trans Bio-Filter™ is environment friendly, award-winning, patent pending, proprietary, cost-effective, no-chemical, zero liquid discharge, indigenously developed, sustainable 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

**trans**Bio-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
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™

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

By moving from conventional to trans Bio-Filter Plant your costs are reduced up to 75%
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Kind of wastewater</th>
<th>Before Treatment Water Quality</th>
<th>Treated Water Quality</th>
<th>% COD reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) TSS (ppm)</td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) TSS (ppm)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Casein Manufacturing</td>
<td>2500 - 4000 99 - 100 2000-3000 -</td>
<td>60-125 5-15 30-50 -</td>
<td>96.8%</td>
</tr>
<tr>
<td>2</td>
<td>Dairy Waste</td>
<td>Up to 3500 350 - 1000 Up to 2000 -</td>
<td>Up to 200 Up to 25 Up to 100 -</td>
<td>94.3%</td>
</tr>
<tr>
<td>3</td>
<td>Food processing waste water</td>
<td>1500 - 2000 1000 - 1200 250-300</td>
<td>150-200 - 50-100 20-30</td>
<td>90.0%</td>
</tr>
<tr>
<td>4</td>
<td>Cheese Whey effluent</td>
<td>60000 Upto 1000 53000 -</td>
<td>Upto 25 &lt; 50 Upto 150 -</td>
<td>99.9%</td>
</tr>
<tr>
<td>5</td>
<td>Ice Cream Effluent</td>
<td>62000 &gt; 1000 55000 -</td>
<td>Upto 25 15 - 20 Upto 10 -</td>
<td>99.8%</td>
</tr>
<tr>
<td>Distillery Effluent</td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) BOD (ppm)</td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) BOD (ppm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>MEE Condensate</td>
<td>4900 25 3035 3400 250 20-25 3000 55</td>
<td>94.9%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Molasses based distillery</td>
<td>75000 - 105000 6360 - -</td>
<td>- 14776 90.0%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grain Based distillery</td>
<td>49000 - - 40000 1490 - -</td>
<td>3825 95.0%</td>
<td></td>
</tr>
<tr>
<td>Fishing Processing Effluent</td>
<td>COD (ppm) NH4-N (ppm) TDS (ppm) BOD (ppm)</td>
<td>COD (ppm) NH4-N (ppm) TDS (ppm) BOD (ppm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Fisheries &amp; Aquaculture</td>
<td>3446 476 5580 4200 142-200 25-70 5580 76-150</td>
<td>94.2%</td>
<td></td>
</tr>
<tr>
<td>Sugar Industries Effluent</td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) BOD (ppm)</td>
<td>COD (ppm) Turbidity (NTU) TDS (ppm) BOD (ppm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Sugar industry condensate</td>
<td>800 - 1000 150 - 200 - 500 80-125 &lt; 40 -</td>
<td>30 87.50%</td>
<td></td>
</tr>
</tbody>
</table>

**Sewage Treatment Plant**

**Delhi Jal Board**

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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.0-7.8</td>
<td>7.0 – 7.5</td>
</tr>
<tr>
<td>Turbidity (NTU)</td>
<td>40-100</td>
<td>Nill</td>
</tr>
<tr>
<td>COD (ppm)</td>
<td>200-400</td>
<td>&lt; 20</td>
</tr>
<tr>
<td>BOD (ppm)</td>
<td>100-200</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>DO (ppm)</td>
<td>Nil</td>
<td>3-4</td>
</tr>
<tr>
<td>Colour</td>
<td>Dark Grey</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Strong</td>
<td>Odourless</td>
</tr>
</tbody>
</table>

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, 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, CO2, H2S, Ammonia, Phosphate)-9 Parameters

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

- **Bacteriological Vials**

**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**