

Service Portfolio

- Asset management including; generator pre-planned maintenance services, generator hire, load bank testing & 24 hour emergency call out
- Design & build of bespoke power generation solutions for oil & gas, industrial and marine applications
- Design & build of explosion protection systems
- Diesel engine installation, overhaul, maintenance and repair services
- Diesel fuel sampling, testing & polishing service
- Engine control solutions, including electronic & hydraulic governors overhaul and repair
- Offshore power generation rental
- Supply, installation and maintenance of uninterruptible power systems (UPS)
- Supply, installation and maintenance of low emission microturbines for prime power and or CHP applications



Turner EPS provide a comprehensive range of planned and reactive maintenance services for standby and emergency power generation equipment. Our tailor made maintenance solutions ensure that your investment is kept in prime condition and ready to power up whenever it's needed. These solutions include; scheduled maintenance, 24 hour emergency call out, generator hire, load bank testing and, diesel fuel sampling, testing, contamination removal and fuel polishing and fuel tank cleaning and fuel conditioning.

Your standby and or emergency generator relies on having pure, clean diesel fuel for efficient and reliable running. The ultra fine tolerances and high fuel injection pressures of today's diesel fuel systems mean they are extremely sensitive to any fuel quality problems or contamination. Fuel borne contaminants can come in a number of forms and from a variety of sources, but all will cause your engine, generator and pumps to fail.

Condition of fuel

The condition of fuel is the key to efficient operation of engines. The introduction of water into fuel stocks through inevitable tank condensation and incoming water vapour encourages the growth of microbes which lead to build up of sludge and separation of water to the tank bottom. These microbes degrade the fuel, causing waxes, resins and floating organisms which inhibit the proper operation of fuel pumps and injection valves, resulting in poor combustion.

Poor combustion leads to loss of power, increased fuel consumption, damage to combustion spaces, metal parts, pistons, inlet and exhaust valves, and other expensive problems.



ENGINE
POWERED SERVICES

ENGINE
POWERED SOLUTIONS

EXPLOSION
PROTECTION SYSTEMS

ENGINE
CONTROL SOLUTIONS



YOUR DIESEL IS UNDER ATTACK – ACT NOW

The Fuel Bulk Storage industry currently loses up to 14% of its stocks annually due to microbial damage. Currently the solution for cleaning tanks involves running down fuel stocks to levels dangerously close to the sludge level, paying for the uplift of the remaining fuel/sludge, and replacing with new fuel. The Forecourts fuel industry also loses up to 14% annually, as well as covering the cost of frequent dispenser blockages, downtime, lost throughput and customer compensation.



The variable nature of diesel fuel contamination and the fact that every application is unique means that there is no 'silver bullet' that will ensure clean, dry, trouble free fuel. It is generally recognised that the implementation of a robust Fuel Management Programme, consistently applied over the long term, is the best way to maintain your fuel quality. In fact, it's what most engine manufacturers and fuel supply companies recommend.

Turner EPS can provide a FastClear solution through introducing a specialised highly efficient Fuel Detergent, Sludge Dispersant and Rust Inhibitor which works instantly when fully blended with fuel. It chemically bonds with and absorbs water into the fuel killing all microbes, bacterial and fungal, within minutes, as they cannot survive without water droplets to attach themselves to.

Turner EPS's fuel cleaning process revives the contaminated fuel, returning 99% to the tank with a flow rate of up to 7,000L/hour or 120,000L/hour depending on which machine we use. No need for fuel uplift.

Special attributes of FastClear Solution

- The dilution rate is 1:4000, i.e. 25L of FastClear treats 100,000L of petrol or diesel fuel. It needs a high rate of fuel agitation to be fully effective. Apart from being used in our fuel cleaning process, and is also sold separately in 25L and 1000L containers. We supply economical dosing systems for adding FastClear to fuel with the correct mode of action.
- FastClear is a blend of surfactants (detergents), oxygenates and corrosion inhibitors, together with minor quantities of metal deactivators, deposit modifiers and non-active components including dyes for identification, safety and regulatory purposes.
- FastClear conditions the fuel by combining water, waxes and resins into the fuel in an irreversible process, resulting in clean fuel and a clean fuel system. It becomes inactive after just a few minutes.
- It extends the shelf life of the fuel and the service life of fuel system components, reduces exhaust emissions and protects against rust.
- It reduces maintenance and servicing costs. FastClear's corrosion inhibitors coat the metal surfaces of the fuel system and inhibit any residual corrosion due to water dispersed in the fuel.
- Unlike Biocides, which are highly toxic, FastClear is safe, non-toxic, non-flammable, non-corrosive, pH neutral, biodegradable, and contains no hydrocarbons, sulphur, phosphorous, nitrogen or metallic ingredients. This is of great benefit to Health and Safety, and to the environment.

Do you know what's in your fuel tank? Here are just some of the problems you could encounter....

Contamination Type	Cause	Effect
Water 	<ul style="list-style-type: none"> Poor fuel handling and transfer processes. Leaking fuel tanks. Condensation with fuel tanks. Poor quality fuel delivery. 	<ul style="list-style-type: none"> Engine and fuel system damage. Corrosion. Fuel oxidation. Growth of diesel bug.
Diesel Bug 	<ul style="list-style-type: none"> Grows as a result of water contamination. 	<ul style="list-style-type: none"> Blocked engine filters & fuel components. Corrosion of fuel tanks.
Asphaltenes	<ul style="list-style-type: none"> Naturally occurring in fuel. Increases with heat & mechanical stress to fuel. 	<ul style="list-style-type: none"> Blocked engine filters.
Gums, Resins & Acids	<ul style="list-style-type: none"> Fuel oxidation, accelerated by water content. 	<ul style="list-style-type: none"> Filter blockage & corrosion.
Other particles -rust, grit, soot etc	<ul style="list-style-type: none"> Poor fuel quality, poor fuel handling, corroding fuel tanks. 	<ul style="list-style-type: none"> Filter blockage and fuel systems wear.

'Turner EPS's Asset Management division provides a complete range of products and services to help you detect, prevent and eradicate harmful diesel fuel contamination'.

