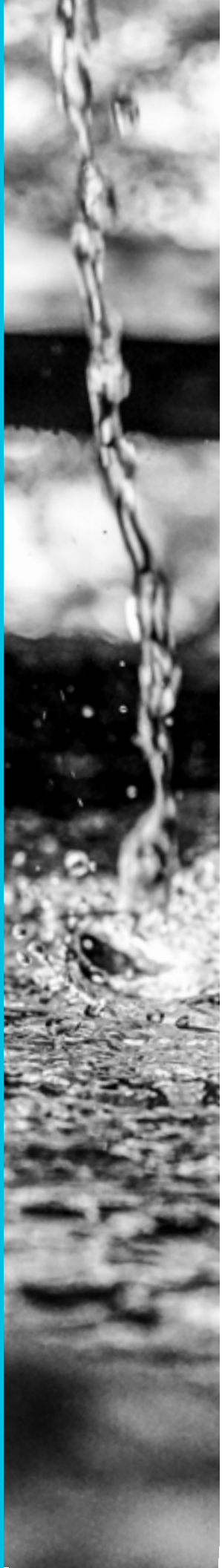
ADVANCED WATER PURIFICATION SOLUTIONS



eFloc™ System

Maximum purification of heavily contaminated waters, producing only clean water and a harmless inert sludge-cake for disposal at any sanitary landfill.

- Highest quality at the lowest cost per gallon in the industry
- Designed to treat severely contaminated waters and produce crystal clear water suitable for drinking
- Integrating field tested and proven (patents pending) technologies, eFloc™ is the most advanced water purification system available
- Successful and efficient treatment, ease of operation, and low operating costs are just a few of the benefits

SAVE THE WATER™

SAVETHEWATER.ORG
INFO@SAVETHEWATER.ORG
786-417-7000 | PLANTATION, FL

System highlights

- Essentially eliminates EPA priority heavy metals from wastewater
- Applicable over a wide range of contaminants
- Greatly reduces oil, grease and suspended solids
- Leaves no hazardous waste stream – solids are eligible for sanitary landfill
- Ideal for up-stream protection of RO membranes & ion exchange resin beds
- Treated water can be recycled
- Self-contained in 40’ intermodal shipping container
- Comprehensive remote digital management

Markets

Federal & Municipal

- Municipal wastewater
- Municipal drinking water
- Landfill leachate
- Superfund sites

Commercial & Industrial

- Wood, pulp, and paper
- Semiconductor & electronics manufacturing
- Mining
- Laundries
- Oil refineries
- Power generation
- Chlor-alkali and other chemical plants
- Ships, shipyards and dry docks
- Agriculture
- Food processing
- Meat and poultry
- Textile and dye
- Metal finishing/plating
- Car, truck, and railroad wash facilities

REMOVES OR REDUCES:

Metals

- Aluminum
- Antimony
- Arsenic*
- Beryllium
- Bismuth
- Boron
- Cadmium*
- Chromium*
- Cobalt*
- Copper*
- Gold (Auric)
- Iron
- Lead*
- Manganese
- Mercury*
- Nickel*
- Silver*
- Strontium
- Zinc*

** EPA Priority Heavy Metal*

Fluoride

Humic Acid

AFFF (PFOS)

Pollutants

- TPH
- FOGs
- PAHs
- BODs
- CODs
- TSS
- VOCs

Our research team has containerized the eFloc™ equipment to provide weather resistance, as well as improved security and portability

How it works

The eFloc™ electroflocculation system removes or reduces a wide range of contaminants, particularly metals, oils, greases, and suspended solids, even in highly contaminated waters. This system is capable of destroying and/or removing the EPA’s “priority” heavy metals over a wide range of species and concentrations.

The system also stabilizes and fixes the solids generated into material that may be disposed of in sanitary landfill. The eFloc™ technology meets federal TCLP, WET, and Detox tests, minimizing the cost of operation and ensuring safe disposal of entrapped contaminants.

The strength of eFloc™ lies in its superior technology and its full service application to each deployment. Digital over-the-Internet control is coupled with expert management from the central laboratory, which monitors and makes adjustments to optimize the system’s techno-economic performance in the field.

The eFloc™ electroflocculation technology has proven environmentally superior to any other available water purification technology because of its capacity to more effectively deal with a broader spectrum of wastewater contaminants and concentrations, with very low labor and maintenance costs. eFloc™ can reduce heavy metals to very low levels (ppm and ppb), even in the presence of heavy fats, oils, and greases, and heavy suspended solids, while simultaneously reducing VOCs, BODs, CODs, etc.

eFloc™ has been installed in multiple commercial applications as diverse as industrial laundry effluents (heavily contaminated with heavy metals, FOGs to 10,000 ppm, TSS, BODs, CODs, and VOCs), dyehouse waters, stormwater run-off, stone-washing fabric processing plant wastewaters, landfill leachates, ship bilge and ballast waters, and nuclear power plant wastewater streams (ethylene glycol to 10,000 ppm). Bench-scale testing also indicates its ability, with minor modifications, to remove radionuclides from radioactive wastewaters and PFOS from waters contaminated with AFFF (Aqueous Fire Fighting Foam).

Design studies have been completed for a mobile eFloc™ system aboard a 40’ shipping container, capable of processing up to 50 gpm of contaminated waters. eFloc™ technology can also be retrofitted to existing wastewater treatment plants and municipal drinking water facilities. The modular system is suitable for multiple units to be installed, for cleaning of an unlimited volume of water.

eFloc™ typical results

INDUSTRIAL LAUNDRY		
Contaminant	Untreated	Treated
TSS	3,500	22
Total Oil & Grease	5,500	<40
Oil & Grease (TPH)	4,000	<10
Cadmium	25.6	<0.001
Lead	400	<0.03
Napthalene	3.4	0.079
2-bis ethylhexyl phthalate	5.7	0.240
Pyrene	3.4	0.330
Ethylbenzene	21	<0.007
Toluene	23	0.014
Xylenes	168	0.051
Phenol	3.4	0.052

DYEHOUSE		
Contaminant	Untreated	Treated
COD	1,896	37
TSS	356	ND*

SHIP BILGEWATER		
Contaminant	Untreated	Treated
Oil & Grease	490	ND*
Cadmium	0.015	ND*
Chromium	0.15	ND*
Copper	2.5	0.008
Lead	0.06	ND*
Mercury	0.0031	ND*
Nickel	2	ND*
Zinc	6.2	0.055

STORMWATER RUN-OFF		
Contaminant	Untreated	Treated
TSS	1,032	3.3
FOG	7.6	<0.25
TPH	4.2	<0.25
Barium	0.228	0.008
Lead	0.0825	<0.0010

NUCLEAR POWER PLANT		
Contaminant	Untreated	Treated
Ethylene glycol	10,000	ND*

INDUSTRIAL PLANT		
Contaminant	Untreated	Treated
TSS	2,500	<100
Oil & Grease	2,000	<100
Lead	10	0.2
Cadmium	1	0.05

SLUDGE ANALYSIS			
Characteristic waste performance test on solids going to county landfill			
Ignitability	Pass		
Corrosivity	Pass		
Reactivity	Pass		
Toxicity	EP Tox	TCLP	Limits
Lead	<0.5	<0.1	5.0
Cadmium	<0.1	<0.01	1.0

All units in mg/L **ND: non-detectable levels*

About Save the Water™

Vision | Our vision is to achieve contamination-free, healthy water for all. We want to ensure all communities have access to clean, healthy water and to protect the supply so it stays clean for generations to come.

Mission | The mission of Save The Water™ is to conduct water research to identify and remove harmful contaminants in water, to improve the quality of drinking water, and to raise public awareness about water contamination and its health impact.

Work | Our research team will work on ensuring each chemical present in North American waters is identified and its effects documented. Then we will translate this information into simple terms and share our knowledge so that every family in the United States and Canada is aware of water pollution's health impacts. Our scientists and engineers have designed water treatment technologies to remove dangerous pollutants in water to make water cleaner for our families.

ADVANCED WATER PURIFICATION SOLUTIONS

SAVE THE WATER™

SAVETHEWATER.ORG
INFO@SAVETHEWATER.ORG
786-417-7000 | PLANTATION, FL