Features

- No Moving Parts / Air Driven
- No Chemical Additives
- No Petroleum Lubricants
- Low to No Maintenance
- Extremely Low Noise Level (50 DB)
- Eliminates Grease Build Up and Matting
- Reduces Pumping of Wet Wells & Lift Stations
- Pre-treats Raw Sewage Up to 65%
- Removes FOG (Fats, Oils, & Grease) Buildup
- Reduces Sludge build up
- Removes Most VOC's and Heavy Metals
- Reduces H2S Gas by Up to 99.5 %
- Reduces Odor
 Reduces Labor Costs By Up to 90 %

 CSCA** Of Water
- Operates In a Minimum Of 24" Of Water
- Low Operating Cost
 - Heavy Duty Non-Corrosive Construction
 - No Electricity in or close to water
 - Installs in 10 minutes
 - ♦ Light weight

GREEN

All Packages Include

- Digester Unit
- Air Filter System
- Blower Motor
- 25 ft. of Flex Hose
- Cam-lock Fittings
- H.D. Aluminum Enclosure
- NEMA 3 Electrical Box
- Completely Assembled
- Hybrid Ozone / A.O.P. Optional

Little John	Single	Three	A.O.P.
Model:	Phase	Phase	Available
1 HP	YES	YES	YES
2 HP	YES	YES	YES
3 HP	YES	YES	YES
4 HP	NO	YES	YES

Sizes Available

Little

DO₂E Waste Water

Treatment, LLC

John Digester

Now With A dvanced **O** xidation **P** rocessing

Total F.O.G. Removal

For Lift Stations, Wet Wells, & **Grease Traps**

Before



CONVERTS F.O.G. ON CONTACT

"F.O.G. is converted on contact into suspended micro-fine particulates which will not reform."

I.H. Wakefield Ph.D.

DO₂E F.O.G. TEST With

Advanced Oxidation Processing

Before Aeration (1/7/12)

After ONLY 2 Hours

12 Months Later









MECHANICAL, BIOLOGICAL, CHEMICAL DIGESTION, COMBINED WITH HYBRID OZONE (A.O.P.)

 $A.O.P. = 0^3 + HYDROXYL RADICALS$

The Little John Digester is a state-ofthe-art system that injects air through a specially designed manifold system constructed of heavy duty non-corrosive material. Atop of this specialized manifold are stationary ridges or blades. As the air travels up and through the digester cylinder, a void is created. With this vacuum effect, solids are pulled in through the bottom of the digester and across the stationary blades or ridges at the top of the unit. At speeds up to 65 feet per second, the **solids are** immediately emulsified when they come in contact with the blades or ridges resulting in a high degree of breakdown of solids, which greatly increases the digestion process. Ozone can also be injected in this cylinder which further facilitates the digestion process of raw sewage before it enters the wastewater plant. The Little John Digester uses THREE means of digestion: mechanical, chemical and biological.

Mechanical Digestion

The mechanical process works as described above by continuously moving the solids at speeds up to 65 feet per second, and accounts for approximately 70% of the digestion process.

Chemical, Biological, & Mechanical

Chemical Digestion

While we do not add any chemicals to our process, we recycle the existing cleaning chemicals found in grease traps and lift stations such as soaps, detergents, degreasers, stain removal solvents, drain cleaners, fabric softeners and all of the other house hold cleaners that are discarded down the drain. Once discarded, these unused household chemicals become stratified or separated in the water column within the lift station and have little to no effect in the digestion process. We have a unique way of blending all these existing chemicals / components together to further break down the grease and other matting which occurs naturally in lift stations. This is a key component of our Green Technology, recycling. It is estimated that the chemical digestion accounts for 20 to 25 % of the digestion that will be occurring in the lift station after the Little John Digester is installed.

Biological Digestion

The biological digestion is further enhanced by reducing the BOD and COD. By continuously injecting 45 to 50 cfm of warm fresh air into the water column, we are able to stimulate or enhance the activity of the microbes / Bugs. This enhancement of the aerobic environment further propagates good bacteria growth. It is estimated that this portion of the digestion process may account for 10 to 15% of the digestive process.

Ozone Advanced Oxidation Processing

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.

Advantages of A.O.P.

Most powerful disinfectant and oxidant readily available
Does not produce harmful by products
Reduces contaminants to inert compounds
Removes some heavy metals
Kills deadly bacteria & viruses
Reduces pharmaceuticals
Reduces H₂S gas
Reduces B.O.D. & C.O.D.
ConvertsF.O.G. (Fats, Oils, & Grease)
Improves working environment





WE WORK WITH A DIVERSE CUSTOMER BASE. HOW CAN WE HELP YOU?

- * DO2E Waste Water Treatment * 9657 Stagecoach Commercial Park Circle Suite A *
 - * Spanish Fort * AL * 36527 * Phone (251) 626-6550 * Fax (251) 626-6551 *

www.do2e.com