

FUEL MANAGEMENT

What's in Your Fuel? Monitoring and Protecting Against Unseen Threats

Fuel is arguably the most critical component of your emergency power system, yet likely the least maintained. Fuel related issues are the number one reason for 95% of generator fail-to-start faults. Proper fuel maintenance is elemental to ensuring your generator will perform its best when you need it the most.

Don't Ignore the Fuel in Your Storage Tank

WHY THIS IS IMPORTANT

Changes in fuel are affecting generator systems in negative ways. Testing and monitoring your fuel is now more important than ever!

FACT:

Today's Ultra Low Sulfur Diesel (ULSD) fuel is chemically different from prior diesel fuels.

FACT:

Reduction in sulfur content weakens diesel's natural resistance to microbial growth.

FACT:

Biodiesel increases the chances of bacteria and fungus growth rendering fuel unusable.

FACT:

Stored diesel fuel changes rapidly forming gums, particulates, and solids in tanks that damage expensive fuel delivery systems.

FACT:

ULSD fuel has a greater affinity to moisture promoting corrosion to storage tanks which adds dangerous particulate to the fuel.

FACT:

It is common knowledge within the fuel supply industry that today's ULSD fuels have a shelf life of about 6 to 12 months before they begin to degrade or breakdown.

This shortened shelf life requires the use of stability additives to ensure fuel reliability for proper generator function.

A Revealing Look Inside.



- **Insoluble Gums and Resins**

Particulate resulting from aged fuel molecularly breaking down leaving deposits that clog fuel filters and fuel injectors.

- **Water Accumulation**

Through condensation water collects at or near the bottom of the tank creating a rich habitat promoting microbial growth.

- **Bacteria and Fungus Spores**

Contaminants that enter through the vent with moist air, settle in the condensate (water), and establish themselves in this environment; feeding, reproducing, dying, and adding to the solids content in the tank.

All of these working in concert to destroy your fuel!

Protect Your Fuel Investment Now
P3FuelManagement



#morethanmaintenance



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What We Do

Fuel in your storage tanks changes rapidly and the changes are all bad. The natural chemical activity of fuel generates an infinite variety of gums, particulates, and solids that left unchecked can render your fuel supply unreliable within a matter of months after being refined.

By following these critical steps, you can be assured your diesel fuel will be absolutely reliable when you need it most.

The P3 Generator Services Fuel Management Plan provides a routine analysis of the fuel within your generator's storage tank. For cost effectiveness this is usually done during a regular maintenance visit. The key is to identify and treat problems before they become major issues.

Step 1:

COLLECT FUEL SAMPLE

- ▶ Identify Water and Sludge Levels
- ▶ Evaluate Storage Tank Integrity

SEND TEST SAMPLE TO LAB

Test for:

- Fuel Stability
- Existing Water and Sediment
- Bacteria and Fungus
- Organic Contamination
- Inorganic Contamination

Fuel Stability - Predicts the potential of fuel to generate insoluble particulate within six months to one year.

Existing Water and Sediment - Determines the presence of water and sediment to indicate any current or potential problems with both.

Bacteria and Fungus - Cultures fuel sample for the presence of bacteria and fungus to allow for corrective action if necessary.

Organic Contamination - Identifies organic contamination that may enable bacterial growth, such as: fuel polymers, engine lubricating oil, waste solvents, etc.

Inorganic Contamination - Tests for the presence of trace metals that may indicate tank rust, waste oil contamination, or other potentially harmful substances.

WHAT'S IN YOUR TANK?

Find out with **P3FuelManagement**

Step 2:

TREAT FUEL

- ▶ Treat fuel with **TEN32 Fuel Inhibitor** and/or biocide as directed by laboratory test results and recommendations.

REASONS TO TREAT FUEL

- Stabilize and Protect Fuel from Further Damage
- Kill Bacteria and Fungus
- Disperse Particulate and Sediment
- Drop Water from Fuel and Break Any Fuel /Water Emulsion
- Inhibit Corrosion

IMPORTANT BENEFITS TO YOU

- ✓ Provides Absolute Fuel Reliability
- ✓ Predictive Analysis of Fuel
- ✓ Avoids Unexpected Fuel Failure
- ✓ Cost Effective
- ✓ Eliminates Fuel Change-outs
- ✓ Protects Critical Equipment
- ✓ Improves Public Safety



MADE FOR STAND-BY GENERATORS

ILFC's TEN32 Fuel Inhibitor is our product of choice to protect the fuel powering your critical emergency power system.

Founded in 1982, ILFC's primary objective was to develop fuel quality solutions for problems related to stand-by power systems - namely those of telephone companies.

ILFC laboratory testing goes beyond ATSM standards to provide real insight into your generator's fuel quality.