



LEIGHTON O'BRIEN

Those who need **peace of mind** using **emergency back-up generators** know **Leighton O'Brien**.

Leighton O'Brien Fuel Restoration provides comprehensive fuel quality solutions to **ensure optimum fuel quality at all times**. Fuel that has degraded can be restored to health – meaning you can lengthen the life of existing fuel and save costs without the need for costly fuel replacement.

Unlike a service station where fuel is regularly used and replenished, fuel for a gen set system sits for an extended period of time.

When unused fuel goes past its shelf life (6 to 12 months according to Chevron, BP, Exxon Mobil guidelines) it will degrade in quality. This out of spec fuel may not allow the engine on your emergency back-up power system to function when its needed most.

When Hurricane Katrina hit New Orleans, a large number of emergency systems with bad fuel failed to operate when needed most, and was a significant factor in the problems the city faced. Hospitals, prisons, critical data centres and office buildings all went without emergency power because the back-up fuel in emergency generators had not been regularly restored and maintained.

Leighton O'Brien delivers:

- Guaranteed optimum fuel quality at all times
- Restoration of dirty, degraded and aged fuel
- Comprehensive fuel maintenance programs
- Stops microbial activity
- The most comprehensive solution for fuel product quality management issues

Leighton O'Brien provides Optimal Fuel Quality at All Times



Leighton O'Brien's Fuel Maintenance Program includes:

- Installation of an automated fuel filtration & polishing system to deliver fuel quality on an ongoing basis
- Quarterly scheduled site visits:
 - * Tanks are dipped for water
 - * A fuel sample taken from the bottom of the tank to test for:
 - * Bacterial and Fungal activity
 - * Visual clarity and colour
 - * Inspection of all cap seals to ensure they provide sufficient seal to prevent ingress of water
- Where fuel is out of specification or dirty, it will be restored to health and cleaned
- Where an automated fuel filtration system is present:
 - * Conduct a system check
 - * Test sensors and alarms
 - * Flush primary filters
 - * Change secondary filters

Fuel Treatment Solutions	Leighton O'Brien
Removal of water	✓
Stop microbial activity	✓
Restores fuel quality	✓
Replace blocked filters	✓
Conduct fuel quality tests	✓
Clean tank walls	✓
Removes sludge & sediment	✓
Treats polymerized fuel	✓

Microbial Decontamination and Water Removal

Leighton O'Brien Fuel Restoration service removes the environment that allows microbial activity to occur. This service eliminates and prevents microbial contamination, bio-fouling, the so called "black death" and completely removes the need for toxic, dangerous and expensive biocides.

Microbes living at the fuel and water interface feed on carbon and sulfur in the fuel. They form thick slimy mats in the fuel and a layer of bio-fouling on tank walls. They produce acids (sulfide) and other harmful by-products, blocking fuel systems (filters) and pit corrosion in tanks and injection systems.

Leighton O'Brien Fuel Restoration is the best and most innovative fuel treatment process on the market today. It restores all elements of fuel quality in previously contaminated fuel tank systems. **The results are the cleanest tank with the cleanest possible fuel.**



(Above)
Leighton O'Brien Fuel Restoration service cleans, reconditions and restores fuel to its pristine "Clear & Bright" in spec condition while removing water and contaminants from the tank.