



**blue eden**  
clean technology solutions

# PureBLUE

PureBLUE™ Water purification system

## DESCRIPTION

PureBLUE™ is a propriety technology offering chemical free treatment of organic rich process/wastewater, delivering high quality treated water using only electricity

## APPLICATIONS

PureBLUE™ solves treatment challenges of organic rich wastewater eliminating expensive process water handling and disposal cost across multiple industry sectors including:

- ✓ **Pharmaceuticals**
- ✓ **Electronics manufacturing**
- ✓ **Food and Beverage**
- ✓ **Oil and gas**
- ✓ **Municipal water treatment**
- ✓ **Agriculture and fertilizer manufacturing**
- ✓ **Landfill**

# PureBLUE™

## THE CHALLENGE

Removal of organic pollutants in H<sub>2</sub>O poses a huge challenge for cities, industries and remote locations where infrastructure is limited. Using disposal techniques such as incineration is extremely expensive and environmentally unfriendly while water consumption continues since the wastewater is not reused.

## THE SOLUTION

PureBLUE™ chemical free treatment effectively destroys all organic compounds in one simple step. Using proprietary (non-consumptive) electrodes + electricity to do the hard work in either a continuous, or batch process.

## BENEFITS

### Destroys organic contaminants such as

- ✓ **Naphthenic acids**
- ✓ **Organic aromatic compounds**
- ✓ **Dissolved organics**
- ✓ **Chemical-free process**

### Cost

- ✓ Elimination of water treatment chemicals and associated processes
- ✓ Reduction of water consumption as wastewater is recycled/re-used
- ✓ Elimination of disposal related costs
- ✓ Highly cost effective when compared to other methods

### Deployment

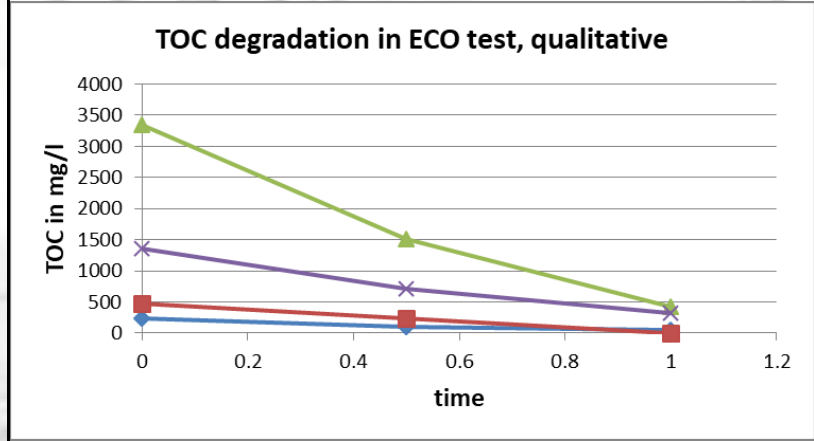
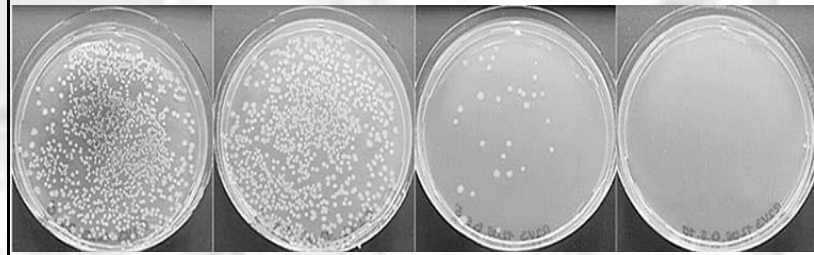
- ✓ Modular design and re-deployable
- ✓ Standalone deployment
- ✓ Compatible with current treatment systems at different process stages
- ✓ Combined with **ClearBLUE™** offers an integrated water treatment solution system

# RELIABLE REPEAT PERFORMANCE

PureBLUE™		
Contaminant Description	Suspensions*, Emulsions*, Colloids* % Removal	Solutions % Removal
Biological oxygen demand (BOD)	-	90 - 99.9
Chemical oxygen demand (COD)	-	90 - 99.9
Total organic carbon (TOC)	-	90 - 99.9
Total suspended solids (TSS)	-	-
Dissolved organic carbon (DOC)	-	90 - 99.9
Oil in water (OIW)	-	-
Turbidity	-	-
Bacteria/algae/larvae	-	-
BTEX (benzene, toluene, ethyl benzene, xylenes)	-	90 - 99.9
Calcium	-	-
Cleaning agents and detergents	-	90 - 99.9
Color	-	90 - 99.9
Dyes	-	90 - 99.9
Ammonia	-	TBD
Antibiotics	-	90 - 99.9
Bisphenols	-	90 - 99.9
Dioxin	-	90 - 99.9
E. coli	-	90 - 100
Fecal matter	-	90 - 99.9
Hormones	-	90 - 99.9
Parasites	-	90 - 99.9
Pesticides	-	90 - 99.9
Pharmaceuticals	-	90 - 99.9
Phosphate	-	TBD
Polychlorinated biphenyl (PCBs)	-	90 - 99.9
Polycyclic aromatic hydrocarbons (PAHs)	-	90 - 99.9
Protozoans	-	90 - 100
Viruses	-	90 - 100
Latex	-	90 - 99.9
Polymers	-	90 - 99.9
Naturally occurring radioactive materials (NORM)	-	-
Heavy Metals (As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se)	-	-
Thallium	-	-
Silicon	-	-

+ ClearBLUE™ is deployed for suspensions, emulsions, and colloidal particles removal in turbid water streams

## Bacteria/Coli treatment



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