



SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
An Autonomous Institution| Approved by AICTE| Affiliated to Anna University
Kuniamuthur, Coimbatore - 641008

6.3.3 FREE DRINKING WATER PROVIDED



6.3.3 - Free drinking water provided

SKCET is dedicated to providing sustainable, safe, and easily available drinking water for the health and well-being of its employees, instructors, and students. In the residence halls and academic buildings, SKCET has installed 86 water coolers, dispensers, and purifiers. Water quality is tested to make sure that safe drinking water quality requirements are fulfilled. SKCET makes sure that every source of drinking water is kept clean and maintained to stop the formation of mold and germs.

Distribution system

Water from the borewell is pumped to a ground-level tank and then to an overhead tank, where it is stored and distributed throughout campus. Water is supplied to every part of the campus via a well-designed pipe network. The civil works committee closely monitors the entire distribution system to make sure that there are no leaks or wastes of valuable water through joints, valves, etc. Devoted employees (plumbers) are in charge of maintaining the distribution system. As soon as issues are found, quick action is made to prevent water waste. The Reverse Osmosis (RO) plant regularly supplies drinking water through water containers in accordance with seasonal demand.

Table: Source of Water, Location of Storage and Application

Type of Water	Source	Application
Corporation Water	Municipal Corporation	Drinking application through water dispensers
Bore well water	1. Admin Block – 1 No's 2. C3 Block Back Side – 1 No's 3. Paly Ground Garden – 1 No's 4. New Gest House – 1 No's	Utensil Cleaning, Bathing & Cloth Washing



	5. F Block Right Side – 1 No's 6. Ladies Hostel – 2 No's	
Rain Water	Collected from 1. Admin Block – 1 No's 2. MCA Block – 1 No's 3. C4 Block – 1 No's 4. C3 Block – 1 No's 5. MBA Block – 1 No's	Used to increase the ground water level

Table: Details of the Water Utilities, Storage, Motor Capacity and Approximate Run Hours

S. No.	Location	Depth	Motor Capacity	Approx. Run Hours	Storage - I	Storage - II
1.	Admin Block	585 ft	5.5 kW	4 hrs/day	Sump in Admin (25 kL)	OH tank in Admin (30 kL)
			3.7 kW (Sump to OH)		OH tank in Library (10 kL)	
					OH tank in Conv. Centre + Food Court (15 kL)	
2.	C-3 Block	400 ft	3.7 kW	4 hrs/day	Sump near STP (40 kL)	OH tank near STP (40 kL)
			3.7 kW (Sump to OH)			OH tank near C3 & C5 (15 + 15 KL)
3.	New Guest House	250 ft	3.7 kW		Sump near Boys Hostel (80 kL)	OH Hostel Block (9 KL)



			3.7 kW (Sump to OH)	5 hrs/day		OH Hostel G-Block (9 KL)
4.	Boys Hostel	350 ft	7.5 kW	18 hrs/day	Sump near C- Block (35 KL)	OH in A Block (20 kL)
						OH in B Block (20 kL)
						OH in C Block (10 kL x 2)
						OH in D Block (20 kL x 2)
						OH in E Block (10 kL x 2)
5.			5.5 kW (Sump to OH)		Sump near Dining (60 kL)	OH in Dining (30 kL x 2)
6.	Ladies Hostel Bore-1 & 2	585 ft	3.7 kW	8 hrs/day	Sump in Hostel (50 kL)	OH in Mess (30 kL+15 kL)
			3.7 kW			OH in Block-1 (15 kLx 2)
<p>In C3- Block; a main OH tank of 40 kL near STP is available. From that tank; water is being supplied through gravity to nearly seven buildings namely; C1 Block (15 kL), C2 Block (20 kL), C3 Block (30 kL), BS Block (15 kL), ECE block (15 kL), MBA Block (15 kL), MCA Block (15 kL).</p>						



Note:

- All the Over Head (OH) tanks are made using cement construction.
- The maintenance team ensure to clean the tank for every six months (Twice in an year)
- Bleaching power is mostly used to clean the inside tank.

Treated Water for Drinking Application:

- The college management is keen on providing uninterrupted, safe and healthy drinking water to all; throughout the year.
- Water dispenser are provided at appropriate places offering the treated RO water for the students (Both Normal and Hot temperature)
- The overhead tanks storing the well water are cleaned at regular intervals and the water management team has been maintaining a cleaning schedule Utensil Cleaning, Bathing & Cloth Washing.

Table: Specifications of RO Plant and Potable Water Distribution System

S. No.	Parameters	Description
1.	Total no. of RO Plant	01
2.	Capacity of each RO Plant	5000 litres per hour
3.	Source of raw water	Groundwater
4.	% of RO & grey water output	40% Treated Water & 60% Grey Water
5.	Usage of grey water	Gardening
6.	Cleaning schedule of carbon & sand filter	Weekly cleaning and Replacement of media once in 3 years
7.	Cleaning schedule of membrane	Cleaning quarterly and Replacement of membrane once in 3 years



8.	Back washing duration & Frequency	Sand Filter and Activated Carbon Filter Backwashing once a day or when differential pressure goes above 0.5 kg/cm ² ; RO Membrane Automated Backwashing
9.	Functioning of RO Plant	Automatic only
10.	Quality of RO water (TDS Values)	30 to 45 ppm
11.	RO water storage	Storage Tank (Food grade SS tank)
12.	Best Operating Procedures to be done	As per Guidelines on Water Purification By Reverse Osmosis by Ministry of Railways, GoI, (Report No. RDSO/WKS/2015/2) – Welcome Step.

Drinking Water consumption Details:

S.No	Location	No. of cans	Usage
1.	College Campus	280 Cans (20 L per can)	5,600 L/d(5.6 m ³ /d)
2.	Boys Hostel	220 Cans (20 L per can)	4,400 L/d (4.4 m ³ /d)
3.	Girls Hostel	140 Cans (20 L per can)	2,800 L/d (2.8 m ³ /d)
4.	Additional stock	1000 L	1,000 L/d (1 m ³ /d)
Total Water Consumption			13,800 L/d or 13.8 m³/d



RO plant front view



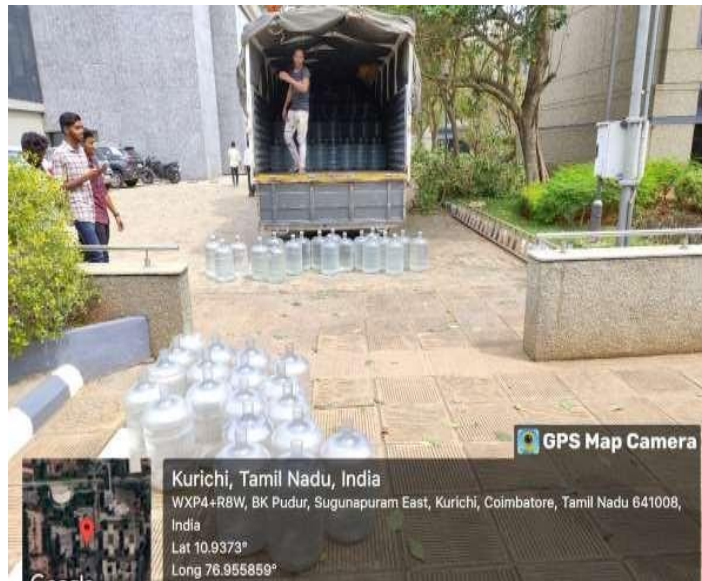
Filtration units inside RO plant



Filtered water storage unit



Filtered water to cans for distribution



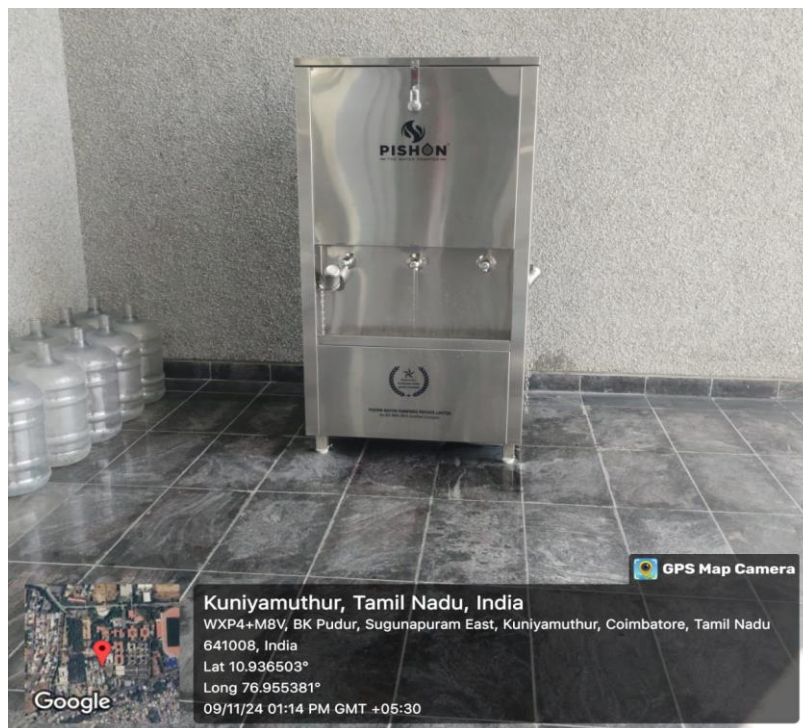
Distribution of water cans from RO plant

Drinking water facility inside the campus blocks





WATER DISPENSERS INSIDE THE CAMPUS BLOCKS







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