



Flexible, Energy-Efficient Advanced Oxidation for Disinfection and Decontamination

BioLargo's Advanced Oxidation System (AOS) offers high-performance water treatment for the decontamination and disinfection of water and wastewater.

Pairing an iodine-based electrochemical advanced oxidative process with proprietary carbonbased substrates, the AOS delivers the highest performance standards with industry-leading energy efficiency.

Highly effective against bacteria and viruses, the AOS is also well-suited for the decontamination of hard-to-treat organic contaminants such as pharmaceuticals and other micropollutants

The AOS can be configured to deliver optimized performance for most water or wastewater treatment applications.



CONTAMINANTS			
Organic Contaminants	Removal	Micropollutants*	Removal
Naphthenic Acids	>95%	Amoxicillin	98%
Phenol	>97%	Carbamazepine	95%
Benzene	53%	Fluoxetine	94%
Benzolalpyrene	**	Ibuprofen	96%
		17-ß-estradiol	90%**
Microorganisms			
E. coli, Salmonella enterica	>6logs		
Staphylococcus aureus	>6logs		
Giardia, Cryptosporidium	3logs		
Bacteriophage MS2 (viral surrogate)	>6logs		

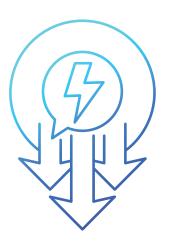
^{*} These represent "hard-to-treat" or recalcitrant contaminants with poor or non-existing solutions in the market

 $^{^{\}star\star}$ Physiological/cellular effect of these compounds removed post AOS treatment









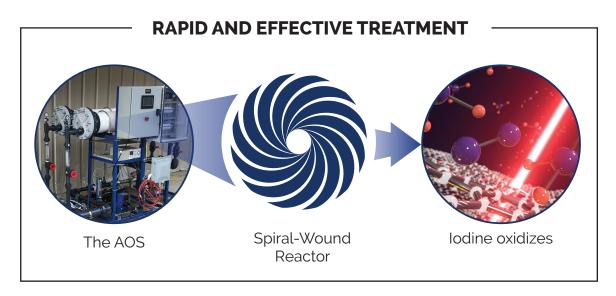
Highest performance, lowest energy consumption

The AOS consumes approximately **0.0075 watt hrs**per gallon.

How it works

The AOS utilizes an electrochemical advanced oxidative process (eAOP) that generates iodine and iodine oxides at its high-surface-area anodes. These molecules rapidly react with organisms and organic contaminants providing outsized treatment performance relative to electrical input.

The AOS has been vetted in multiple third-party studies. It has been shown to produce water that is environmentally safe and produces less disinfection by-products than common treatment technologies.



Total water treatment solutions

BioLargo offers full service environmental solutions. Our team of experts includes water and wastewater professionals, research scientists and engineers with 30+ years experience, who help ensure you receive the cutting-edge in water treatment. Our team solves the toughest environmental challenges to make your life better.

BioLargo, Inc. 14921 Chestnut Street Westminster, CA 92683 Phone: (888) 400-2863 Email: info@biolargo.com www.biolargo.com



BIOLARGO_AOS_1.0.indd 2 8/30/21 11:50 AM