

# DO<sub>2</sub>E

WASTEWATER TREATMENT LLC

**Air Docks**



“SOLVING THE WORLD’S WATER  
PROBLEMS WITH INNOVATIVE  
GREEN TECHNOLOGIES”

REVOLUTIONARY CHANGES IN AERATION & MIXING

VISIT US ON THE WEB AT [WWW.DO2E.COM](http://WWW.DO2E.COM)



DO<sub>2</sub>E Waste Water Treatment LLC has designed and patented some of the most technologically advanced wastewater treatment equipment on the market today. DO<sub>2</sub>E is proud to offer products that are environmentally friendly, air driven, and most importantly have no moving parts. This is a new paradigm in wastewater treatment equipment for both municipal and industrial applications. DO<sub>2</sub>E continues to be on the cutting edge in the design, development, and production of environmentally friendly and energy efficient technology. Our approach to **Green Technology** continues to set new industry standards when it comes to "Solving the World's Wastewater Problems."



**Green Technology** refers to technology whose use is intended to mitigate or reverse the effects of human activity on the environment.

**DO<sub>2</sub>E: The Solution To Pollution!**





## DO2E's Water Aeration Technology



Approved

Deployed During The 2010 Deepwater  
Horizon Oil Spill

# DO2E's Patent Pending Air Dock

Air Docks are designed to improve the water quality in marinas, creeks, canals, bays, bayou's, lakes, and ponds or where ever stagnated or poor water quality exists.

Air Docks are naturally aspired and operate using the patented DO2E Aerator technology. DO2E's patented technology injects low pressure high volumes of air into the water column through a specially designed manifold that maximizes oxygen transfer and raises dissolved oxygen levels.



These units are environmentally friendly, noninvasive, have no moving parts, are air driven and operate at a noise level of less than 35 dB.



**DO2E's Air Dock Systems  
Mitigate The Need For Costly  
Preventive & Remedial Measures**



**The Air Dock System Breaks Down  
Blue Green Algae Bloom**



The Air Dock draws water by means of the "Venturi Effect".

DO2E's Air Docks are designed to deliver and inject a unique combination of coarse and fine air bubbles to achieve maximum oxygen transfer.

The Air Dock utilizes the Venturi Effect to pull water through the system at high velocities giving DO2E the ability to move massive volumes of water while aerating simultaneously.



### Chemical & Oil Buildup Inside Marina



### Some of The Benefits of DO<sub>2</sub>E's Green Technology for Environmental Remediation Include:

1. Increased Dissolved Oxygen
2. Improved water quality
3. Oxidizes; hydrocarbons, fecal-coliform, most heavy metals, pharmaceuticals, ammonia, hepatitis viruses, etc...
4. Reduces Turbidity and TSS
5. Improves Marine-Life Habitat



# Advanced Oxidation Processing

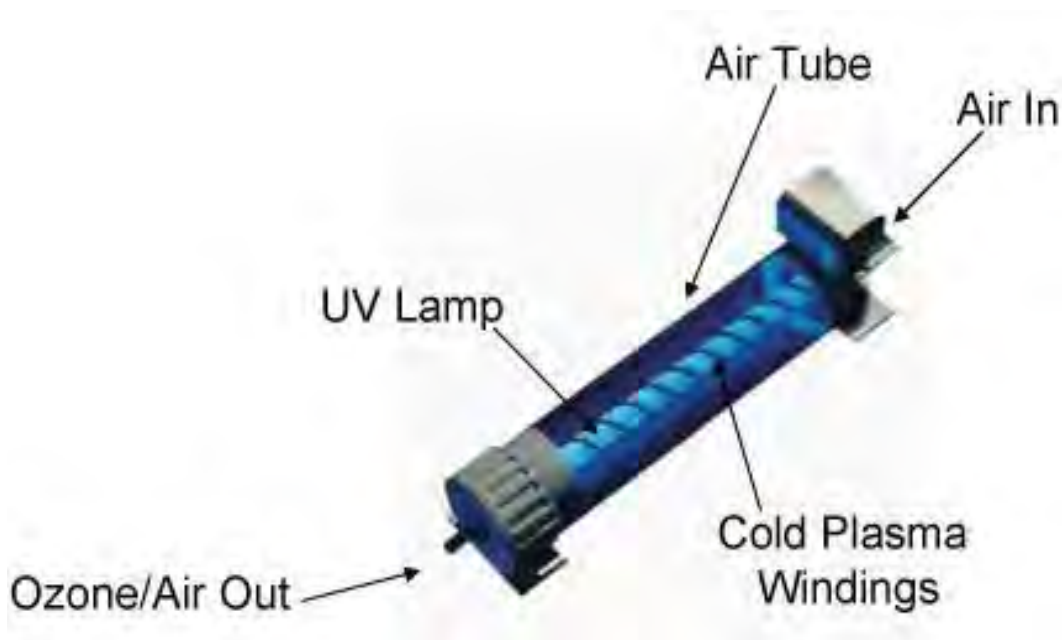
## Technical Information

A.O.P. is the conversion of ozone, by ultraviolet radiation on the UVC wavelength, in the presence of water, to form high-energy hydroxyl radicals. Hydroxyls function in a manner similar to Hydrogen Peroxide, which is increasingly used as an additional oxidation shock.

Ozone is the most powerful oxidant and disinfectant readily available. Ozone is a form of oxygen that contains three atoms ( $O_3$ ) rather than the normal two ( $O_2$ ). Ozone acts as an oxidizer and disinfectant (sanitizer). Our equipment is designed primarily to provide oxidation and disinfection of the water, this water is known as **aqueous ozone** or ozone-enriched water. Ozone kills bacteria by rupturing the cell wall (similar to popping a balloon) and by destroying the virus' protective layer. Unlike most chemical disinfectants, microorganisms cannot develop a resistance to Ozone.

A.O.P. is an ideal solution for wastewater problems that must deal with high contaminant concerns, particularly in the areas where state or municipal laws require quick and effective treatment of these major issues.

## A.O.P. Processing Tube



**Ozone is Approved  
For Use By:**



# Advanced Oxidation Processing (A.O.P.)

## Advantages of A.O.P.

- Most powerful disinfectant & oxidant readily available
- Does not produce any harmful by-products
- Reduces many contaminants to inert compounds
- Oxidizes many heavy metals
- Kills most bacteria & viruses including Hepatitis
- Oxidizes pharmaceuticals in waste water
- Oxidizes H<sub>2</sub>S gas and certain other Mercaptans
- Increases dissolved oxygen (DO levels)
- Eliminates F.O.G. (Fats, Oils & Grease)
- Reduces the use of other chemicals
- Provides a cleaner, more sanitary environment



**A.O.P. Generator**

Known as A.O.P., Ozone and hydroxyl radicals are combined to form one of the most powerful and effective oxidation agents known to man. Hydroxyl radicals are much more potent than ozone. When hydroxyl radicals are combined with ozone, reaction times are 300 - 500 times faster, 200-300% more effective and they have a half-life of 2 to 5 seconds.

**A.O.P. Is Compatible with All DO2E  
Products and Is Optionally  
Available.**





***DO<sub>2</sub>E***

***Wastewater Treatment LLC  
9657 Stagecoach Commercial Park Cr.  
Suite A, Spanish Fort, AL 36527***

***For More Information On DO<sub>2</sub>E's Proprietary  
Aeration & Mixing Products Please Visit Us On The Web  
At  
[WWW.DO2E.COM](http://WWW.DO2E.COM)***