# WASTE WATER RECYCLING





### MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA (MACFAST) Thiruvalla - 689101

### **WASTE WATER RECYCLING**

The college installed an odour-free, eco-friendly Sewage Treatment Plant in the premises of the boys' hostel for treatment, recycling and reusing of waste water. Bio-filtration, aeration and oxidation are the major stages of treatment. The tank capacity is 25,000 litres and the treated water is used for gardening purpose.



SEWAGE TREATMENT PLANT



Pathanamthitta

Waste recycling system

The college has installed a Sewage Treatment Plant in the premises of the boy's hostel, which helps in treatment, recycling and reusing of waste water. The water treatment is odour free and eco-friendly. The treated water is used for gardening.

Source - Wastewater from bathrooms and kitchen

Treatment procedure - 3 stages - Bio filtration, Aeration and Oxidation

Screening procedure - Primary treatment, Chemicals used (Caustic soda and Chlorine)

Outcome - Filtered water

Tank capacity - 25000 litters

Implementation cost - Rupees 18 lakhs

Purpose - Conservation of water



### WASTE WATER MANAGEMENT

The college has installed a Sewage Treatment Plant (STP) in the premises of the boy's hostel, through which the waste water is processed and the treated water is used for gardening.

Source	Wastewater from bathrooms and kitchen			
Purpose	Conservation of water			
Treatment procedure	3 stages			
	➢ Bio filtration			
	> Aeration			
	> Oxidation			
Screening procedure	Primary treatment, Chemicals used (Caustic soda and Chlorine)			
Outcome	Filtered water			
Tank capacity	25000 litters			
Implementation cost	Rupees 18 lakhs			



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## KERALA STATE POLLUTION CONTROL BOARD

FILE NO.: PCB/PTA/ECO/118/2014

Date of issue :26/09/2018

### INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No: ECO/PTA/87/R1/2018

Ref: 1. CONSENT NO-ECO/PTA/87/2014,ISSUED ON-20/06/2014,VALID UPTO-31/12/2016

2. APPLICATION NO-6668464, SUBMITTED ON-2/08/2018

The 'Integrated Consent to Operate' issued as per reference above to M/s Mar Athanasios College of Advanced Studies (MACFAST) Boy's Hostel, Tholassery, Thiruvalla Pathanamthitta is hereby renewed up to 31/12/2023 and issued to M/s Mar Athanasios College of Advanced Studies (MACFAST) Boy's Hostel, Tholassery, Thiruvalla Pathanamthitta The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

### I. GENERAL

S.No.	Items	Description			
1	1.1. Validity	31/12/2023			
2	1.1.a. Month and year of renewal	30/09/2023			
3	1.10.Category	ORANGE			
	1.12 Fee Slab/Fee Remitted	Rs.26000/- Rs.195000/-			
5	1.13.Capital Investment	200 LAKHS			

### II. Stack Details

Stack No.		Emission	Stack Hei	Control
		Rate(Nm3/Hr)	Ground Level(In Meters)	Roof Level(In Meters)

#### III. CONDITIONS

1. This consent is granted based on the application, affidavit and particulars submitted by the applicant and subject to the power of the Board to review and make variation in or revoke the conditions as the Board deems fit.

- 2. The Consent unless withdrawn earlier and subject to condition no.1 shall be valid up to 31/12/2023. For renewal of consent, online application in the prescribed form shall be submitted to the Board on or before 30/09/2023 along with copy of this consent. Late applications will be accepted only with a fine/late fee as per norms.
- 3. The sewage treatment plant shall be operational at all times.
- 4. The treated sewage shall be disposed through dispersion/soak pit arrangements.
- 5. The unit shall fully comply with the provisions of the Water (Prevention & Control of Pollution), Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981; the Environment (Protection) Act, 1986, the Environment (Protection) Rules, 1986; the Solid Waste Management Rules, 2016; the E-Waste (Management) Rules, 2016; the Plastic Waste Management Rules, 2016, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016; the Construction and Demolition Waste Management Rules, 2016 and the Batteries (Management and Handling) Rules, 2001 as amended till date and as applicable to the unit.
- 6. Condition no. II of this consent is deleted.

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

DATE: 26/09/2018

SIGNATURE & SEAL OF ISSUING AUTHORITY ENVIRONMENTAL ENGINEER, District Office, Pathanamthitta



To

CHERIAN JOHN KOTTAYIL PERUMPETTY PATHANAMTHITTA PIN-689592

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000
- 2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent

