

### **7. 1. 3 THE FACILITIES IN THE INSTITUTION FOR THE MANAGEMENT OF THE FOLLOWING TYPES OF DEGRADABLE AND NON-DEGRADABLE WASTE**

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



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**7.1.3 Geotagged photos for the facilities in the Institution for the management of the following types of degradable and non-degradable waste:**

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## 1. SOLID WASTE MANAGEMENT

### a) Collection of waste using the Garbage Bin

- **Method:** As per Solid waste handling rules 2016
- **Construction Details:**

DESCRIPTIONS	CONTENT
Type	Garbage Bin
Color	Red, Green, Blue, Yellow
Capacity (Litre)	110 Litres
Size (mm)	110 Litres
Spare Part	Lic
Shape	Rectangular
Material	HDPE, Plastic, Stainless steel
Condition	New
Movable	Yes
With Paddle	No
Plastic Type	HDPE
Eco Friendly	Yes

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Waste collecting Bin

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**b) Stabilize the bio degradable waste by Composter:**

Eco-Bin converts degradable waste into powerful organic manure.

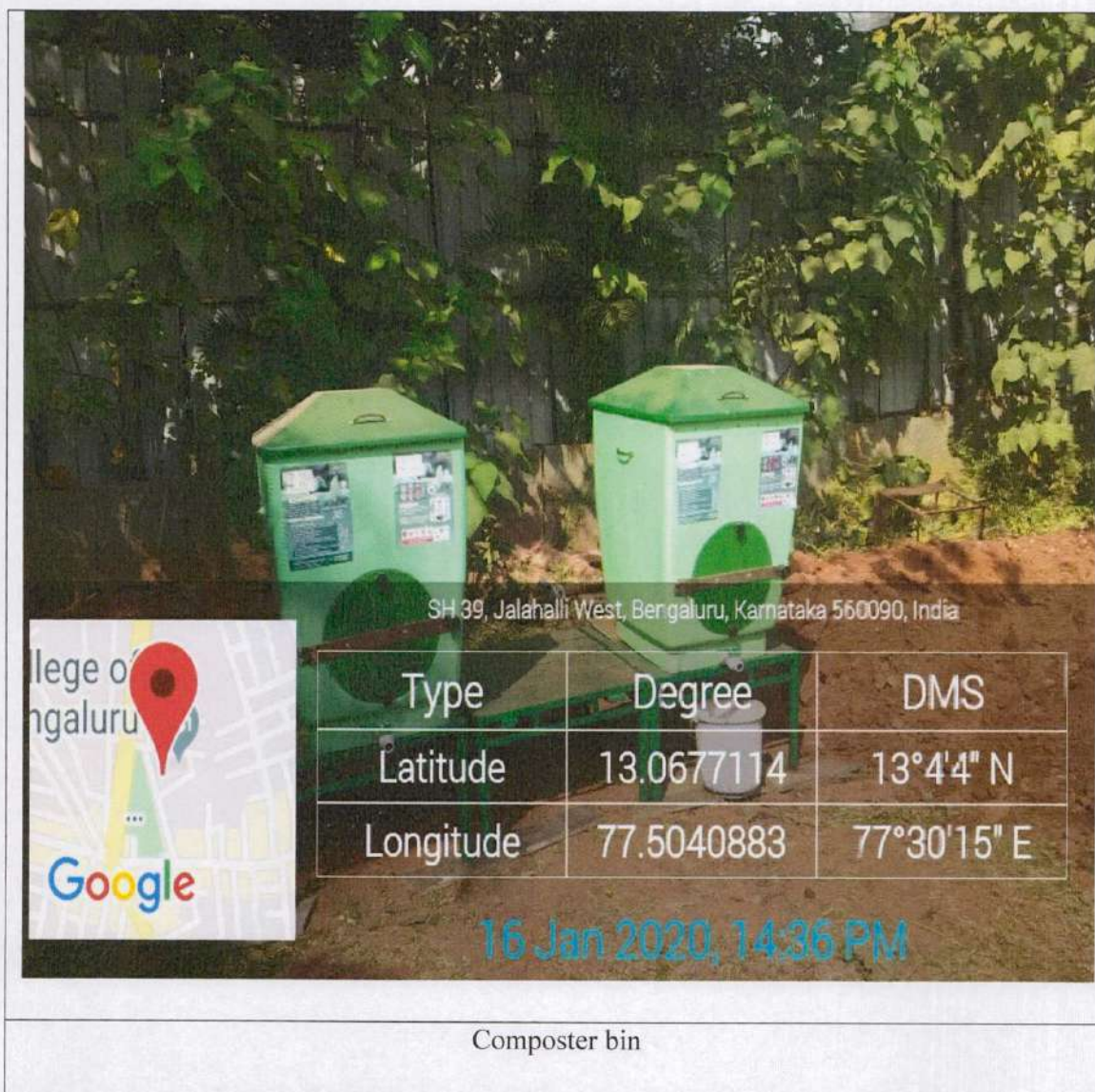
- Method: Anaerobic decomposing
- Location: North west corner of the campus, near to electrical work shop building

Sl.No	DESCRIPTION	QUANTITY
1	400 Litres Compcster Bin ( 2'3" x 2'3"x 3'6")	2 no
2	Capacity of feed	20 Litres/month or 8 bag
3	Quantity of solid compost formed	25% (of the waste deposited on weight)
4	Numbers of days for compost to be formed after the bin is full	25 to 30 days
5	Leachate collection provision	Yes
6	Mixing or Turning	No
7	Eco-Friendly	Yes

  
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c) Non bio degradable waste and hazardous (category: infectious) waste management:

DESCRIPTIONS	CONTENT
Power Source	Electrical
Pre-scription/Non pre-scription	Prescription
Waste Type	Sanitary Napkin
End product	Ash
Capacity	30 kg/batch



  
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## 2. LIQUID WASTE MANAGEMENT:

- Method: SBR (Sequencing batch reactors )
- Location: South East corner of the Academic block
- Construction Details:

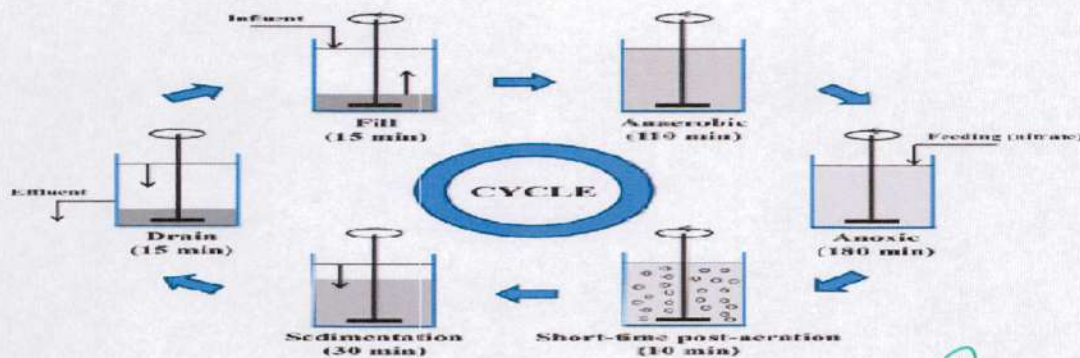
Sl.No	DESCRIPTION	QUANTITY
1	Treatment Capacity	70 KLD
2	Influent waste water strength, BOD <sub>5</sub>	350 mg/L
3	Effluent treated water strength, BOD <sub>5</sub>	10mg/L
4	Dimension of waste treatment processing room equalization tank, aeration tank, sedimentation tank, storage tank. (4m x 4m x 4m)	4
5	Pump house and control room(4 m x 5mx 4m)	1
6	Raw sewage transfer pump	2 hp sewage pump
7	Bar screen( 1m x 1m x 1 m) S S fabricated structure	1
8	Air diffuser Core( 1/2m x 4" diameter)	12

  
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### Working Procedure:

- Sequencing batch reactors (SBR) or sequential batch reactors are a type of activated sludge process for the treatment of wastewater.
- SBR reactors treat wastewater such as sewage or output from anaerobic digesters or mechanical biological treatment facilities in batches.
- Oxygen is bubbled through the mixture of wastewater and activated sludge to reduce the organic matter (measured as biochemical oxygen demand (BOD) and chemical oxygen demand (COD)).
- The treated effluent may be suitable for discharge to surface waters or possibly for use on land or agricultural usage

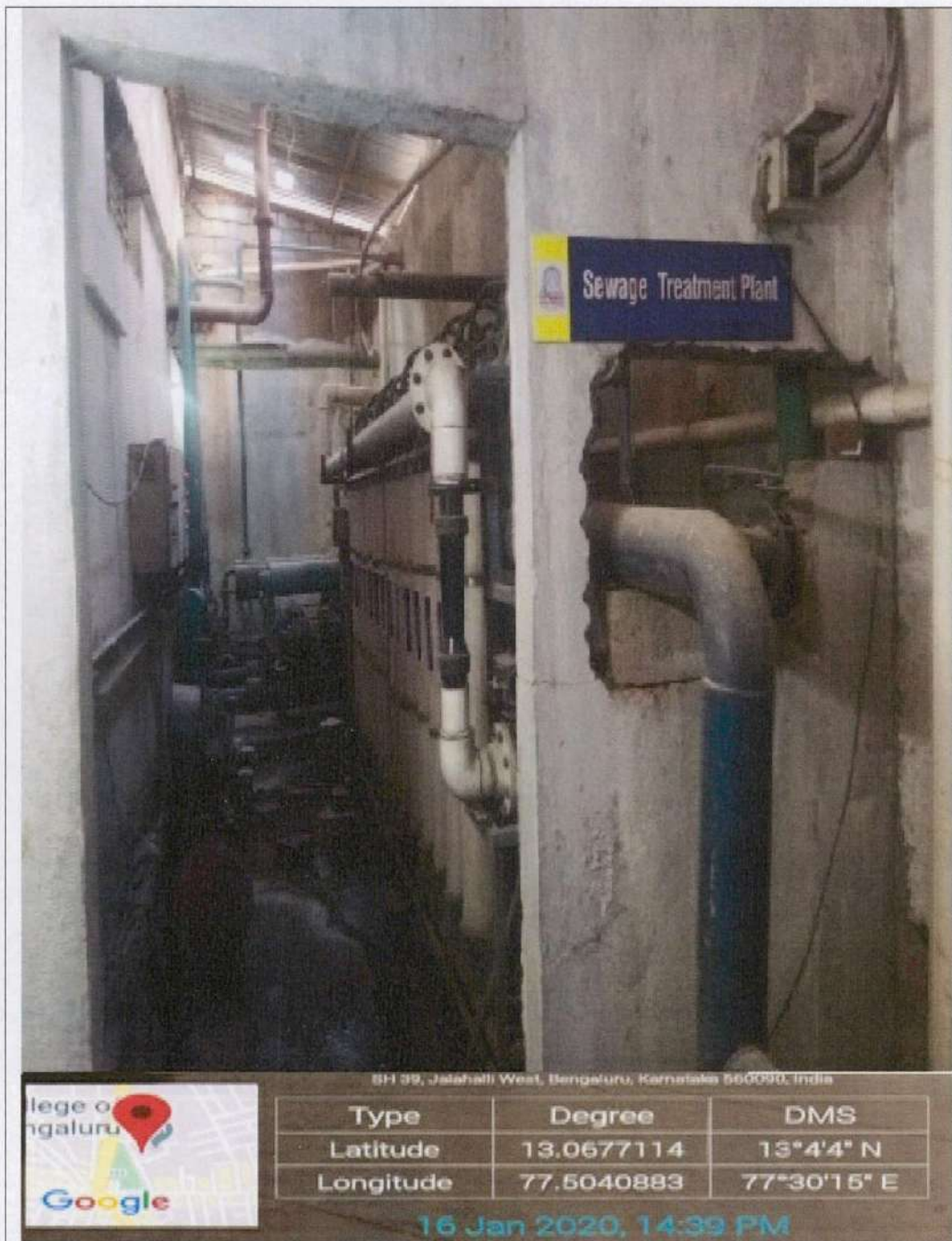


Treatment working cycle



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Sewage Treatment Plant



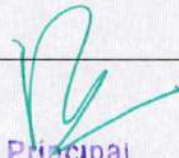
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**BIOMEDICAL WASTE MANAGEMENT**

DESCRIPTIONS	CONTENT
Power Source	Electrical
Prescription/Non prescription	Prescription
Waste Type	Cotton, Bandages, Cloth
End product	Ash
Capacity	30 kg/batch




  
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#### 4. HAZARDOUS CHEMICALS

Hazardous chemical are temporarily stored at Faraday block and Administrative block in Chemistry Lab and Bio-tech Department, thereafter it is transferred as per MOU made between SCE and MMIS for safe disposal.

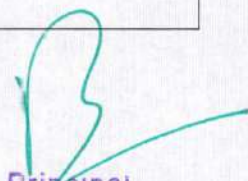


Hanumanthe Gowder Main Rd, Chikkasandra, Jalahalli West, Bengaluru, Karnataka 560057, India

Type	Degree	DMS
Latitude	13.0673851	13°4'3" N
Longitude	77.5043134	77°30'16" E

25 Feb 2020, 15:33 PM

Hazardous waste collecting facility

  
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