

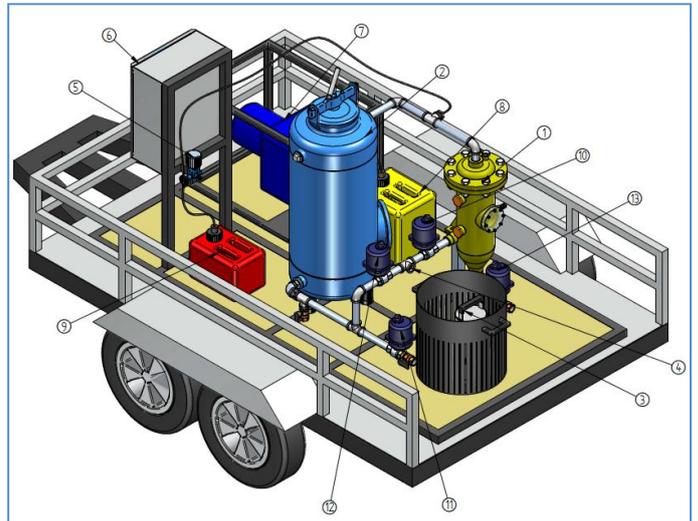
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# *Mobile Potable Water Station Disinfection and Treatment of River Water*

## **1. System Description**

The following describes Mobile Potable WSDT for flows of 0.5-1.0 M3/H, installed on a robust trailer with a standalone 10m<sup>3</sup> collapsible water tank.

The system on the small trailer is designed to be hooked to a car or a small truck, positioned in the required area and self-operate by pumping river water, performing filtration, disinfection and proper treatment to produce safe portable drinking water to the people of the village.



The system is built taking into account the ease and simplicity of operation in the field, with minimal maintenance requirements and quick setup and installation.

The main advantage of the system is its advanced chlorination and oxidation unit the SR-CL. This chlorination and oxidation unit system has triple oxidation and sanitation qualities specially fit for bacteriological elimination and safe potable water supply from river source.

The Chlorine producer is designed to produce free active chlorine from the natural chloride/salts already existing and dissolved in the water, without any need to add or apply into the water neither salt nor chlorines tables nor chlorine liquid. The disinfecting abilities of the device cover other oxidants that ensure a wide range of efficiency.



The unit is an environmental friendly device that does not use any chemicals.

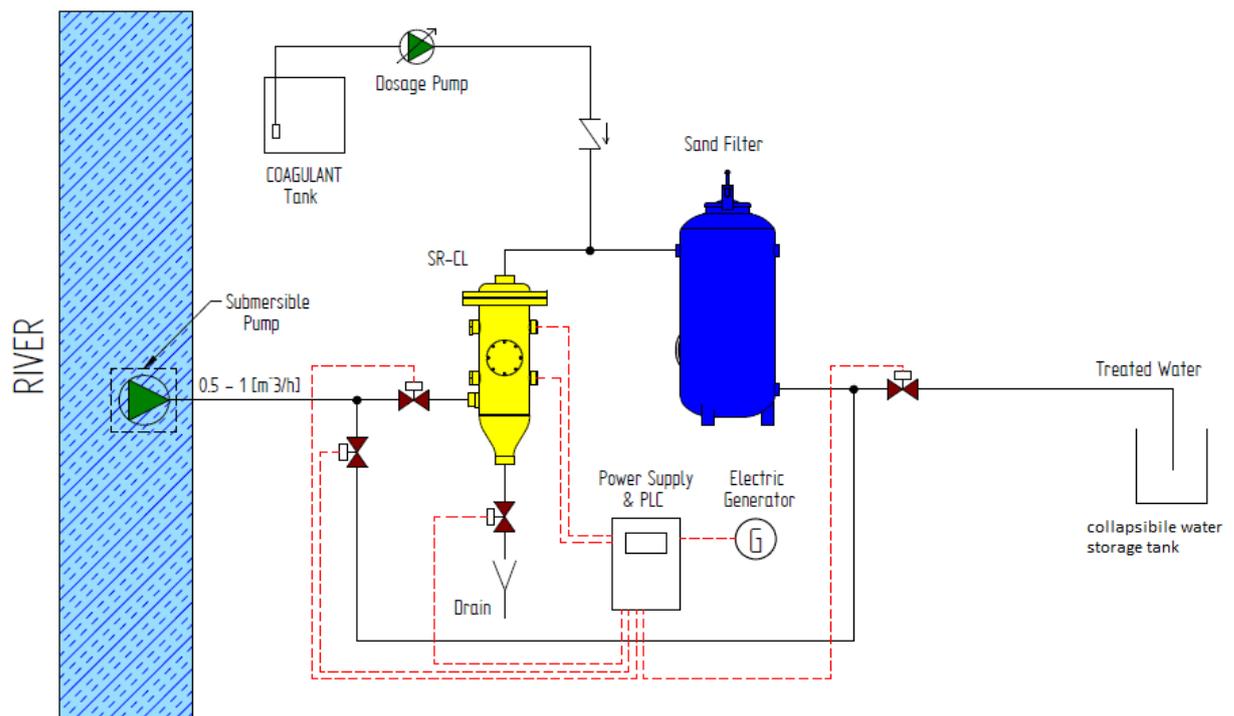
- Eliminates use of chemicals.
- Disinfects the water, destroy all bio life, bacteria and alga.
- Prevent bacterial enhanced corrosion.
- Low maintenance cost.

The trailer solution is equipped with an integral diesel generator + fuel tank to provide the electrical needs of the water treatment process.

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## 2. Operation Description

The submersible pump in its cage is lowered into the river water, gravel in the bottom of the cage acts as a filter screening out medium dirt and elements; the cage itself acts as protecting against branches and other objects floating in the river. A firefighting pipe extends from the submersible pump to the trailer and connects to the piping system that directs the water in the cleaning process till safe water are poured into the collapsible water storage tank at the other end of the installation.



The system is controlled with a PLC that does the monitors the coagulant dosing pump, performs Automatic Flush/Cleaning of the filter (periodically) and controls the Chlorination and Disinfection process on the incoming water.

The heart of converting the water to be safe for drinking is an additive free device that uses the already dissolved salts in the water to produce the required Chlorination and Disinfection, the level of production is controlled by the PLC.