

Waste Management

The 6 Rs of Sustainability

- **Re-use:** Take an existing product that has become waste and use the material or parts of it for another purpose, without processing it.
- **Repair:** When a product breaks down or doesn't function properly, try to fix it rather than throw it away.
- **Recycle:** Take an existing product that has become waste and reprocess the material to use in a new product.
- **Reduce:** Minimise the amount of energy and materials you use.
- **Rethink:** Ask whether we can sustain our current way of life and the way we design, make, use and dispose of products.
- **Refuse:** Don't use a material or buy a product if you think you don't need it or if it's unsustainable.



Institute's Philosophy of Waste Management

Solid Waste Management:

- Adequate number of dustbins at each building and along the road side is provided. The frequency of solid waste collection is twice in a week.

- Food waste generated in canteens and messes is about 8850 kg per month
- Recyclable materials (900 kg per month) such as plastics, glass, steel, tin cans, paper and cardboards are segregated under dry condition
- About 3000 kg of construction waste generated on an average in the form of broken bricks, dismantled walls and concrete structures which are deteriorated are used in land filling on the campus

E-Waste Management

- An e-waste of 42.5 kg per month is generated on an average.
- Hazardous waste in the form of 1) spent batteries, 2) Waste oils from busses and DG set are generated which is approximately 200 kg per month on an average.

The Trust takes the responsibility and engages the disposal of the solid waste to the vendors identified by them

Liquid Waste Management:

- The ground water available in the campus contains hardness beyond the drinking water standards. The institute installed two Reverse Osmosis (RO) systems (1000 Liters per hour capacity each). This RO system is usually operated during morning (4 am to 9 am) and evening (6 pm to 10 pm).
- Manual alert system is provided to check overflow of water tanks. The water works man always keep track on the water tanks.
- Water tanks are cleaned periodically.
- Drinking water quality standards are well maintained through periodic water quality tests.
- Pipelines, taps and other sources of water discharge are well maintained without any leakages.
- Wastewater is generated from wash rooms, toilets of all buildings, canteen and messes is collected and transported by means of well conceived sewerage system to two sewage treatment plants of 150 KLD

and 200 KLD. An extended type of activated sludge process principle is provided in the working of these sewage treatment plants. The wastewater generated is 100% domestic origin. **The treated water is used for the gardening the lawns on campus.**

- Eco-friendly floor cleaners are used and the corresponding wastewater is checked periodically and disposed after treatment if necessary.
- Chemicals in the laboratories are disposed as per MSDS (Material Safety Data Sheet) of each chemical.



Dustbins at Important Locations



Food Waste Collection



**Storage Facility –
Reusable/ Recyclable Materials**



Fallen Leaves from Trees



**Storage and Drying Yard - Grass and Bush
Cuttings, and Fallen Leaves**



Composting Yard

Solid Waste Management



**E-waste Storage Facility
(Size: 10 m x 8 m)**



Computer Waste as Wall Cladding

E-WASTE MANAGEMENT



**Reverse Osmosis (RO) System (1000
Liters per hour capacity) at College**



**Reverse Osmosis (RO) System (1000
Liters per hour capacity) at Hostel**



**Sewage Treatment Plant of 150 KLD
Capacity**



**Sewage Treatment Plant of 200 KLD
Capacity**

LIQUID WASTE MANAGEMENT