general office waste, including paper waste and cardboards, cotton, plastic, Organic waste such as grass/leaves from garden, food waste from canteen, and hazardous waste such as oils, oil filters, fuel waste from dg sets chemicals and batteries, electronic waste.

3. Objective

The objectives of this policy are to:

- 1. Ensure waste management in accordance with all legislative requirements, plan for future legislative changes and to mitigate their effects.
- 2. Minimize waste generation at source and facilitate reduction, reuse and recycling of waste generated through authorized recyclers and vendors in a cost-effective manner.
- 3. Provide clearly defined guidelines for identifying and coordinating activities within the waste management process.
- 4. Promote environmental awareness to increase and encourage waste minimization, reuse, and recycling.
- 5. Ensure safe handling and storage of waste of various types at all facilities and locations
- 6. Promote best practices and holistic approach on waste management.
- 7. Ensure that hazardous waste, including used batteries and e-waste is sent to recyclers authorized by the State/Central Pollution Control Boards at the respective locations.

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- 8. To promote a holistic approach to waste management on campus and to give faculty, residents, employees, students, and other stakeholders with the necessary training on waste management concerns.
- 9. The Policy must be adhered to by all employees and students participating in institute activities
- 10. The institute is committed to promoting sustainable consumption and production through several elective courses in syllabus.

The cooperation of all members of the institute is needed in order to ensure a healthy environment for everyone.

Principal
Dr. CLVRSV. Prasad

PRINCIPAL

GMR Institute of Technology GMR Nagar Rajam 532127 AP