VIGNAN'S INSTITUTE OF INFORMATION TECHNOLOGY
(AUTONOMOUS)
(Approved by AICTE & Affiliated to JNTUK, Kakinada)
DUVVADA, VISAKHAPATNAM

Waste management Process

The VIIT campus is a green campus that follows standard practice of 3Rs i.e., reduce, Reuse, and Recycle for the solid waste management. The VIIT campus produces an estimated 100 Kgs of solid waste per day, which consist of recyclable waste, non-recyclable waste, organic waste, E-waste, and hazardous wastes. All the types of wastes are regularly collected and managed using the standard practices at the VIIT campus.

The type of solid waste generated in the VIIT campus and its collection and disposal methods are given in Table 1.

Table 1: Description of Solid waste generated in VIIT campus

Category	Description	Disposal Method	Collection System
Biodegradable waste	• Vegetable and fruit peels. • Leftover food. • Fruit Kernels and seeds. • Flowers and leaves.	• Collects in the bins for biodegradable waste. Converted to manure and liquid fertilizer. • All the produced manure and liquid fertilizer again used for plants and garden.	• Collection every morning for biodegradable waste.
Recyclable (Dry)	• Plastic, Paper, and Glass. • Thermocol and cardboard. • Metal, Fabric, and Leather. • Packaging material.	• Collect in the bin for non-biodegradable waste. • After collection, the recyclable waste is sent for further processing to the third party	• Collection every morning for non-biodegradable waste.
Sanitary waste	• Diapers, Sanitary Napkins. • Any material contaminated with blood.	• Securely wrap in brown/plastic bag or newspaper and mark red cross. • Collects in a separate bin provided for sanitary waste. • Final disposal through incineration.	• Collection every morning. (non-biodegradable waste)
Hazardous waste	• Bulbs, CFLs, tube lights. • Batteries, Electronics. • Broken Glass, blades, scissors.	• E-wastes are stored separately and disposed of by transferring them to the E-waste management company (Green Waves. • Acidic liquid wastes are neutralized with base and then disposed of. • Bio-medical wastes are sterilized using the autoclave	• Collected once a month through special drives

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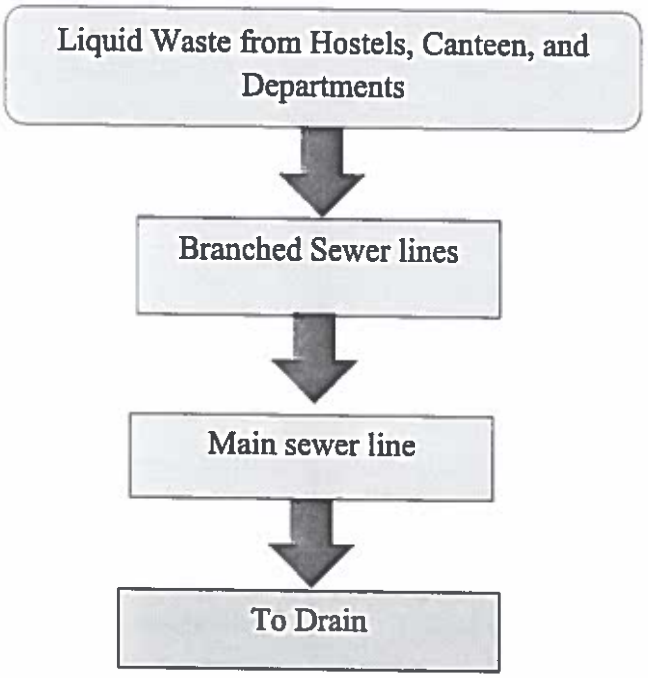
- The sewerage lines are regularly cleaned and bleached for maintaining hygiene and environment.
- Any liquid disposal from laboratories into sewerage lines is monitored to check that no hazardous chemicals are released through pipelines.

Flow chart depicting liquid waste management at VIIT campus



2) Biomedical and Hazardous waste

- Sanitary and bio medical wastes are collected on a regular basis and disposed through incineration.
- Large amount of bio-waste, whenever generated, are disposed of taking the support of external service providers.
- E-waste generation by routinely collecting, sorting and disposing off waste. E-waste related to computers and peripherals are collected, sorted, and stored. The stored E-waste is finally handed over to the partner company Green Waves with whom VIIT has signed an MOU for further processing. The partner company dispose the E-waste following the globally accepted standard practices.

Hazardous chemicals waste management:

- The acids used in chemical experiments are highly diluted and neutralized before disposal into sewerage lines.
- The hazardous chemicals used, in small quantities, are collected, sterilized, and periodically disposed of with due care in uninhabited waste lands.

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