

# 7.1.4 The facilities in the institution for the management of the following types of degradable waste and non-degradable waste.

To maintain environmental sustainability, GSL Dental College has an efficient waste management system in place. The college separates waste into categories including biodegradable and non-biodegradable according to a rigorous segregation procedure. Non-biodegradable garbage, such as plastics and papers, is sent for recycling, while biodegradable waste, such as food waste, is composted and turned into manure for campus gardening. Additionally, approved biohazard waste disposal techniques are employed to securely dispose of clinical waste produced in the dental clinic, including spent gloves, syringes, and other disposables.

The college raises staff and student knowledge of environmental responsibility and trash segregation. This all-encompassing strategy promotes the college's dedication to sustainability and complies with legal requirements.

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

# SOLID WASTE MANAGEMENT

Segregation, recycling, and appropriate disposal are the main focuses of the methodical solid waste management strategy used by GSL Institutions. Sorting garbage into biodegradable and non-biodegradable elements at the source is the first step in the process.

Food scraps and other biodegradable garbage are composted to produce manure, which is subsequently utilized for campus gardening. Paper and plastics are examples of non-biodegradable waste that is sent for recycling. The college's dedication to environmental preservation and sustainability is reinforced by this effective waste management system.

# LIQUID WASTE MANAGEMENT

GSL Institutions have implemented a comprehensive liquid waste management system to ensure safe and environmentally responsible disposal of waste from labs, clinics, and other facilities. Liquid waste is categorized into chemical, biological, and sanitary types. Chemical waste from labs is treated to neutralize hazardous substances before disposal. Biological waste, such as that from medical or dental procedures, is carefully handled to prevent contamination. Sanitary liquid waste is processed through the institution's sewage treatment system to meet regulatory standards before being released. The institution also emphasizes staff and student awareness on the importance of proper liquid waste disposal to minimize environmental impact.

#### BIOMEDICAL WASTE MANAGEMENT

GSL Institutions have established a strict biomedical waste management system to ensure the safe handling, segregation, and disposal of waste generated in clinical and laboratory environments. Biomedical waste, including used syringes, gloves, and bandages, is segregated into categories such as infectious, non-infectious, and sharps waste. Infectious waste is disinfected through autoclaving or chemical treatment, while sharps waste is placed in puncture-proof containers for secure disposal. Non-infectious waste is recycled or disposed of in an environmentally responsible manner, ensuring compliance with safety and regulatory standards. comprehensive approach

minimizes health risks and environmental impact, supporting the institution's commitment to public health and sustainability.

#### E-WASTE MANAGEMENT

For the safe and responsible handling of abandoned electronic devices and components, GSL Institutions employ a systematic e-waste management system. Old computers, printers, batteries, and other electrical devices are all considered e-waste, which is gathered and separated to avoid contaminating the environment. Old electronics are either delivered to approved e-waste recycling facilities, where they are disassembled, processed safely, and recycled, or they are refurbished for future use. Additionally, GSL institutions teach faculty, staff, and students the value of minimizing electronic waste production, encouraging sustainability on campus, and disposing of e-waste responsibly.

# WASTE WATER RECYCLING

Wastewater recycling has been implemented by GSL Dental College in Rajahmundry to encourage environmentally friendly behaviors, especially when it comes to watering plants. The campus gardens and green areas are irrigated with the treated wastewater following biological treatment and filtration procedures. Water conservation is aided by this system's huge reduction in the need for freshwater for landscaping.

The college minimizes its influence on the environment while ensuring that the flora flourishes by recycling water for plant irrigation. By effectively using wastewater and preserving a lively and green campus, this eco-friendly project demonstrates the college's dedication to sustainability and resource conservation. One important component of GSL Dental College's environmental responsibilities is recycling wastewater for plant watering.

# HAZARDOUS CHEMICAL AND RADIOACTIVE WASTE MANAGEMENT

GSL Dental College manages radioactive and hazardous chemical waste according to stringent guidelines to protect the environment and public health. In accordance with regulatory guidelines, hazardous substances used in dental treatments and laboratory work are handled with care and kept in containers with clear labels. For the purpose of preventing contamination, the college uses safe disposal techniques like neutralization. The organization ensures that all radioactive materials are maintained in safe locations and disposed of by licensed facilities in order to comply with safety standards regarding radioactive waste. To ensure that staff and students handle these items properly, regular training and awareness campaigns are held. This all-encompassing strategy reduces hazards to human health and the environment.