

# VBO TANK- WATER POLISHING

## HOW CAN OUR VBO TANK HELP YOU?

Some contaminants cannot be mechanically separated, some common examples are listed below. Our VBO Tank is a simple and cost-effective way to treat these contaminants. If you have strict discharge requirements, then a VBO Tank is a good way to ensure you are consistently compliant. Furthermore if you are struggling with a shortage of fresh water on site and plan to reuse treated water then you need a VBO Tank to keep the water fresh. Without VBO treatment before reuse, the treated water will produce foul odours, hazardous off-gases and scum build up.

### WHAT IS TREATED?

Light Hydrocarbons	Alcohol
BTEX	Ammonia
Detergents	Chlorine
Degreasers	Iron
Hydrogen Sulfide	Mercury
Herbicides	Manganese
Pesticides	pH
Oxygen Content	and many more



## HOW DOES OUR VBO TANK WORK?

### VOLATILISATION



As air bubbles float to the surface they will come into contact with volatile substances in the water. When air bubbles contact the volatile substances they vaporise into the bubble and are carried to the water surface where they are released.

### OXIDATION



Introducing air into the water creates an environment where substances can be rapidly oxidised. There are a large number of contaminants which can be discharged once they are oxidised. In a still tank only contaminants very close to the water's surface can oxidise, while in an aerated tank substances can be oxidised throughout. This effect will also reduce the COD of the discharge water.

### BIOLOGICAL ACTIVITY



In most waste water there will be a few naturally occurring bacteria who can eat contaminants in the water. By aerating the water you cause the bacteria population to boom and increase the effect of biological activity to an effective level for treatment. Bacteria convert contaminants into volatile substances and other material which can be discharged.