

News

DAVID PLUMB & CO LTD

Spring 2005

Scrubbers rule OK!

In our view there is only one way to ensure a fuel storage tank is really clean and that is to get inside and scrub it by hand.

Not very high-tec, but it is the only way that really works.

Jet washing from the surface creates more contaminated water than necessary - which then has to be disposed of - and, we believe, does not get the tank sufficiently clean anyway.

Some of our customers worry about the danger involved. While we have expelled as much of the explosive mixture of petrol vapour and air as possible, by filling the tank with nitrogen foam or water, the atmosphere inside the tank is still not acceptable. To this end we force ventilate the tank prior to entry, but there are still the normal dangers of working in a confined space.

The fully trained person who goes into the tank wears a full protective suit and breathing apparatus, as does a 'buddy' on the surface, in case the person inside gets into trouble.

The air inside the tank is constantly

monitored, to ensure it is breathable, in case a problem develops in the breathing apparatus. In 39 years we have never had a confined space accident or rescue situation.

As well as tanks that are going to be re-used, we also thoroughly clean a tank that is going to be disposed of.

Contaminated material has to be disposed of at specialist landfill sites, but the metal from the tank is sent to a general smelter, where the personnel are not prepared for handling contaminated material. By thoroughly cleaning the tank metal, this problem is alleviated.

Our duty of care insists that we ensure that everything that leaves the site is as safe as possible. We believe that this can only be done by getting inside the tank and scrubbing



The only other way to get a tank as clean as scrubbing — not recommended

On show at the NEC

David Plumb & Co directors Kathy Early and John Moore had a productive time making new contacts and renewing old ones at the International Forecourt and Fuel Equipment show 2005.

Says Kathy: "The show was definitely worth doing and we have already decided we will do it again next year. While we did pick up some solid new business leads, its real value is being able to meet people that you don't normally get to see."

Kathy and John are in black, the one in green and a hard hat is a dummy (we think).



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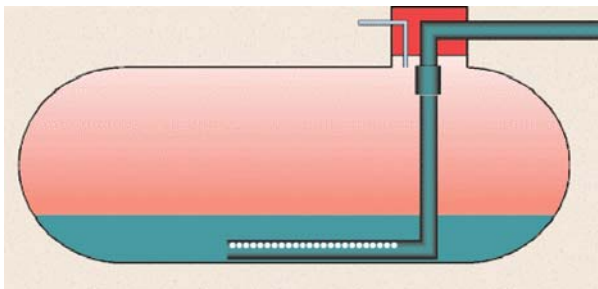
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New service keeps tanks clean

As promised in our last issue, here are some more details on our new service.

We at David Plumb & Co are offering a new service that we believe will ultimately decrease the need for our services by increasing the intervals between the cleaning of fuel storage tanks, and extending tank life.

The extra service entails fitting Petroman's new Softfill fuel distribution device onto the bottom of the fill pipe, allowing fuel to be delivered smoothly and without turbulence.



A diagram of the Softfill system

Installing the Softfill, which has no moving parts, cuts down on wear, maintenance and the need to clean the tanks.

Says David Plumb & Co director, Nigel Plumb: "The reduced turbulence that results from installing Softfill cuts back on vapour generation, which means fewer stock losses and less condensation build-up, which, in turn, means less corrosion. As much of the sludge at the bottom of the tank is rust flakes, this also means less sludge build-up."

The Softfill also redistributes sludge deposits away from suction pipes, reducing clogging problems in pipes and customer vehicles.

David Plumb can easily retrofit the Softfill to the inside of any size tank at the same time as the tank has been drained and opened for cleaning - so causing no extra disruption to the fuel site's operation.

The tank doctor

The second in our series on dealing with tank problems

2. A bad load

Symptoms

Your customers fill up at your pumps, pay, try to drive away and fail. Sometimes the cars will not even start. This is a much more sudden and catastrophic problem than the more gradual onset of sludge or water, discussed in our last issue.



Cause

The same symptoms can be the result of two different causes:

- Diesel going into a petrol tank, or vice versa.
- A delivery of fuel containing an excessive amount of sludge. The reasons for this are many and various. This is a rare problem, but it does happen more often than you would think.

Cure

The first thing to do in both cases is to drain the tank and legally and safely dispose of the contaminated fuel. David Plumb & Co can arrange for this to be done, but it is obviously better to get the oil company to accept responsibility, as it will then carry out and bear the cost of the disposal.

After that, the affected lines have to be drained and the tank cleaned.

The danger of old and incomplete plans

“It doesn’t matter how many precautions we take, with the current lack of knowledge about hidden electricity and gas lines, every time we excavate we are taking a risk,” says David Plumb director, Nigel Plumb, as part of his call for better information for contractors from utility companies and the owners of fuel sites.

“We have come across a number of instances recently of contractors hitting electricity cables they simply didn’t know were there – despite taking all the right precautions,” he says.

“The owners of the sites have a duty of care to tell us about any underground hazards, but in many cases the information they have is incomplete. Even the utility companies cannot give definitive answers, all they will say is that there are no ‘known’ services under the site, which is useless, as it is the unknown we have a problem with.”

David Plumb scans all its sites with a Cable Avoiding Tool (CAT) several times – once before it starts, again at each level of excavation and finally when it reaches the bottom of the excavation. The first set of scans is so it can avoid hitting any unmapped utility lines itself, and the final one is so it can spot deeper lines to build up a better picture for the next people on the site.

“Despite our safety first procedures,” says Nigel Plumb, “careful examination of client and utility company plans and the possession of a certificate from the electricity company, guaranteeing that the power to the site had been shut off, we still managed, during a recent project, to

uncover two live 11 kVa electricity cables we did not know were there. They were not supplying the site, but simply passing under it.”

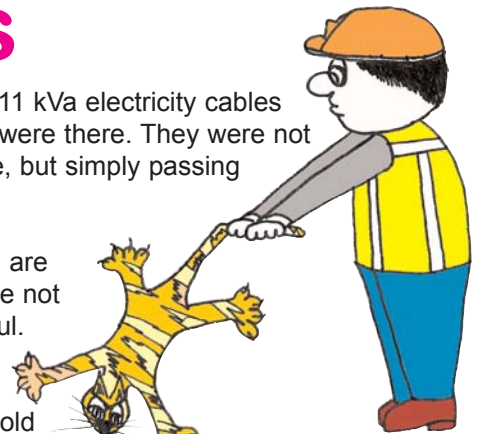
Even when plans are available, they are not always that helpful. “Sometimes the plans we get to work with are so old and illegible,” says Nigel Plumb, “that we can only identify what the lines and marks mean once we have completed the excavation.

“Also, although it is now illegal to run electric lines over, or under, tanks, it still sometimes happens, and it makes identifying them with a CAT scan extremely difficult, if not impossible. An extremely dangerous situation, especially when we are dealing with a potentially explosive fuel/air mixture in a tank we have not yet made safe.

“Up to now we have only been able to eliminate ‘most’ of the risk, using scanning and incomplete plans, but when you are dealing with explosive mixtures and thousands of volts of electricity, ‘most’ is not enough.”

To reduce the risk to negligible, David Plumb & Co is proposing:

- More investigations by the utilities companies into exactly where the cables and pipes for which they are responsible are, so they can provide accurate plans.
- Better scanning and safety procedures by contractors.



**CAT scanning?
(No cats were harmed in the production of this newsletter)**

www.davidplumb.co.uk

Visit us at our new web site at the above address. It is packed with fully illustrated information, news items and details of all aspects of our business.

Individual pages are dedicated to fuel tank cleaning, filling, excavation, disposal, nitro-foam inerting, cold

cutting, fill-water treatment and forecourt decommissioning.

There is also a form to help you contact us and tell us about a project you would like us to quote on.





New vehicles improve service and conditions

We are currently renewing a number of vehicles in our fleet, to improve the service to our customers and improve conditions for our staff.

The latest addition is a customised tank cleaning vehicle, constructed using a long-wheelbase Ford Transit 350 turbo diesel chassis and a tailor-made body (top left and top right).

The rear of the vehicle is set up for secure storage of all the equipment required for tank cleaning, with a compartment, clip or strap to keep everything in its place.

The front part of the body is taken up with a mobile decontamination room (right), with a dirty side and a clean side.

The operative goes in the right-hand door to strip off his disposable outer protective suit, puts his overalls in the linen basket, has a shower and steps through a curtain into the clean side, where he changes into fresh overalls and leaves through the door on the left-hand side.

This is the second adapted Ford Transit 350 long-wheelbase that we have purchased recently, the other is the versatile pick-up (left) many of you will see on our sites.

Contacts:

David Plumb & Company Limited

169 Frenches Road
Redhill

Surrey RH1 2HZ
Tel: 01737 767524

e-mail:

tanks@davidplumb.co.uk

Website:

www.davidplumb.co.uk

Kathy Early, managing director

Nigel Plumb, director

John Moore, director