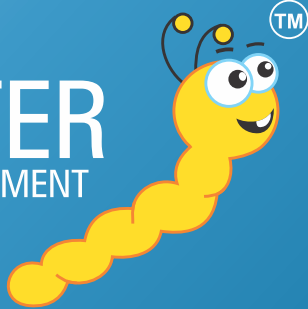


# **trans** BIO-FILTER™

WASTE WATER TREATMENT  
TECHNOLOGY



**Best Waste Water  
Treatment Technology  
in India**  
Award through  
ASSOCHAM  
in 2017



**Environment  
Abatement and  
Pollution Award**  
through FGI  
in 2015

**Outstanding  
Achievement Award  
for Environment  
Excellence**  
through International  
Achievers Conference  
in 2018



**transBio-Filter™** is environment friendly  
award winning, patent pending,  
proprietary, cost effective, no chemical,  
zero liquid discharge indigenously developed,  
sustainable green technology.



## **Green Technology**



# COMPANY PROFILE

Transchem Agritech Pvt. Ltd. (TAPL) incorporated in 2004 is engaged in Soil, Water and Wastewater treatment solutions. Our mission is to “strive for excellence and satisfaction through reliable supply of products, projects and services”.

## ABOUT **trans Bio-Filter™** TECHNOLOGY

The concept is “Design with Nature” how to work cooperatively with nature, while at the same time learning the tools of modern science.

- **trans Bio-Filter™** is a bed of organic material which supports hybrid earthworms and microbes that break down solids and converts it to carbon dioxide, water and nutrients.
- It uses the ability of the earthworms and beneficial microbes (**transzyme**) to reduce contaminants present in the wastewater.
- It involves removal of toxic matter by adsorption and filtration followed by biological degradation and oxygen supply by natural aeration to the treatment system.

Our Research & Development is working for the last 25 years for new innovations, applications as well as modifications to constantly evolve our **Award Winning, Patent Pending, Proprietary & Sustainable waste water treatment solutions based on customer feedback.**

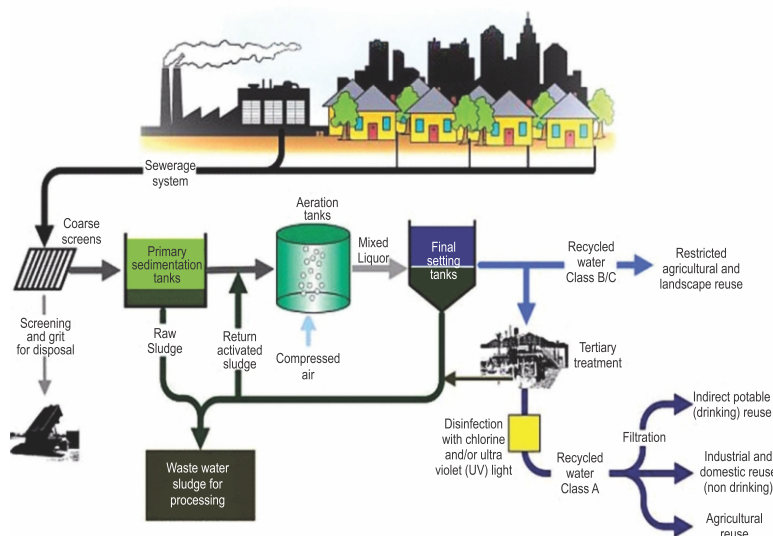
We are proud to have a strong client base, and long term relationships which is coupled with attention to detail. We provide tailor-made solutions, which makes us the ideal choice for our clients.

## ADVANTAGES

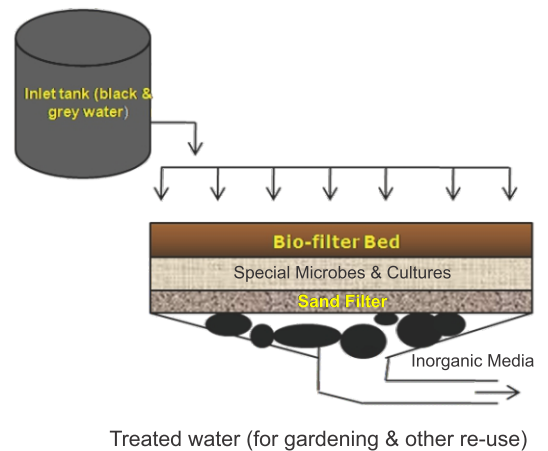
- **Sustainable Technology:** Eco-friendly, Cost-effective, Efficient, Green Technology and Reliable
- **Life-cycle is 100% Green:** Environment-friendly i.e. Chemical Free
- **Sludge Free:** No sludge generation or odor
- **Compliant:** Customized design systems to meet discharge and pollution control norms
- **Lowest Capital Requirement:** Minimum Investment required and is highly cost-effective
- **Range of Capacity of Plants:** From 5 KLD to 3 MLD tailor-made to suit conditions
- **Lowest Operational Cost:** ₹0.0050 / Liter
- **Low Footprint:** No space restriction. We have ground level and multi-storey plants
- **Works at even high TDS levels:** **trans Bio-Filter™** reduces contaminants in presence of TDS up to 50,000 ppm
- **Smart System:** **trans Bio-Filter™** works at low hydraulic & organic load
- **Unskilled Personnel sufficient to operate**

**Receive detailed quote today !**

# ENVIRONMENT DIVISION



**Conventional STP/ETP**



**transBio-Filter™ Technology**

**trans Bio-Filter™, “A Complete & Sustainable Solution to treat your Wastewater”**

## ACCREDITATION OF **trans Bio-Filter™** TECHNOLOGY

- Clearances from Pollution Control Boards like Gujarat Pollution Control Board, Maharashtra Pollution Control Board, Punjab Pollution Control Board, Delhi Pollution Control Board
- Patent Applied No. 201621036616
- Validation by ATIRA (Ahmedabad Textile Industry's Research Association)
- Technology Performance Report certified by Griffith University, Australia
- Award Received in **Best Wastewater Treatment Technology in India** through ASSOCHAM 2017 and for “**Environment abatement and Pollution control**” in the year 2015 by Federation of Gujarat Industries.

## SEGMENTS



Chemical & Pharmaceutical Industries



Block / Dye Printing



Sugar Industries



Dairy Industry



Food Processing Units



Fisheries Industries



Domestic Sewage & Municipal waste water



Reduces  
contaminants  
with high TDS  
without any  
chemical use

# trans Bio-Filter™, “A Complete & Sustainable Solution to treat your Industrial Effluents”

 **Green Technology**

## Effluent Treatment Plant

One of our clients shifted from conventional system to **trans Bio-Filter™** & these are the successful results.



**Conventional ETP**  
Area: 3,000 square meters



**trans Bio-Filter Plant**  
Area: 400 square meters

### Data of Replacement of Conventional ETP with **trans Bio-Filter™**

Sr. No.	Details	Existing ETP Plant	trans Bio-filter Plant	% Reduction	
1	Total Effluent Treated (M3/Day)	180	180	N.A.	-
2	Area Covered	3000 Sq. Mtr.	400 Sq. Mtr.	86%	↓
3	Number of Aerators	12	Nil	100%	↓
4	Power Load (HP)	110 HP	20 HP	82%	↓
5	Retention Time	10 Days	45 mins	99%	↓
6	CAPEX	200 Lac.	50 Lac.	75%	↓
7	OPEX	181 ₹/KL	63 ₹/KL	65%	↓



Inlet



Outlet

By moving from  
conventional to  
**trans Bio-Filter Plant**  
your costs  
are reduced up to  
75%

Sr. No.	Kind of wastewater	Before Treatment Water Quality				Treated Water Quality				% COD reduction
Chemical Effluent		COD (ppm)	Turbidity (NTU)	TDS (ppm)	Chlorides (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	Chlorides (ppm)	
1	Caprolactam II	52416	6	47820	-	250	< 5	2310	-	95.6% ↓
2	Sodium Formate effluent	58400	37	378	-	700	< 5	< 2000	-	98.8% ↓
3	DETC effluent	16000	500	28000	-	2200	30	16000	-	86.3% ↓
4	Sulphur wash	23000	750	110360	-	1229	13	46420	-	94.0% ↓
5	Chemical Process Effluent	6500	100	12000	-	250	15	10800	-	96.2% ↓
6	Composite Effluent	5000	> 1000	6450	-	250	< 10	6500	-	95.0% ↓
		COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	
7	CETP Effluent	5800	20	366	2000	250	20-30	3050	50	95.7% ↓
		COD (ppm)	Turbidity (NTU)	TDS (ppm)	Phenol (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	Phenol (ppm)	
8	Phenolic Effluent	4605	3.3	18880	1325	600	< 5	7900	< 1	86.9% ↓
Dyes Effluent		COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	
1	Chemical & Natural Dye	1500	200-400	-	100-500	150	5-10	-	< 30	90.0% ↓
2	Scouring Liquor from woolen textile	20376	> 1000	6811	17625	400	< 10	3608	250	98.8% ↓

Sr. No.	Kind of wastewater	Before Treatment Water Quality				Treated Water Quality				% COD reduction
Dairy & Food Processing Effluent		COD (ppm)	Turbidity (NTU)	TDS (ppm)	TSS (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	TSS (ppm)	
1	Casein Manufacturing	2500 - 4000	90 - 100	2000 - 3000	-	60-125	5-15	30-50	-	96.8% ↓
2	Dairy Waste	Up to 3500	350 - 1000	Up to 2000	-	Up to 200	Up to 25	Up to 100	-	94.3% ↓
3	Food processing waste water	1500 - 2000	-	1000 - 1200	250-300	150-200	-	50-100	20-30	90.0% ↓
4	Cheese Whey effluent	60000	Upto 1000	53000	-	Upto 250	< 50	Upto 150	-	99.6% ↓
5	Ice Cream Effluent	62000	> 1000	55000	-	Upto 250	15 - 20	Upto 10	-	99.6% ↓
Distillery Effluent		COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	
1	MEE Condensate	4900	25	3035	3400	250	20-25	3000	55	94.9% ↓
2	Mollasses based distillery	75000	-	-	105000	6360	-	-	14776	90.0% ↓
3	Grain Based distillery	49000	-	-	40000	1490	-	-	3625	95.0% ↓
Fishing Processing Effluent		COD (ppm)	NH4-N (ppm)	TDS (ppm)	BOD (ppm)	COD (ppm)	NH4-N (ppm)	TDS (ppm)	BOD (ppm)	
1	Fisheries & Aquaculture	3446	476	5580	4200	142-200	25-70	5580	70-150	94.2% ↓
Sugar Industries Effluent		COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	COD (ppm)	Turbidity (NTU)	TDS (ppm)	BOD (ppm)	
1	Sugar industry condensate	800 - 1000	150 - 200	-	500	80-125	< 40	-	30	87.50% ↓

## Sewage Treatment Plant Delhi Jal Board

**trans** Bio-Filter, “A Complete & Sustainable Solution to treat your Sewage Wastewater”

Parameters	Before Treatment	After Treatment
pH	7.0-7.8	7.0 – 7.5
Turbidity (NTU)	40-100	Nil
COD (ppm)	200-400	< 20
BOD (ppm)	100-200	< 5
DO (ppm)	Nil	3-4
Colour	Dark Grey	Colourless
Odour	Strong	Odourless



Inlet



Outlet



Delhi Chief Minister Shri Arvind Kejriwal drinking water from the first "Toilet To Tap" sewage treatment plant in Delhi (HT Correspondence, Hindustan Times, New Delhi, Jul 10, 2015)

More than 50+ trans Bio-Filter plants successfully installed in 12 states across India.



Our System can be tailor-made to suit conditions.  
We make capacity of plants from 500 Kilo Liters per day to 3 Million Liters per Day.

## Ground level system



1200 KLD **trans** Bio-Filter™ STP at Excel Crop Care, Bhavnagar



50 KLD - ETP at Transmetal, Karakhadi



## Multi-Story system



10 KLD **trans** Bio-Filter™ plant at Best Value chem Pvt Ltd, Vadodara



Inside view of plant system

## AGRI DIVISION



**Soil Testing Kit**  
(pH, Organic Carbon, Nitrate-Nitrogen, Ammonical-Nitrogen, Phosphorous, Potassium, Calcium, Magnesium, Sulphur)-9 Parameters



**Water Testing Kit (Drinking)**  
(pH, Total Hardness, Chlorides, Residual Chlorine, Iron, Nitrates, Turbidity, Fluorides) - 8 Parameters



**Water Testing Kit (Agriculture)**  
(pH, E.C., Hardness, Chlorides, Alkalinity)-5 Parameters - (Along with EC Meter)



**Water Testing Kit (Fisheries)**  
(pH, Hardness, Nitrates, Alkalinity, DO, CO<sub>2</sub>, H<sub>2</sub>S, Ammonia, Phosphate)-9 Parameters.



**Portable Electronic Meters** provided for pH, TDS, EC, Fluorides, Iron, Sulfates and others.



**Bacteriological Vials**



**Compost Testing Kit**



**Effluent Testing Kit**



**Chlorine Testing Kit**

## ORGANIC PRODUCTS



**transBio-Plus**  
Pest Control Pesticide



**transVrudhhi**  
A foliar spray for higher crop growth



**transVermibrew**  
Liquid Solution containing nutrients to keep plant healthy

## LABORATORIES



• **Mobile Soil Testing Laboratory**



• **Mobile Soil Testing Laboratory - Interior**



• **Static Soil / Water Testing Laboratory**



**INTERNATIONAL  
PRESENCE INCLUDING**

**CHINA**  
**ITALY**  
**NIGERIA**  
**ZAMBIA**  
**KENYA**

**TRANSCHEM**  
**AGRITECH Pvt. Ltd.**

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## OUR VALUABLE CUSTOMERS

### BIO FILTER



### AGRI

