

BioCleaner

THE SOLUTION

Removes:	Clients:	Eco-Friendly:	Cost Saving:
* <i>Sludge</i>	* <i>Industrial</i>	* <i>Green Patent "A"</i>	* <i>Thousands Less \$\$\$</i>
* <i>COD, BOD, TSS</i>	* <i>Commercial</i>	* <i>Low Energy Use</i>	* <i>Lowest OPEX & CAPEX</i>
* <i>Cyanobacteria</i>	* <i>Residential, Municipal</i>	* <i>Small-Footprint</i>	* <i>Fastest Results</i>
* <i>Odor</i>	* <i>Agricultural</i>	* <i>Non-GMO Microbes</i>	* <i>Guaranteed</i>

REVOLUTIONARY NEW SYSTEM

The "Biocleaner" system is a revolutionary, breakthrough technology that harnesses the power of nature to treat all types of organic waste, such as residential, commercial, industrial, municipal sectors. The technology has gone through years of research and development in the United States. It can also be used to clean waterways such as rivers lakes and bays effectively.

The Biocleaner has a rating for green patent A, setting itself apart from all other systems.

Unlike other biological treatment systems, which require regular application of microbes, the Biocleaner constantly produces its own microbes, eliminating the need to add new microbes every day.



Treatment Parameters:

*Ph must be between:

4.0-9.0

*Temperature:

Ideal: 20-35 °C

Okay: 15-42 °C

Within these parameters

the BioCleaner will:

Decrease the BOD, COD, and TSS, Remove Oil, grease, surfactants etc.

and, Increase the dissolved oxygen (DO) in the wastewater.



THE MEDIA



Are the Microbes Safe?

Yes. According to the American Type Culture Collection (ATCC), the microbes we use are Biosafety level 1 meaning if a healthy human ingests them, it will not do any harm. The microbes used are indigenous to the country and will not cause any harmful outbreaks.

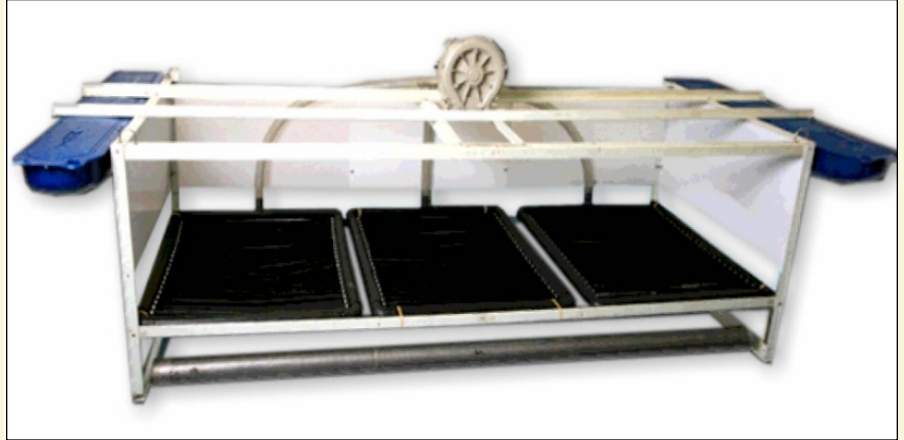
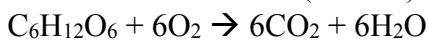
Have the Microbes been Modified?

No. The microbes are all-natural and are not genetically modified. There is no risk of the microbes mutating from their original form.

What Happens to the Waste? Where Does it Go?

The microbes digest the waste and turn it into carbon dioxide and water. This is a very clean and green technology.

The reaction that occurs (aerobic):



How Does it Work?

In nature, microbes are used to decompose dead material until they are returned to the ecosystem. Just like nature, the Biocleaner uses natural microbes to treat wastewater towards its original form. The microbes are in a special patented immobilized state in the form of media.

Immobilized state means that the microbes are dormant or hibernating. When media or microbes have oxygen and nutrients available, it then activates and will start multiplying. It is the newly produced microbes that will occupy the entire tank and treat the wastewater to high standards. The media is located along the bottom horizontal tube of the Biocleaner. The microbes use the waste as their food source. The Biocleaner also delivers a very efficient amount of Oxygen to the water. The microbes need to have a good source of oxygen to flourish. The Biocleaner is a natural, cost effective, and fast method of treating waste water.

Media Tube



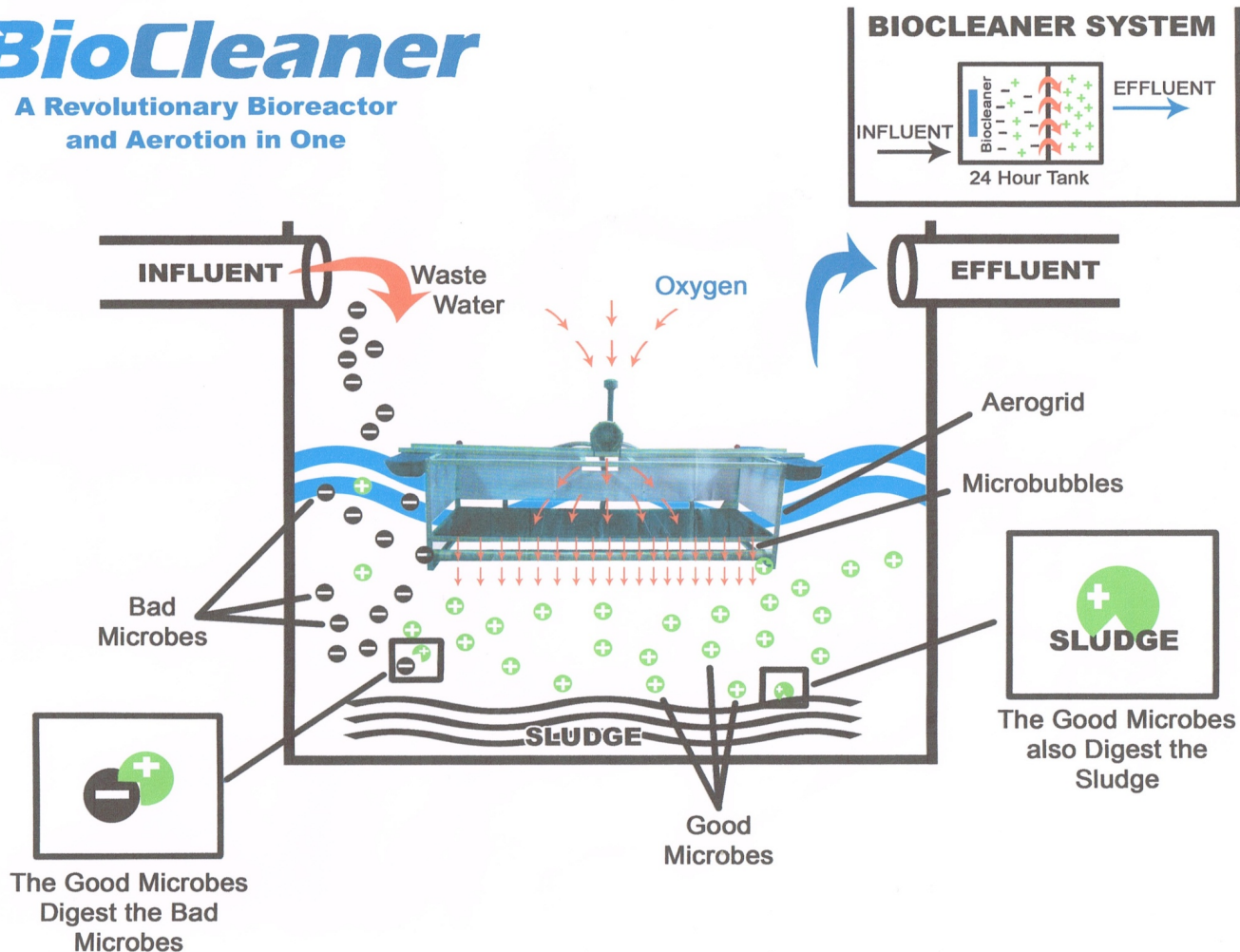
Media



THE SYSTEM

BioCleaner

A Revolutionary Bioreactor
and Aeration in One



The BioCleaner is so powerful that it can break down waste so that there is no organic sludge. The treatment tanks will be filled with microbes enabling an efficient breakdown of all organic waste including oil and grease. A standard BioCleaner system can be pre-engineered to BOD 5mg/L and COD 20mg/L or even to non-detect depending on how you design it. This means that sludge handling or desludging will no longer be needed, saving a significant amount of time and money. Sludge related costs typically average 90% of your STP expenses

Each BioCleaner is powered by a small 2.0 HP blower depending on unit size. No expensive transfer pumps are needed. Furthermore, the effectiveness of our patented

system enables you to recycle 100% of the wastewater. The recycled water can be suitable for flushing, washing, irrigation and on air-conditioning cooling towers. Excess water can be used to recharge the ground water. Coupled with a Reverse Osmosis (RO) unit you can cheaply treat it to drinking water standards.



CASE STUDIES

THE CLIENT:	THE PROBLEM:	BIOCLEANER:	TIME FRAME
Diamond Water Laboratory	High levels of TSS, COD, BOD, and Heavy Metals	One Unit, Placed in Pond.	3 Reports Over the Course of 16 Months

DIAMOND WATER LABORATORY			
	Dec 2011	June 2012	March 2013
Iron(mg/l)	14.615	ND (non-detect)	ND
Manganese(mg/l)	1.32	0.06	0.059
Hardness (grains/gal)	56	23	19
Ph	6.84	8.76	8.47
TSS (mg/l)	1061	539	634

THE CLIENT:	THE PROBLEM:	BIOCLEANER:	TIME FRAME
Tagaytay Highlands: Residential	Foul Pungent Odor, High Levels of BOD, COD and TSS	One Unit, placed in STP with flow of 20,000 gls/day	Results were seen in Two Weeks

TAGAYTAY HIGHLANDS			
	Sept 2009	Oct 2009	Standard*
BOD (mg/l)	380	13	50
COD (mg/l)	n/a	20	100
TSS (mg/l)	8	<2	70

*These are the passing standards for the local Government.

CASE STUDIES, CONT



WellPack Inc

An industrial services and equipment type of business that specializes in printing. Due to ink use the water was significantly discolored even after regular treatment.

THE CLIENT:	THE PROBLEM:	BIOCLEANER:	TIME FRAME
Wellpack Inc. - Industrial	Odor and discoloration.	One Unit, Placed in STP.	10 weeks

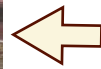
WELLPACK INC. - INDUSTRIAL			
	Initial Reading	After BioCleaner	Standard*
Ph	n/a	7.22	6.5-9.0
Color (PCU)	n/a	65	150
TSS (mg/l)	n/a	44	70
FOG (mg/l)	n/a	2.87	5
BOD (mg/l)	10,000	22	50
COD (mg/l)	n/a	56	100

*These are the passing standards for the local Government.

CASE STUDIES, CONT

THE CLIENT:	THE PROBLEM:	BIOCLEANER:	TIME FRAME
LianHe Pond	Heavily Sewage Polluted Water, Foul Odor, Sludge	One Unit, Placed in Pond.	10 weeks

LIANHE POND			
	Initial Reading	After BioCleaner	% Reduction
Phosphorus	7.74	4.13	46%
Ammonia	73.5	12.9	83%
Total Nitrogen	85.8	14.7	82%
BOD (mg/l)	58.3	17.3	70%
COD (mg/l)	103	53.2	48%
TSS (mg/l)	41	24	41%



Before:

Sewage from surrounding population of 2,400 people. You can see the sludge and discoloration in the water. The sludge was at an organic thickness of about 1.2-1.5 meters.

After:

The BioCleaner removed the Ammonia and Nitrogen. There is an obvious clarity to the water and all odors and sludge were significantly reduced to well below required standards.



ADDITIONAL INFORMATION:

How Can We Help You?

Each BioCleaner can be engineered and designed to match the needs and requirements of your existing WWTP, STP, or Tank. We have worked with various clients in a multitude of situations, and we have the capability to engineer our product to match your

needs.

Good to know:

- Works Anaerobically or aerobically.
- Can be adjusted or engineered to meet your projects needs.
- The water can be recycled back into your system.
- Can be treated to Potable levels with the inclusion of a UV system.
- Works best in a wastewater depth between 3-5 meters.

Additionally, once your Pond, Lake or Waterway has been cleaned with BioCleaner you can safely add fish to your eco-system, increasing the natural cleaning and

maintenance ability of the water and wildlife, bringing it back to its natural state.

Be sure to

check out our website!
www.biocleaner.com.

Contact us at:
info@biocleaner.com with any questions, and for Rep info!



*Mexico: Golf Course - Sludge and Odor - One BioCleaner unit was added.

Our MISSION is to make a convenient, easy to use system, that is cost effective, and flexible enough to be placed within any existing treatment parameters, and will clean the surrounding water in the safest and most environmentally friendly way.

Our VISION is to see a World where hazardous waste water doesn't exist, because clean water is ever-present and easily accessible. With systems like ours, everyone has the ability to create clean, reusable water.



*Mexico: Golf Course - After 10 weeks, no more sludge, no more odor. Fish will be added.

