



# HANDIQUE GIRLS' COLLEGE

## Waste Management Facilities

AQAR 2020-2021

In the College, the sources of solid waste are classrooms, laboratories, staff rooms, office, library, canteen, toilets, grounds and the hostel. The types of solid waste generated have been characterized and the quantity assessed as follows:

**Source:** Classrooms, Laboratories, Staffrooms, Office, Computer Centre, Canteen, Library, Toilets, Grounds, Hostel (including living quarters, toilets and the kitchen), Both campuses

**Type of waste generated:** Paper, plastic wrappers, plastic bottles, pens, tetrapacks, cardboard, thermocol, Paper, filter paper, broken glass, pins, growth media, leftover food, Paper, metal clips, rubber band, old printer cartridges, old CDs, disposable plates, cups, paper boxes, aluminium foil, vegetable peels, rotten vegetables, leftover food, sanitary napkins, Grass cuttings, dry leaves, twigs, construction debris, broken furniture, unserviceable equipment, batteries etc.

**Quantity of waste generated per day in the College:** 39 kgs. (approx.), including 12kgs. (approx.) of vegetable peels, rotten vegetables and leftover food that is biodegradable.

For the management of the waste generated on a regular basis, the College has adopted proper methods of disposal and has also encouraged reduction, recycling and reuse of waste.

### Disposal:

- Segregation of the waste into wet and dry waste and disposal in separate, different coloured, bins.
- Non-biodegradable waste, which is dry waste, is disposed of in notified municipal collection centre.
- Used solid microbial growth media is sealed in autoclavable bags and disposed after decontamination by autoclaving.
- Construction debris generated in the College is disposed by contractors in authorized landfill sites.
- For unserviceable equipment and batteries, the College tries to negotiate buy-back or removal from site agreement during replacement.

### Reduction and reuse

- A drive has been taken to ban the use of single-use plastic in the campus.
- There is an on-going effort to reduce the wastage of food in the canteen and also in the hostel
- Paper waste is being reduced by reusing the blank side of used paper for rough work. Printing of documents, unless necessary is discouraged. The College now makes many of its documents and publications available in the digital form instead of the print form.

### Recycling

- Using waste assimilators, which are bins for assimilation of biodegradable wastes using microbial growth and vermicomposting, biodegradable waste is being converted to usable compost.  
There is a project in the campus, in which a teacher in the Chemistry department is collaborating with a technology solution developer to recycle waste plastic in the campus to usable laminates.

- Broken furniture, doors and windows are refashioned into garden seats, desks and benches for reuse. The College has donated many such desks and benches to neighbouring schools that need them.

**Liquid Waste:** A major source of liquid waste is the laboratories in the departments of Chemistry, Home Science, Botany and Zoology. Along-side this is the wastewater from toilets and bathrooms. Characterizing and quantifying the liquid waste generated in the College is a challenging task but it has been assessed that, on an average, 1.0 m<sup>3</sup> of Laboratory effluent and 3.5 m<sup>3</sup> of domestic (hostel and college campus) effluent is generated every day. The methods used in handling liquid waste include

**Disposal:**

- Liquid waste generated in the laboratories is checked for corrosiveness and disposed of after neutralization.
- Waste water from toilets and bathrooms is disposed in the drainage system.
- For sewage disposal there is an onsite system of septic tanks.

**Reduction and reuse:** In all laboratories, there are efforts to reduce the generation of liquid waste by minimizing the quantity of chemicals used and also through reuse.

**E-waste:** The management of E-waste is a big challenge for every organization. With recycling being a major component in E-waste management, it is an expert process. The College has adopted the following measures for its e-waste:

**Disposal for recycling-** The College is working with ‘Karo Sambhav’, who have installed an e-waste collection point in the College, for the proper disposal of its e-waste.

**Reduction and reuse:**

- Reducing the use of CDs and DVDs through use of reusable pen-drives and external hard drives.
- Refilling used toners for printing