

A CONVENTIONAL SURFACE WATER TREATMENT SYSTEM FOR AN ISOLATED COMMUNITY

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ABSTRACT

In this advanced technology century still got some place that cannot get water supply from government. Based on this fact, this water treatment system is designed to satisfy the rural area human's need. The main function of this system is to filter the surface water such as lake and river to usable water for human to use.

The process consists in the water treatment plant includes the screening, aerator, chemical mixing, flocculation and coagulation, sedimentation, filtration, adsorption and disinfection. Through this process the bacteria in the water can be killed up to 90%-99%.

In mechanical part need to study the pump, generator and piping system. After that, make the selection of pump, generator and piping system.