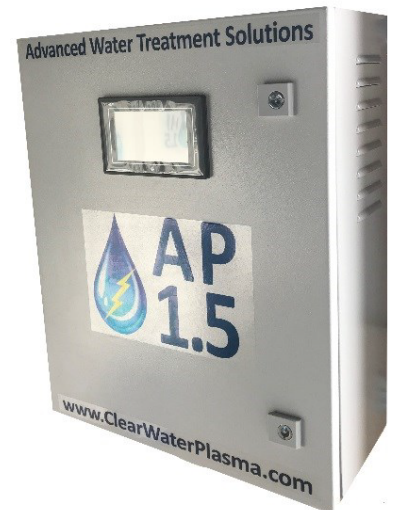


Onsite Gray/Black Water Treatment BOD & E. Coli reduction

Clear Water Plasma LLC (CWP) has successfully treated onsite sewage waste water from a leading service provider in Western Texas.



Case History

An insight into how CWP's unique hyperoxidation technology was used to treat onsite black water

Benefits

- Uses only Electricity
- No chemicals
- No waste stream
- Modular
- High Volume (upto 30 bpm)
- Mobile (Portable or Fixed as needed)
- Low Maintenance
- Easy Operation
- Fast Deployment

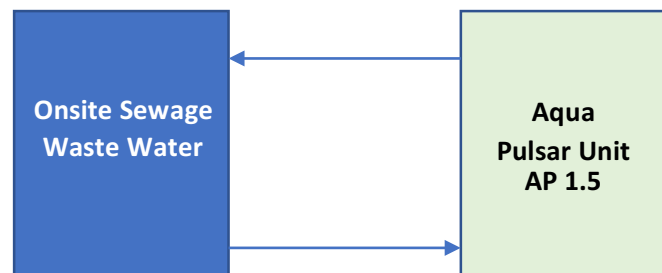
Capabilities

- Disinfection
- Reduces Scale Formation, Biofilms and Algae
- Eliminates sulfate reducing and acid producing bacteria
- Oxidizes Heavy metals
- Reduces total dissolved solids – converts to TSS
- Eliminates foul odor - H₂S, NH₃, Mercaptans
- Replenish Dissolved Oxygen
- Organics/BOD/COD reduction

Wide range of Products

- ☐ AP 1.5
- ☐ AP 6
- ☐ AP 12
- ☐ AP 48
- ☐ AP 72

- Customer constantly facing non-compliance issues with existing treatment scheme
- State regulations require BOD of treated water to be less than 80mg/L
- State regulations require E.coli & Total Coliforms to be less than 8 CFU/ml for reuse as spray water on ground
- State regulations require the pH to be in the range of 6.0-9.0
- State regulations also require residual chlorine to be 2-3 mg/L over 7 days.



The customer approached CWP with these stringent demands and CWP delivered on its promise.

- Recommended AP-1.5 Unit as pretreatment to existing treatment scheme
- log 4 reduction in total coliforms and E. Coli
- BOD reduced by > 76%
- pH of came down to 8.3
- Excess Residual free chlorine after the CWP pretreatment (14.5 mg/l) allowed the customer to add more untreated water and bring free chlorine down to 2-3 mg/L as required by the state regulations
- Increased processing capacity for customer
- Brought the overall treatment plant into compliance
- Happy customer orders more units and installs at all its locations
- Now provides a complete integrated system with AP1.5 pretreatment as a package to new customers

Onsite Sewage Waste Water Treatment		
Parameter	Before Treatment	After Treatment
BOD, mg/l	696	161
pH	8.78	8.31
Temperature	19.6	21.3
Total Coliform, MPN/ml	>2420	<1.0
E.Coli, MPN/ml	>2420	<1.0
Chlorine, Residual,mg/L	NONE	14.5

