# 7.1.3 WASTE MANAGEMENT

## 1. SOLID WASTE MANAGEMENT

**Integrated Waste Management system is adopted inside the campus aided by viable units of *Integrated Farming System* namely cattle, piggery, poultry, vermicompost and mushroom and thus rendering self-sustainability.**

### Cattle Shed (RDS Farm)

**35 animals (Cross breeds of Jersey and HF) are maintained. Consumption of feed as green fodder (farm produce) is 25-40 kg/animal/day and dry fodder (farm produce) is 5 kg/animal/day. Waste produced is 5kg/animal/day (solid) and 3-5 litres/animal/day (liquid).**

## Piggery Shed (RDS Farm)

**45 adult animals (Large White Yorkshire) are maintained. Consumption of feed is 1.5kg/animal/ (vegetable and kitchen waste). Waste produced is 500g/animal/day (solid waste) and 500ml to 1 litre/animal/day (liquid waste).**

## Poultry Shed (RDS Farm)

**300 birds (Aseel) are maintained. Consumption of feed is 100g /bird/day (farm produce). Waste produced is 50g/bird/day (solid).**

## Vermicompost Unit (RDS Farm)

**Composting is done using solid cattle waste. Concrete pits (8) are filled with dry cow dung (35kg/pit) and inoculated with earthworm (*Eudrillus euginiae)* and composted for 40 days. Manure yield is 50kg/ pit. This manure sustains the integrated nutrient management system for crop cultivation.**


## Mushroom Unit (RDS Farm)

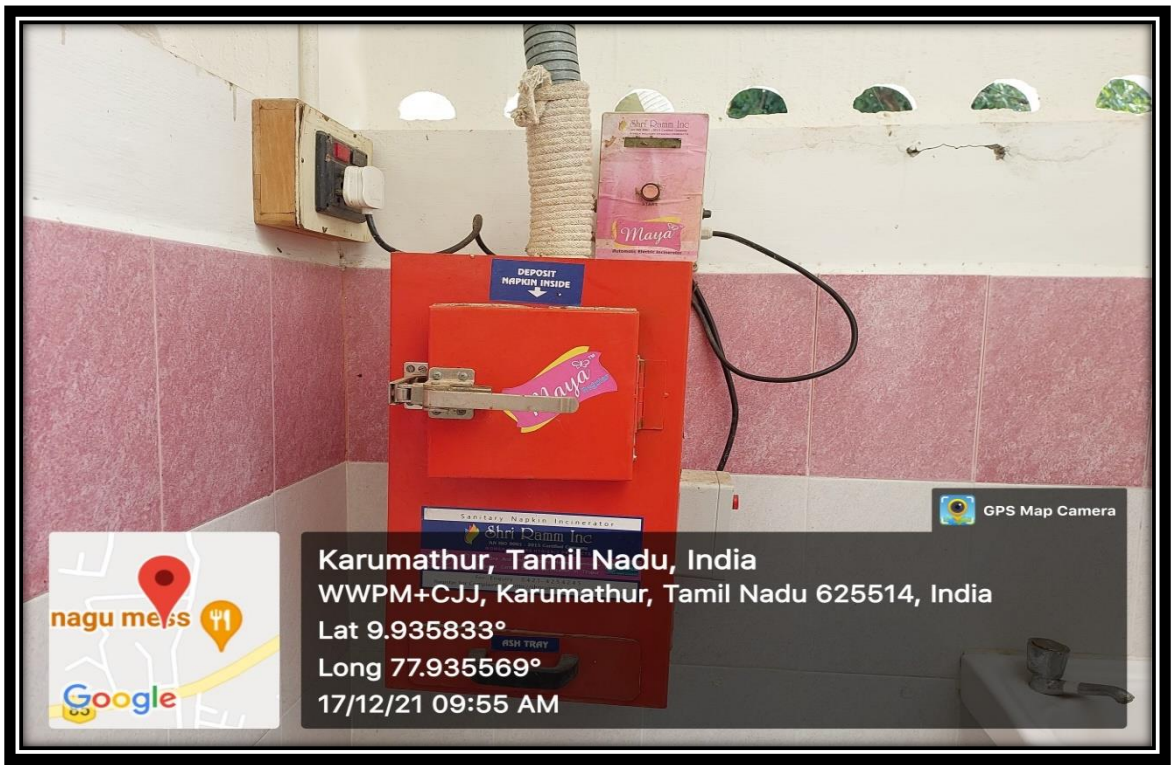
**Solid farm waste serves as the substrate for oyster mushroom cultivation. A single cycle of mushroom cultivation requires. 50 kg (solid farm waste). 25-30 kg of oyster mushroom is harvested per cycle**

## DUSTBINS

**Colour coded bins are available in selected places inside the campus to collect the biodegradable and non-biodegradable wastes. Collected wastes are dumped in the compost pit for composting**


## Incinerator Fixed in Ladies Toilet (Arrupe Block)

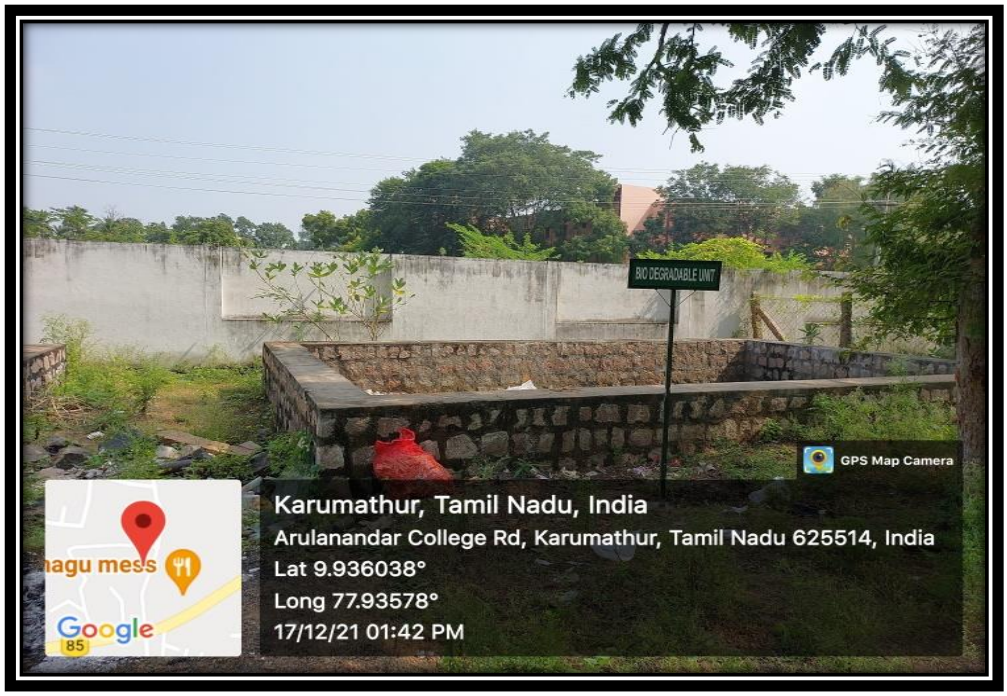
**The incinerating speed is 16 napkins/hour. It has the capacity of incinerating 300 napkins/day.**



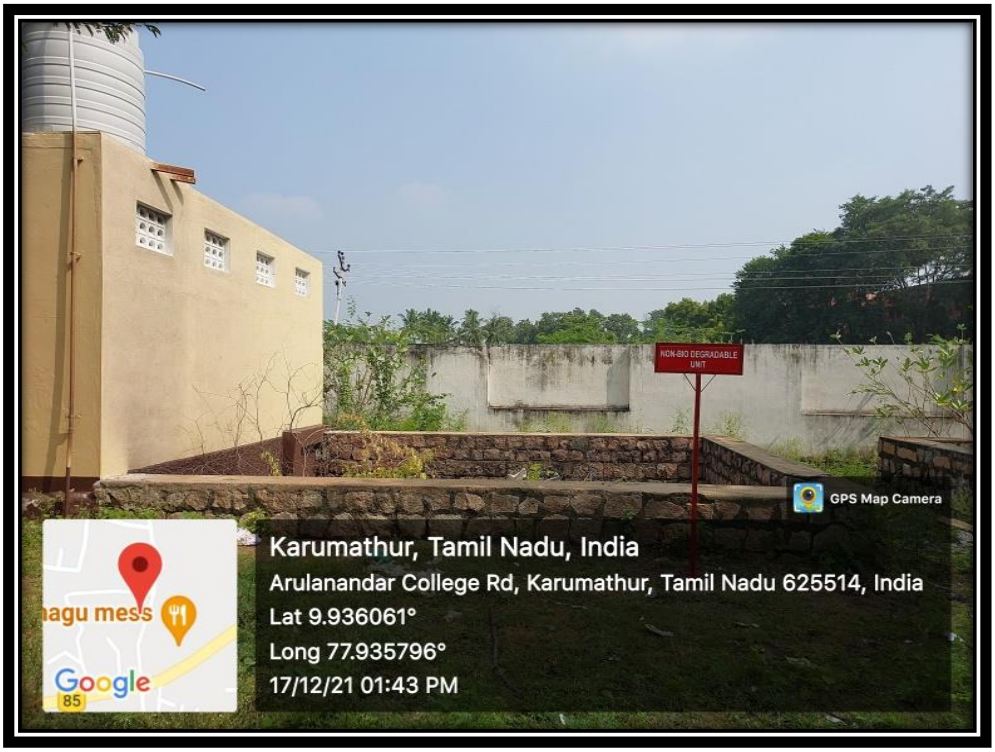
## Compost Pit

**Solid wastes collected inside the campus are dumped in concrete pits. There are separate pits for biodegradable and non-biodegradable wastes. The resultant manure serves as an integral component of integrated nutrient management for crop cultivation.**

## Biodegradable Pit




## Non-biodegradable Pit



## 2. LIQUID WASTE MANAGEMENT

**Water from bore well is treated using reverse osmosis system and supplied as drinking water. RO water reject is used for gardening.**

**RO Processing Unit in Arrupe Block**


**RO Processing Unit in Girls Hostel**

## RO Processing Unit in Boys Hostel


## Drinking Water Supply

**Standard Water Analysis (IS: 10500:2012) reports confirmed the potability of drinking water. The Concentration of Calcium, Chlorides and Magnesium was found to be within permissible limits. Total Dissolved Solids (TDS) was only 12.**

## Cattle Shed

**Liquid waste discharged from cattle shed is used for irrigating fodder crops after a short sedimentation period.**



**S**

# 3. BIOMEDICAL WASTE MANAGEMENT

**Medical wastes used in VETEX are decontaminated using autoclave in microbiology laboratory of Rural Development Science.**

# 4. WASTE RECYCLING SYSTEM

## REED BED SYSTEM IN BOYS HOSTEL

**Treatment of wastewater generated by domestic usage is done by a reed bed system. The system is a biomimicry of a wetland. It has a specially chosen reed species on its surface. This reed species absorbs oxygen from the atmosphere and release it through roots. The treatment system is installed in the boys hostel**

### Waste Water Collection Point


### Settling Tank

## Sedimentation Tank


## Treated Waste Water Exit Tank (used for irrigation)