Design Philosophy

The AguaClara Design Philosophy is based on our Philosophy of

Empowerment:

Affordable for the Community

AguaClara plants must...

be constructed using local labor. be constructed using locally available materials. use generic suppliers rather than specialized components. operate without electricity. minimize use of valves to reduce costs. minimize use of moving parts. be robust and resilient. be optimized for low-cost and high-performance. be easy to construct using low precision construction techniques use high rate processes to minimize construction costs and facility footprint

Operator-Friendly

Designs must...

use unit processes that are observable whenever possible (no sealed reactors). be possible to operate without doing math. use chemical dosages that are set directly. be maintainable by one person. have a direct-reading indicator of plant flow rate. have a chemical dosing control point close to flocculator.

have no small parts that can be easily lost. have removable parts for inspection and maintenance.

be enclosed in a building to provide protection from sun and rain.

be sized so that all tanks are accessible by a human for inspection.

include provisions so that the operator can receive appropriate feedback for every step of the treatment process