

# DO<sub>2</sub>E LITTLE JOHN DIGESTER

now available with optional A.O.P

**Ozone + Hydroxyl Radicals; Advanced Oxidation Processing or A.O.P** 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 between 10-15 minutes. A.O.P will SUPER CHARGE your system!



Before

After 1 hour

# EMCO

## FOR LIFT STATIONS WET WELLS & GREASE TRAPS

### CHEMICAL BIOLOGICAL & MECHANICAL

While we do not add any chemicals to our process, we recycles the existing household 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 household 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 of the digestion that will be occurring in the lift station after the Little John Digestor is installed.



DO<sub>2</sub>E Little John Digester with A.O.P.

### Benefits of Standard Features.

- |  |  |   |   |
|--|--|---|---|
| <b>1</b> Breaks down FOG on contact<br>Reduces odor<br>Reduces labor costs       | <b>2</b> Reduces sludge build up<br>Reduces H <sub>2</sub> S gas build up<br>Pre-treats raw sewage | <b>3</b> Non-Corrosive Construction<br>Operates in min 24" of water<br>Very low noise level (50 DB) | <b>4</b> Eliminates grease build up<br>Reduces Pumping of Wet Wells & Lift Stations |
| <b>5</b> No electricity close to water<br>Installs in 10 minutes<br>light weight | <b>6</b> Portable<br>All green technology<br>made in the USA                                       | <b>7</b> Eliminates matting<br>no petroleum lubricants<br>low to no maintenance.                    | <b>8</b> No moving parts/air driven<br>No chemical additives                        |

### Advantages of A.O.P Option.

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|--|---|
| Most powerful disinfectant and oxidant readily available | Increase dissolved oxygen                           |
| Does not produce harmful by products                     | Eliminates F.O.G (Fats, Oils, & grease)             |
| Reduces contaminants to inert compounds                  | Eliminates use of all other chemicals               |
| Oxidizes many heavy metals                               | Provides cleaner/ sanitized environment for workers |
| Reduces most bacteria & viruses (all forms of hepatitis) | Removes pharmaceuticals in waste water              |
| removes H <sub>2</sub> S gas and all other Mercaptans    |   |

NOW AVAILABLE WITH  
OPTIONAL A.O.P  
ADVANCED  
OXIDATION  
PROCESSING  
PLEASE  
CALL  
FOR A QUOTE  
250.391.3064  
SEE THE VIDEO ON  
OUR YOUTUBE  
EMCOWW.VICTORIA

EMCO WATERWORKS

**T**HE LITTLE JOHN DIGESTER is a state of the art "Patented System" that injects air through a specially designed manifold system constructed of heavy duty non-corrosive material. Atop of this specialized manifold house 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 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.

**THE MECHANICAL DIGESTION** 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.

**THE BIOLOGICAL DIGESTION** is further enhanced by reducing the BOD & 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 such as factors. It is estimated that this portion of the digestion process may account for 10-15% of the digestive process.