





Facilities for Waste Management

#### Facilities for degradable and

#### non- degradable waste management



#### 7.1.3. Facilities for degradable and nondegradable waste management

Facilities Available
Solid waste management
Liquid waste management
Biomedical waste management
E-waste management
Waste recycling system
Hazardous chemicals and radioactive waste management

173, Agaram Main Rd., Selaiyur, Chennai, Tamil Nadu 600073

#### Facilities for degradable and

#### non-degradable waste management

#### **Facilities available for Waste Management**

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH has undertaken waste management initiatives with the objective of providing an end-to-end solution to the waste generated at its campus through an environmentally sound processing and disposal technology. The final goal is to have 'zero' organic waste taken out of BIHER campus for disposal into municipal landfills. The waste-to- energy concept is promoted in order to process the organic waste generated.

BIHER is having adequate numbers of Garbage Clearance Units per building. The solid garbage is collected, segregated and disposed in safe manner. The collection, segregation and disposal of biomedical waste is outsourced to M/s. Sani Clean Pvt. Ltd., Chennai which is authorized by Tamilnadu State Pollution Control Board for waste treatment facilities relating to Bio-medical wastes using Autoclave / Microwaves / Incinerator shredders etc. The lifting and disposal of general garbage (both wet & dry) from all campuses are outsourced to M/s Space, Chennai. Chennai Municipal Corporation (BMC) is also involved in the process of garbage disposal. Besides BIHER is also having its own Sewage Treatment Plants (STP) in each campus for liquid waste management.

Our campuses have waste management systems in place that ensure primary sorting of solid trash. Sorting stations for itemized recyclable trash sorting and correct management of non- recyclable garbage ensure zero liability and environmental protection. We have solid waste management system in all hostels and campuses. Our solid waste management involves organic waste processing, Organic Waste Composter, Verme-composting and Waste burner handling non-biodegradable waste.

Our campuses' wastewater collection tanks collect over 15 lakh liters every day. We have multiple Sewerage Treatment Plants on all of our campuses for liquid waste. As filters, ultra-filtration units are utilized. This reclaimed water is used to flush toilets, water gardens, and cultivate crops. The wastewater is filtered using a high-pressure sand filter and UV filters.

In our medical campus, we have several collection rooms such as an autoclave, a biomedical waste

collection point, a chlorine contact tank, a microwave room, a sludge holding tank, and a tube settler. We have separate collection units for different sorts of biological waste. Biomedical waste is collected separately and delivered to the waste collecting location in a covered container. Biomedical wastes are separated into three categories and are never mixed with other wastes. No biomedical waste shall be retained for more than 24 hours, according to policy.

Campus has e-waste teams that dispose of electronic garbage through authorized agents. The majority of our e-waste is handled by approved agents. Plastics are turned to bricks for building of retention and compound walls using shredders as part of our waste recycling system. Thermocouple and other solid wastes are handled at compression facilities. Our organic waste converter can process more than 10K kg of organic waste per day. Because we have medical and pharmaceutical institutes, hazardous wastes including incinerator ash, hazardous chemicals, and radioactive materials are properly packaged, transported, and given over to approved recyclers.

The Geo tagged Photos of the different waste management systems, different collection and storing rooms and recyclers are as follows:





**Solid & Bio-Medical Waste Collection & Segregation** 





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**Solid & Bio-Medical Waste Collection & Segregation** 



Solid & Bio-Medical Waste Collection & Segregation



**Central for Biomedical Waste** 



**Waste Water Treatment Plant** 





**Waste Water Treatment Plant** 





**Waste Water Treatment Plant** 



**Waste Water Treatment Plant** 



**Sewage Treatment Plant** 



**Waste Recycling Unit** 













# SEGMENT OF HIGHER EDUCATION AND RESEARCH

Declared as **Deemed-to-be-University** u/s 3 of the UGC Act, 1956

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