



7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

Biogas Plant

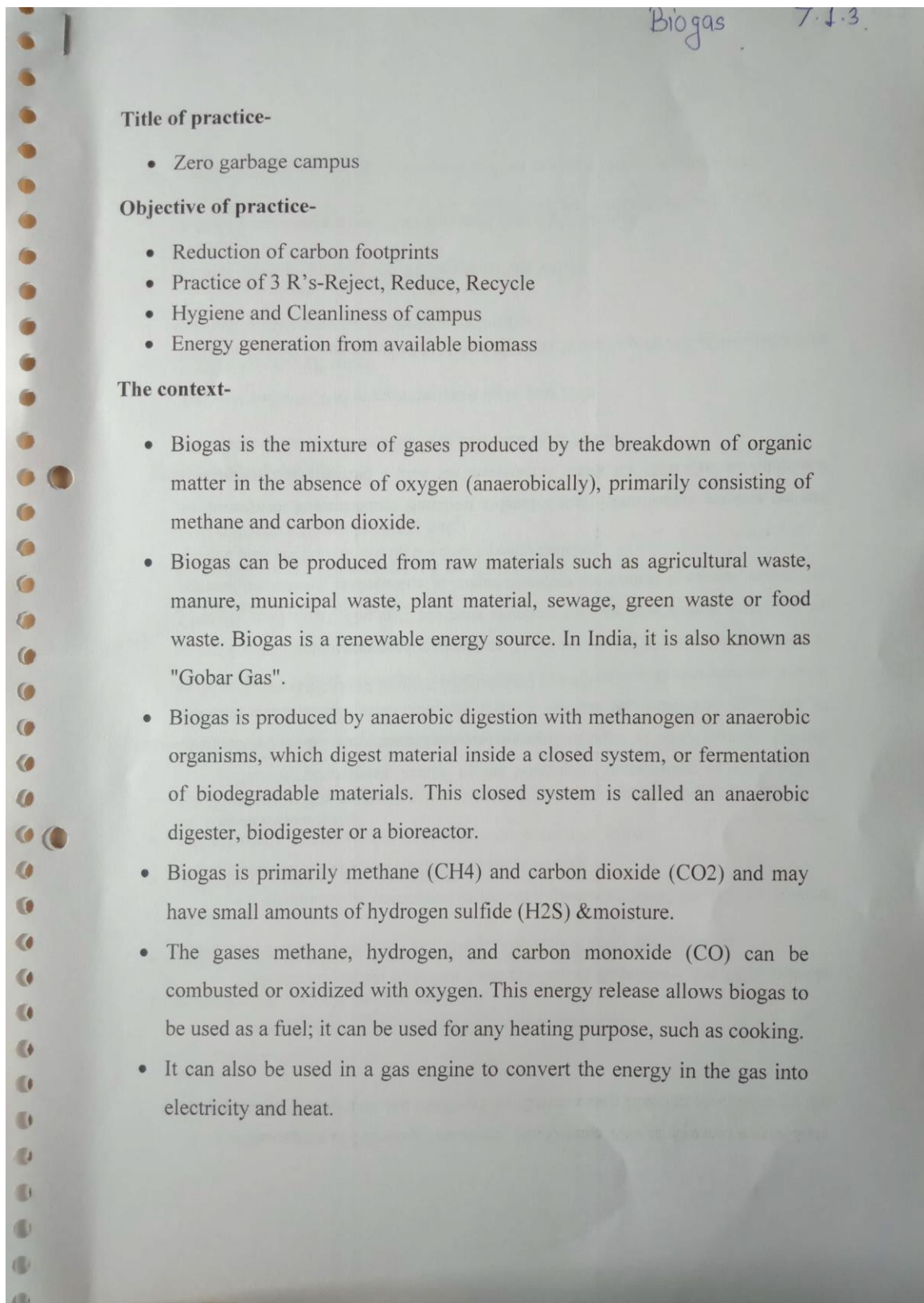
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1. Biogas Plant: Information

Generated compost using the canteen & mess waste food annually = 3 tons of manure.





The practice-

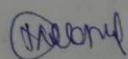
- The generated gas is used for cooking, in college ladies hostel mess.
- The generated gas is 20-25 kg daily output equivalent to 1 LPG gas cylinders
- Present daily input 250-300 kg
- Organic manure as by product 15 kg daily
- Capacity 1000 kg input

The technical details-

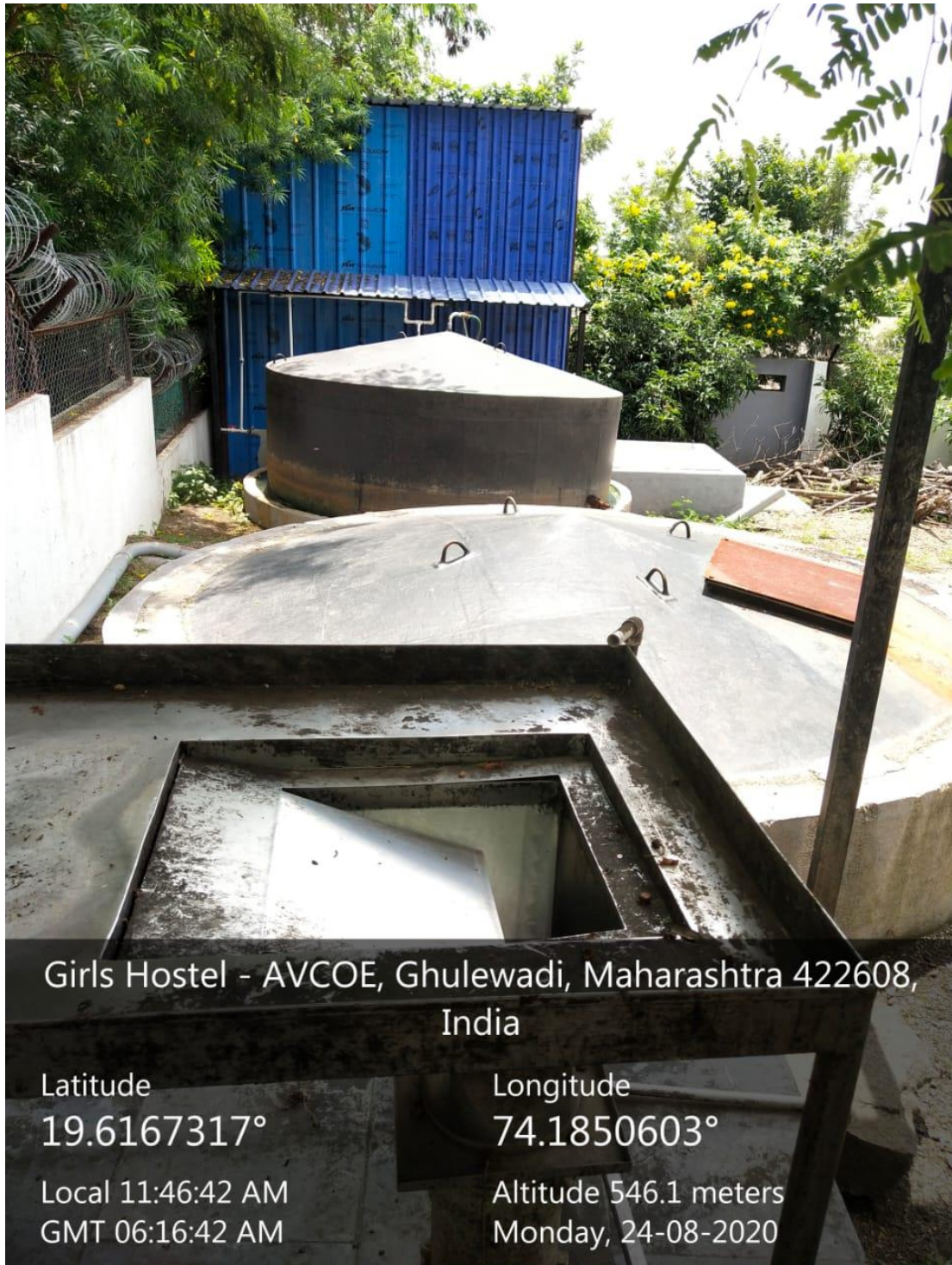
- 2 digesters 20 meter cube each
- Hopper with crusher driven on 2 hp motor.
- Blower with 2 hp motor
- Gas storage balloon 30 meter cube
- All safety measures to face unforeseen events

Problems encountered and resources required-

- The generated gas output vary depending upon ambient conditions
- The calorific value varies depending on nature of input
- Regular operation and maintain chain if broken needs repeated seeding operation
- Segregation of input waste and appropriate quantity of water
- Regular and trained human resource


Head of the Dept. (Civil)
Amrutvahini College of Engineering
Sangamner 422605

2. Biogas Plant Photos:





Amrutvahini College of Engineering, Sangamner





Amrutvahini College of Engineering, Sangamner

3. Biogas: Purchase Order

Amrutvahini Sheti and Shikshan Vikas Sanstha's

Amrutvahini College of Engineering Amrutnagar, Sangamner.

P.O.Sangamner S.K. Tal-Sangamner, Dist-A.Nagar. (422 608) Ph.No:-02425-259016

-: PURCHASE ORDER: -

Order No:-AE/Purchase/Civil Dept/ 31 /2018-2019 Date:- 10 / 04 / 2018

To,

M/S:- Moralc Technology and Services,

Shri Dhananjay Gajanan Thite,

902 A Canosa,Hiranandani Estate,

G B Road, Thane (West), Mumbai-400607.

Ref: - Your Quotation No. By mail & Date 10 / 04 / 2018

Ref: - Our Quotation No-- & Date 10 / 04 / 2018.

Dear Sirs,

With reference to your above cited quotation. We are pleased to place our order for supplying the following goods as per the terms and conditions mentioned below. Please acknowledge receipt of the order.

Sr.No.	Particulars	Quantity	Rate	Total Rs.
	Biogas Plant Erection Implementation, Monitoring and Functioning you supply digester package of biogas systems. Biogas purification unit, Capacity 10m ³ / hr. as per aforesaid scope of supply. Storage Tank- Capacity 100m ³ - 200m ³ B-CNG Filling Station (Optional). Other specification as per followse-	01 No. 01 No. 01 No.	Total Set. 400000=00	Total Set. 400000=00
01	Metalic Dome container- water tight, faced RCC, specific dimension as per structural engineer, ca.1m in ground.	01 No.		
02	Turbo mixer 5kw- submersible Mixer for biogas application, 5kw, 3 phase motor 400V, 50Hz, 1450rpm.	01 No.		
03	Mast for Turbo mixer in pit- Lifting gear & orientation device in mixing / fertilizer pit, direction.(if required)	02 Nos.		
04	Automatic Starter 5kw- or submersible Mixer / Pump 5kw with motor protection switch, hand/ automatic switch, ON /OFF switch, time delay switch, incl. CEE- connector 32A, installed in plastic housing.	02 Nos.		
05	Gas Storage safety package Gas Balloon- Over / Under pressure sensor for membrane gas roof, Liquid level alarm sensor.	01 No.		
06	Rs- Four Lack only.		Total Rs-	400000=00

Terms And Conditions:-

01) Delivery: - our college site at your cost.

02) Delivery Period: - Before 20 / 05 / 2018.

03) Sales tax: - GST extra at actual.

(P.T.O)



Amrutvahini College of Engineering, Sangamner

- 04) Payment –35% advance with purchase Order, 25% after completion of civil work of main Digester, 15% after completion mechanical installation, 15% against supply of purification plant and remaining 10% After successful installation by cheque only.
- 05) Warranty- One year warranty.
- 06) Civil work required for foundation Tank, which includes site clearing, excavation, RCC Tank, Gas Storage Shade, Minor Masonary as per the civil work drawing provided by you.

W. B. Y. Humde

Chief Executive Officer
Amrutvahini Sheti & Shikshan Vikas Sanstha
Amrutnagar, Sangamner.

Copy to; - 1) A/C Dept 2) H.O.D. 3) Stores Dept. 4) O.C.