

ClearPod Case Study: 3 chamber septic tank

Location: Guangzhou, China

Partner Installer : ALCLE

Installation: May 2017



ClearPod™
Enhanced Septic System Treatment

Problem:

Our partners ALCLE have identified a significant issue with under-performing septic systems across China.

A large addressable market has been identified to upgrade existing septic systems.

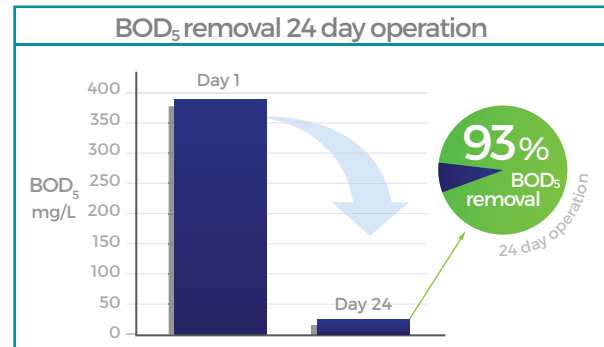


ClearPod Solution:

ClearPod was placed into the first chamber the existing 3-chamber septic system in May 2017. The septic system serves a single home with two bathrooms and 5 occupants, the water is then discharged into a small leach field.

Results:

Treatment result summary				
	Unit	Day 1	Day 24	Removal
COD _{cr}	mg/L	975	135	86%
BOD ₅	mg/L	385	25.1	93%
TN-N	mg/L	163	43.8	73%
TP	mg/L	15.5	10.9	30%
NH ₃ -N	mg/L	159	22.1	86%
E.Coli	N/L	1,600,00	350,000	78%



Performance:

Recent wastewater sampling from this install indicated an effluent of 25.1 mg/L cBOD . This indicates a 93% removal efficiency and significantly reduced organic loading to the leach field. Significant reductions were also identified for key nutrients (Nitrogen, Phosphorous) as well as clear reduction in fecal contaminants.

Upgrade Opportunity:

Addresses the flaw in traditional septic systems by providing active treatment to the wastewater and reducing the organic loading in the leach field. Validates an effective drop solution to upgraded septic system performance in China.

Cost Benefit:

Rather than replacing the entire system, a ClearPod was simply dropped into the septic system to enhance the under performing system and extend its lifetime. The reduction of organic loading allowed the leach field to rejuvenate, percolate water more efficiently, and extend the lifetime of the existing system at a fraction of the cost of replacing the entire septic system.



web: www.islandwatertech.com
email: info@islandwatertech.com
phone: (902) 361-2085

www.clearpodwater.com