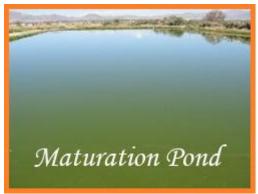


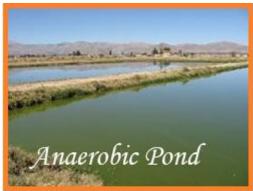
# **Dryden Aqua Ecosystem (For Pond Wastewater Treatment)**

Waste water treatment by Dryden Aqua Ecosystem. The said technology is in use since past 15 years in Europe and several other places in world. With the DAES we are replacing a conventional stabilization pond treatment with an innovative system and catering to the need of waste water treatment in villages.

Dryden Aqua is a Scottish based marine biological company established in 1980 specializing in water quality and innovative treatment technology. Our unique knowledge combination and detailed understanding of the biological as well as the physio-chemical reactions has enabled Dryden Aqua to develop a highly innovative range of product systems.







# Dryden Aqua Ecosystem Technology

Dryden Aqua Technology has designed a new technology called as Dryden Aqua Eco Systems (DAES). The technology is designed for the Domestic waste water treatment/Sewage which is discharged from a common house hold. The operation principals & the technology is designed keeping in mind the situations prevalent in Rural India & villages.

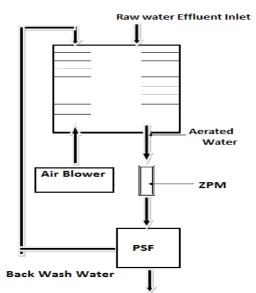
The technology is entirely designed on the fundamental of Aerobic process and converting the entire water mass in to an aerobic environment and in turn achieving the desired water quality.

## The technology is consisting of the following steps

- Septic water is discharged into the artificially created pond with false bottom created with the plastic liners
- A pipe line grid is created with the help of MS pipes surrounding to the pond structure
- From the connections taken from the pipe flexible pipes are attached to the fine bubble air diffusers
- The diffusers do not require anchoring or external weight to be attached. They are simply dropped inside the pond
- They discharge ambient air in the pond & also create turbulence in the pond which pushes
  the water at the bottom on the top surface of the pond and creating a homogeneous water
  quality across the pond and also uniformly distributes the oxygen in the pond water,
  removing the thermostratifiation and thermocline layers
- The water is sucked from the top surface of the pond and passed through a static mixture called ZPM. ZPM does the task of mechanical sanitation and also increases the ORP of the water
- The water is than passed through the AFM (active filter media) which does a dual functioning of filtration & organics removal
- The treated water is used as per the desired application

### The technology is consisting of the following steps

- Potable water treatment
- Waste water treatment
  - Domestic waste water treatment
  - Industrial waste water treatment
  - Waste water treatment in STP & ETP
- Process water pretreatment in power plants
- Process water treatment in Food & Beverages
   Company
- Process water treatment in Pharmaceuticals
- Treatment of swimming pools



Treated water for Bore well Recharge/Irrigation

**Note:** The technology of Dryden Aqua Technology is recommended by the DST/Department of science and technology for Arsenic removal.

#### Benefits Dryden Aqua Ecosystem

- The entire system can be constructed in less than 1 acre of the land against conventional
   6-7 acres
- The saving in the size of the land could be utilized for several cultivation activities
- The capital investment for the technology is around 20 to 30% lesser than the cost of the existing technology
- The Entire system can be scaled up twice the capacity merely by increasing the air diffusion. Hence system can sustain at least for next 20 years
- Raw water BOD up to 200 mg/liter can be brought down to below 30 mg/liter which is acceptable for the discharge in open body and also for the bore well recharge
- The ponds can be used a means of generating employment by promoting aquaculture in the ponds. There are several local fish varieties which grow in such ponds and can be cultivated. Which could cover the recurring expenses
- The treated water is very rich in nutrients which are desired by the plants and vegetation to grow. Hence this substantially reduces the requirement of additional fertilizers & growth boosters
- DAES would not be responsible for the diseases spreading which other commonly used treatments are responsible for
- There is no waste generation in the system. Even the backwash effluent generated will be pumped back into the pond and recycled
- Sir we would like to assure that by using Dryden Aqua Ecosystem we can resolve several
  critical issues related to pond waste water treatment. And also can complete the task with
  1/3rd to 1/4th of the land and infrastructure requirement

Website: www.bhartiwaters.com CIN NO: U15543DL2004PTC128953











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