

Clean Fuel Means Reliable Backup Power for Emergency Power Generators

By Paul Golden, *Electronic Environments Data Center Blog*

The need for reliable backup electric power in data centers, healthcare facilities, telecom sites and other critical facilities is too important to leave to chance. In emergency power generation applications, a gen-set must be ready to run during very critical times – to do this you need to send clean fuel to the engines. Emergency power generators that rely on diesel fuel are at constant risk of unexpected failure due to clogged fuel filters.

Because the engines used in these emergency power generators often sit without operation until they are needed to perform, poor fuel quality becomes a very common problem. If you have stored fuel, attention should be given to the condition of this fuel. Water build up in fuel is natural, as tanks collect condensation and water can leak in during fills and through vents. Also, changes in temperature can create an environment for bacterial growth in fuel, while natural oxidation and unavoidable fuel deterioration will lead to the formation of sludge, acids and tank corrosion. This sludge accumulates at the tank bottom over time, it is acidic and eats at tank walls and it clogs filters.

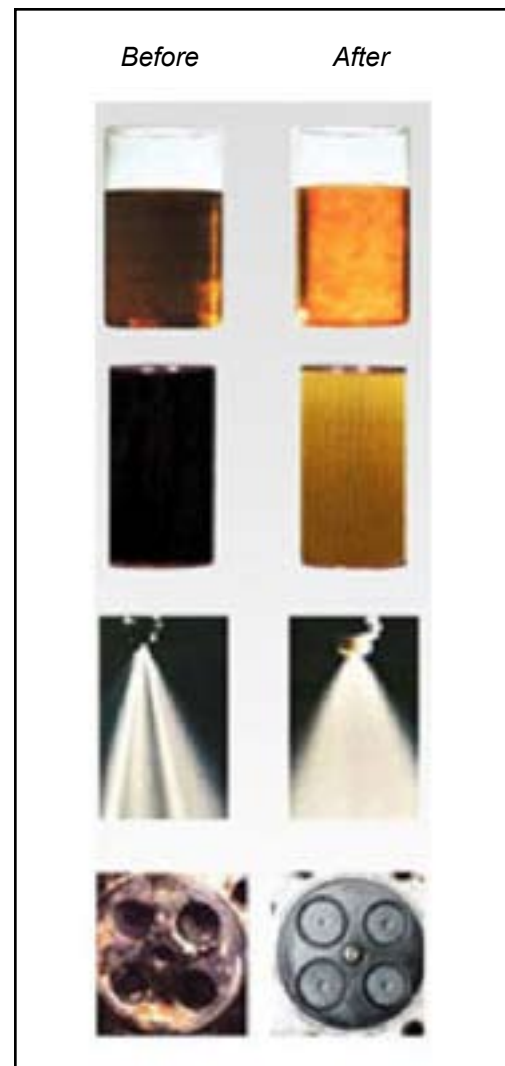
Several studies suggest that the overwhelming cause of most diesel fueled emergency generator engine failures is now fuel related, especially with today's electronic injection systems.

You may already have a periodic preventive maintenance program in place for your emergency generator, but implementing a regularly scheduled fuel testing, cleaning and polishing program in order to proactively detect problems and correct them before they impact your critical system is a good idea.



The results from adding emergency generator fuel tank cleaning and polishing to your regular maintenance schedule:

- More reliable power for improved safety
- Improved engine performance
- Clean internal engine components
- Fewer injector failures
- Reduction of maintenance, downtime and operating costs



Original post from the *Electronic Environments Data Center Blog*, September 30, 2010.