

TECHNICAL APPROACH



We envision a day when everyone can have pure and safe drinking water.



Water facts in India

- People suffering from water borne diseases occupy 80% of the hospital beds.
- More than 1,200 deaths daily and 450,000 annually due to diarrhea.
- Over 35% of the population does not have access to safe drinking water.
- Villages in India lack resources to provide safe drinking water.
- 21% of communicable diseases in India are related to unsafe drinking water.

Source of information - UN



Water facts in India

- Over 500,000 villages in India.
- Over 25,000 villages in Andhra Pradesh.
- Over 70% of population reside in rural areas (villages).
- Village population varies from 500 to 5000 residents.
- Estimated safe drinking water plants in state of Andhra Pradesh: 1500 (as of 31 Dec 2013).
- Estimated Safe drinking water plants in State of Telengana: 600 (as of 31 Dec 2013)
- Price of water in supermarkets in India is Rs. 15/Liter

Source of information – 2001 Census and State Government

Our Method Of Treatment

- Reverse Osmosis treats most types of contaminated water like Fluoride, iron, arsenic and also Septic tank discharge, grey water.
- Substances that are removed during the process of drinking water treatment include bacteria, algae, fungi, minerals such as iron and sulphur and man made chemical pollutants.

Comparison between Ultra-Violet Systems and Reverse Osmosis (RO) Technology

Sr.No	Contaminants	Diseases	UV Treatment	RO Treatment
1	Sodium YES	Heart Diseases	No	Yes
2	Calcium	Kidney Stone	No	Yes
3	Magnesium	Kidney Stone	No	Yes
4	Lead	Fluorosis	No	Yes
5	Fluoride	Mental Retardation	No	Yes
6	Arsenic YES	Poisoning	No	Yes
7	Iron	Constipation, Dysentery	No	Yes
8	Copper	Gastrointestinal track	No	Yes
9	Mercury	Kidney	No	Yes
10	Nitrate	Poisoning	No	Yes
11	Pyrogen	Fever	No	Yes
12	Insecticides & Pesticides	Cancer	No	Yes
13	Salinity, Brackishnes	Bad Taste & Odor	No	Yes
14	Bacteria	Bacterial Diseases	Yes	Yes
15	Virus	Viral Diseases	Yes	Yes

PROCESS

o Our Business development member visits the village and analyzes following information:

- Water sources
- Village population
- Raw water sample

Grampanchayath Provides

- Room of 15' X 20' for plant installation
- Access to Electricity connection
- Access to raw water
- Village resolution
- IOM Agreement
- Contribution required from GP/Trust/Donor/any other third party

Plant Installation & Commissioning

The RO Plant will be installed within 30 days of the Agreement between Grampanchayath and CPW



- After installation & commissioning, the Plant is ready to supply Purified water to the Villagers.
- We hire and train a person from the village as a Operator of the Plant so that the plant can supply purified drinking water to Villagers.