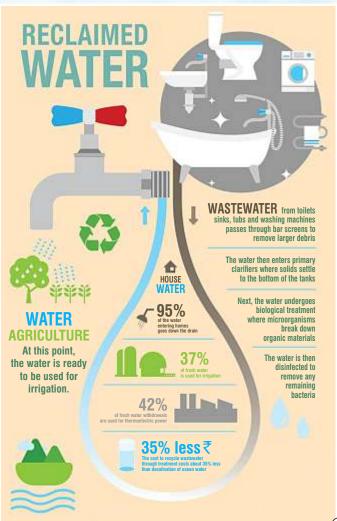




Robust, Energy Efficient & Ultra Low LCC, Aqua SubmergedCF pumps help keep Chandigarh's Water Footprint Low while keeping it **Green; Water & Energy Lean**



Chandigarh is an epitome of Urban Transformation Model and acts as one of the crucial case studies for the Urban Planners and Architects across the world. It is also one of the first planned cities of India and also enjoys the tag of "Green City" – naturally it requires a lot of water & energy to keep it green!







Situation

The city of Chandigarh has a well planned underground sewer network of pipes aggregating to 890km & is designed by taking into account the natural slope of the city, which is from north to south mostly flowing under gravity in various pipes of different diameter ranging from 6" to 18" S.W.Pipes and 24"x36" to 66" dia circular Brick sewer.

The sewage is carried to a site in the south of the city where it is to the Sewage Treatment Plant, spread over an area of 48 acres, is located at Sector 66 of S.A.S. Nagar

What is Tertiary Treatment?

Primary Treatment:

Treatment involving sedimentation (Sometimes preceded by screening and grit removal) to remove gross and settle able solids. The remaining settled solids, referred to as sludge, are removed and treated separately.

Secondary Treatment:

Generally, a level of treatment that removes 85% of biological Oxygen Demand [BOD] and suspended solids via biological or chemical treatment process. Secondary treated reclaimed water usually has a BOD of <20 milligrams per liter (mg/L) and suspended solids of <30 mg/L, but this may increase to >100 mg/L due to algal solids in lagoon systems.

Tertiary Treatment:

The treatment of reclaimed water beyond the secondary biological stage. This normally implies the removal of high percentage of suspended solids and/or nutrients, followed by disinfection. It may include processes such as coagulation, flocculation and filtration.



Asthetic Green view - the top slab of Underground Treated Water Reservoir is covered with Grass to maintain minimal intrusion to **Chandigarh's identity as a Green City**

Solution

The sewage received at S.T.P. is subjected to primary, secondary and tertiary treatment. Out of the 48 mgd sewage received at the Sewage Treatment Plant, 35 mgd is treated upto secondary level and out of this 10 mgd is further treated upto tertiary level.

The tertiary treated water is sent to TTWPS pumping station, where it is pumped (recycled back) to the city for irrigation of open spaces/ gardens. The treated sewage is used for the irrigation of open spaces in t h e s e institutions helps

not only in reducing the burden on the sewerage network of the city but also help in reducing the cost of taking the sewage from the residential and

c o m m e r c i a l premises to the S.T.P. a n d thereafter recycling it back to the city after treatment for irrigation of open spaces/ parks.





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Recycled Waste Water



No Maintenance

For almost 9years now; Aqua Submerged Centrifugal pumpsets are working with Nil Maintenance & Very Low ManPower requirement.

- They requires **No Routine Maintenance** (like Oiling, Greasing, Gland Tightening, Gland Rope replacement, Shaft Alignment, Dry Run prevention, etc.)
- They requires **No Consumables** (like Oil, Grease, Gland Ropes, Bush, Pins, Couplings, Sleeves, etc)
- They requires No Special Pre– Post / Ancillary-Auxillary Operations (like Suction Priming, Valve Opening-Closing, starting- stoppingmonitoring Forced Water Lubrication systems operation, Dewatering Seepage/ Gland Leakage, etc.)

AQUA MACHINERIES PRIVATE LIMITED www.aquapumps.com

Registered Office & Manufacturing Plant

Survey No. 504/1-2, 442/2, Near Haridarshan Estate, Near Express Highway, Ramol, Ahmedabad-382 445. Gujarat, India.

marketing.aquapumps.com