**Treating the Fuel Tank on Your Pump or Generator**

It is a well-established fact that, across different industries, 70% of all diesel engine breakdowns are caused by fuel problems. In many of the cases, the problem results from solids formation in the fuel or microbial growth of fungus, mold and bacteria – both of which ends up blocking the fuel flow through the fuel filters.

***The key to reducing the chances of a microbial infection in your diesel tank is keeping the water out of the storage tank. Here’s how to deal with it.***

Mold, fungus and bacteria all need water to grow. Most fuel tanks are vented to the outside atmosphere, allowing the development of condensation in the diesel tank. Therefore, it is important that water be dealt with as soon as it is found. Testing for water is done with a water-finding paste that is simply placed on the end of a stick. This water finding paste will change color when it comes in contact with water. Place the stick in the tank so the end with the water paste touches the tank bottom and allow it to stay there for approximately 30 seconds. If water is found it can be removed with Bell Performance DFS Plus, which should be added prior to adding fuel to the tank to assure a proper mixing with the water.

***Along with treating for water, it is essential to treat with biocide to kill fuel microbes.***

In a new or used pump or generator add Bell Performance Bellicide (biocide) to the fuel tank before filling at a rate of 1 oz for every 40 gallons of diesel fuel. If the pump or generator is only fueled a couple times per year, we recommend adding Bellicide each time. If the equipment is in continuous use, add Bellicide every three to four months. This product should also be added prior to filling the fuel tank which will ensure mixing with the fuel when it is filled.

***The importance of fuel stability treatment***

When diesel fuel sits for extended periods of time, its exposure to heat and oxygen causes the fuel to break down and form solids which can plug fuel system components. A fuel stabilizer should be used to slow this process down. To do this, add Bell Performance Dee-Zol Life at a rate of 32 oz for every five hundred gallons of diesel fuel. If the fuel tank is only filled a couple times a year it is recommended Bell Performance Dee-Zol Life be added at each addition of fuel. If the equipment is in continuous use, it is appropriate to add Bell Performance Dee-Zol, which has stabilization and detergent components in its formulation. Any of this treatment should also be added prior to filling the fuel tank to ensure proper mixing into the fuel when the tank is filled.

***Conclusion***

There is nothing worse than a pump or generator failing when it is needed in an emergency. The recommendations above will greatly reduce your chances of an equipment failure. It is far cheaper to prevent issues like diesel fuel solids formation and microbial growth than it is to deal with an equipment failure when it is needed most.