

Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words):

Sewage treatment is a vital process in wastewater treatment, aimed at removing contaminants from sewage to produce an effluent suitable for discharge into the environment or for intended reuse purposes. By doing so, it effectively prevents water pollution caused by the discharge of untreated sewage.

The wastewater treatment process consists of three main stages: primary, secondary, and tertiary water treatment. In some cases, a more advanced level of treatment, known as quaternary water treatment, may be necessary.

The primary objective of a sewage treatment plant is to thoroughly treat the wastewater to the best practical extent. Although these plants can handle larger volumes of waste compared to septic tanks, they still require periodic emptying. On a daily basis, this plant treats 200 KLD (kiloliters per day) of wastewater.

The treated sewage wastewater finds use in gardening purposes, while the dried sludge is utilized as fertilizer for plants, providing a sustainable approach to waste management.

Water treatment, on the other hand, encompasses any process that enhances water quality to make it suitable for specific applications. These applications can range from drinking water supply, industrial use, irrigation, river flow maintenance, water recreation, and more. Furthermore, treated water is packaged in bottles and supplied during inter-college events.

The treatment units involved in this process include sedimentation tanks, coagulation tanks, filtration units, and a disinfection unit. Each unit plays a crucial role in ensuring the effective treatment of water and the removal of contaminants.

BIO-MEDICAL WASTE: -

Bio-medical waste refers to any waste generated during the diagnosis, treatment, immunization of human beings or animals, research activities related to these fields, or the production and testing of biological substances. This includes waste from surgeries performed on patients with infectious diseases. To ensure proper management, bio-medical waste is segregated and transported through a designated Collection Point by the municipality staff. The Collection Point for all bio-medical waste is conveniently located near the dental hospital.

Various types of bio-medical waste are identified, including:

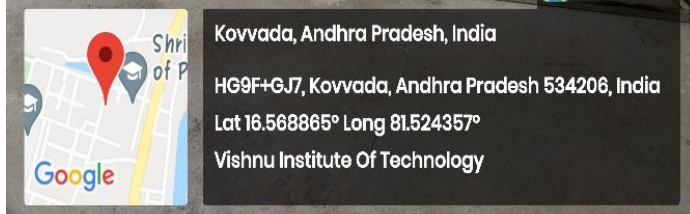
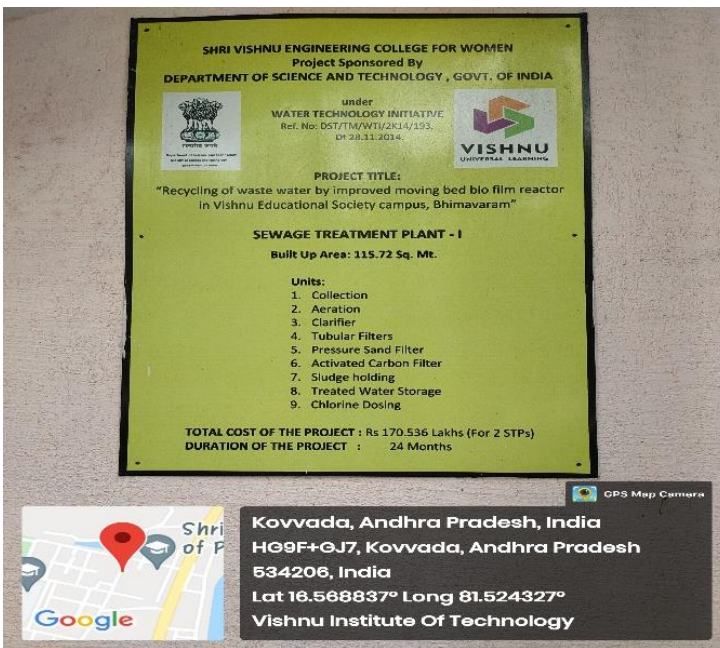
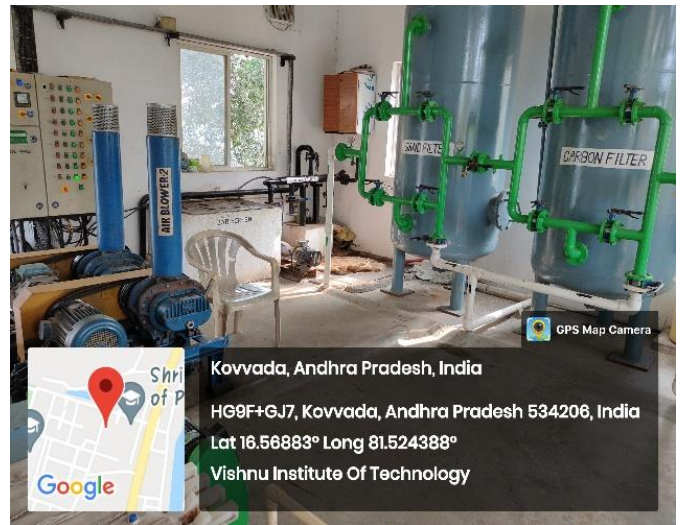
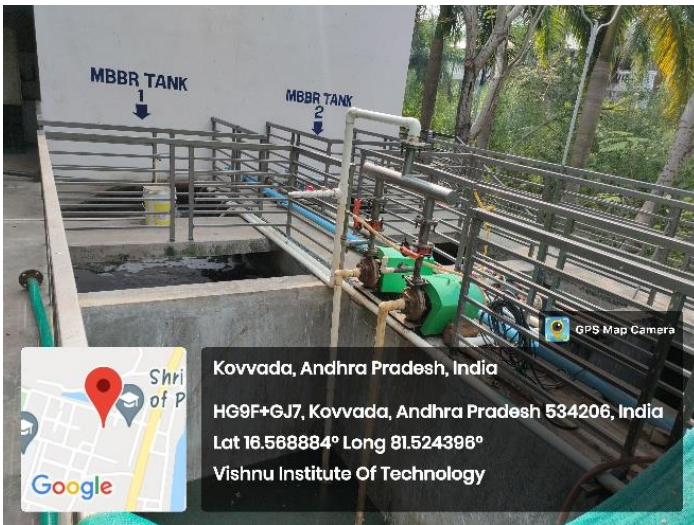
1. Human anatomical waste, such as tissues, organs, and body parts.
2. Animal waste generated from research or veterinary hospitals.
3. Microbiology and biotechnology waste.
4. Waste sharps, including hypodermic needles, syringes, scalpels, and broken glass.
5. Discarded medicines and cytotoxic drugs.

These categorizations help in efficient handling and disposal of bio-medical waste, ensuring the safety and well-being of both the healthcare professionals and the environment.

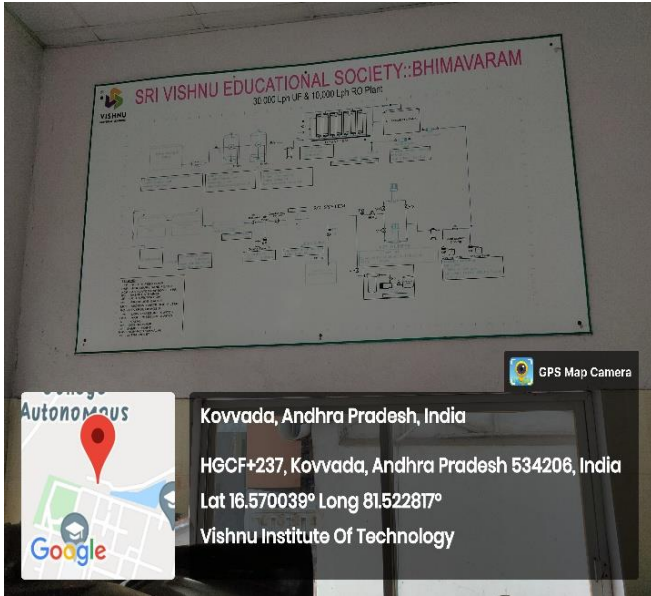
Solid waste management:



2. LIQUID WASTE MANAGEMENT



WATER TREATMENT PLANT



3. BIOMEDICAL WASTE MANAGEMENT



WASTE WATER RECYCLING SYSTEM

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN
 Project Sponsored By
DEPARTMENT OF SCIENCE AND TECHNOLOGY, GOVT. OF INDIA
 under
WATER TECHNOLOGY INITIATIVE
 Ref. No: 5571/MW/IT/2014/193,
 Dt: 18.11.2014.

VISHNU
 UNIVERSITY

PROJECT TITLE:
 "Recycling of waste water by improved moving bed bio film reactor
 in Vishnu Educational Society campus, Bhimavaram"

SEWAGE TREATMENT PLANT - I
 Built Up Area: 115.72 Sq. Mt.

Units:
 1. Collection
 2. Aeration
 3. Clarifier
 4. Tubular Filters
 5. Pressure Sand Filter
 6. Activated Carbon Filter
 7. Sludge holding
 8. Treated Water Storage
 9. Chlorine Dosing

TOTAL COST OF THE PROJECT : Rs. 170.536 Lakhs (For 2 STPs)
DURATION OF THE PROJECT : 24 Months

Kovvada, Andhra Pradesh, India
 HG9F+GJ7, Kovvada, Andhra Pradesh 534206, India
 Lat 16.568837° Long 81.524327°
 Vishnu Institute Of Technology

Kovvada, Andhra Pradesh, India
 HG9F+GJ7, Kovvada, Andhra Pradesh 534206, India
 Lat 16.56883° Long 81.524388°
 Vishnu Institute Of Technology

Kovvada, Andhra Pradesh, India
 HG9F+GJ7, Kovvada, Andhra Pradesh 534206, India
 Lat 16.568884° Long 81.524396°
 Vishnu Institute Of Technology

Kovvada, Andhra Pradesh, India
 HG9G+23X, Kovvada, Andhra Pradesh 534206, India
 Lat 16.567273° Long 81.524869°
 Vishnu Institute Of Technology

Kovvada, Andhra Pradesh, India
 HG9G+23X, Kovvada, Andhra Pradesh 534206, India
 Lat 16.567453° Long 81.525582°
 Vishnu Institute Of Technology

Kovvada, Andhra Pradesh, India
 HG9G+23X, Kovvada, Andhra Pradesh 534206, India
 Lat 16.567269° Long 81.525237°
 Vishnu Institute Of Technology