

OOPS

How to prevent diesel spills, and be prepared for them to happen.

Lucy Radley speaks to government agencies and suppliers

Diesel spills affect us all – they cost money to clear up, delay traffic and affect the environment. “In 2019 we recorded 342 such incidents,” says Mark Cartwright, Highways England’s head of commercial vehicle incident prevention, and it’s easy to see why this might matter. A serious spill as a result of a major accident can mean a road closure and a very hefty bill to resurface the road, but even smaller leaks are a major hazard. Having only two wheels, motorcycles are disproportionately affected, according to DfT’s statistics – in 2017, for example, they were involved in 23.29% of incidents where a contributory factor included a deposit on the road, despite making up less than 0.5% of all traffic.

Diesel spills can be expensive too – and not just because they are a waste of fuel. A leaking tank, however minor, could attract a £50 fixed penalty notice from DVSA or the police, as could a missing or defective fuel cap. If fuel is found leaking from a tank with a missing or faulty cap, the fixed penalty is £50 for each, and if the situation is bad enough for the operator to be prosecuted, that fine can rise as high as £1,000.

“To help prevent these incidents from happening, we’ve developed guidance for commercial vehicle drivers and operators. This includes simple things like carrying out vehicle checks and having a spill kit in their vehicles,” Cartwright says. “Other actions operators can take include fitting fuel



caps with anti-siphon devices and self-sealing tanks; and installing guard rails to the sides and extended catwalks on the top of the fuel tank for protection.”

The current guidance, the Highways England Diesel Spillage Best Practice Guide, was published in April 2019 (it is available via www.is.gd/nunohi). It reveals that – serious collisions and incidents such as roll-overs aside – most spills are caused by some very basic things. In 2010, Transport Research Laboratory (TRL) carried out an extensive survey and found a failure to fully close and secure fuel caps was a major factor, as were caps which were either damaged or missing. ‘Brimming’ or ‘necking’ the tank by filling it right up to the cap itself was another important issue, as was the absence of anti-spill devices as protection against such factors. Corroded and ruptured tanks also featured on TRL’s list.

AN OUNCE OF PREVENTION

But one far less costly way to mitigate against spillage is, as Cartwright says, to fit an anti-siphon device. In this case choice of product matters, however. Basic anti-siphons that only have a cage beneath the cap as protection will not

do the job, and aren’t even particularly good at stopping theft; the tank will still be vulnerable to ‘skimming’, where the top six or more inches of fuel are removed.

The need for a reliable solution is something the OEMs have become aware of, particularly in the UK market, and many now supply such products. Mercedes-Benz is one example, with the TankSafe range. “We received several requests from our key account customers, primarily to prevent fuel being siphoned, but also to reduce overfilling and stop diesel spillages,” says product and sales technical manager, Bob Gowans.

That device, which has been type-approved, is produced by Blackpool-based company TISS. As well as a specific anti-spill flap, it includes a float valve which rises to the top of the chamber as the tank is filled, creating a seal which is held in place by the pressure of the fuel itself. This means overfilling is impossible, and spillage is prevented. “We actually visited one customer to find a truck which had overturned sitting in their yard,” director Matthew Rose tells us. “There’d been no spill through our unit on the tank.”

A failure to fully close and secure fuel caps was a major factor in a 2010 TRL survey of fuel leaks, as were caps which were either damaged or missing



factory-fit option, as well as specialist bespoke vehicle engineers such as SB Components of Wisbech.

STANDARDS AND PRACTICES

But Rose doesn't just want to tell us about his company's product; he has another concern to air as well. "I think there is a real issue in the industry with how prevalent spillages are," he explains. "When we were field-testing the latest generation [of the device], we would go and inspect it to make sure it was filling correctly, among other things. While we were doing that we noticed a number of other issues which were obviously being missed when vehicles were inspected."

These included many of the items listed in the Highways England guide as being on DVSA's checklist for what is acceptable and expected in terms of checking fuel tank safety and suitability. Defects present included missing fuel cap seals, detached safety chains, factory-fit spill-flaps which were no longer functional, and signs of tampering around sender units. This, in turn, has led to TISS providing free-of-charge fuel tank inspections. "Obviously we hope it might lead to business, but it's more just an insight for fleets," Rose

states. "We'll inspect a sample number of vehicles, take pictures of any issues and submit a report to the operator."

Finally, the importance of fuelling safely in the first place should not be forgotten, especially if fuel is bunkered on private premises. Stephen Hannan, sales director for Wolverhampton-based fuel system supplier Merridale, outlines the requirements. "It is an obligation on every user to produce its own risk assessment on the storage, dispensing and operation of fuelling equipment, and it should consider the pollution and flammability aspects of that installation," he advises. He also recommends operators do this for themselves. "There are a host of small companies out there offering 'DEFRA inspections' and this is being used by some of them as a way to find business."

Beyond that, Hanna says that users need to be practical. "It should be mandatory for deliveries to fuel installations to be attended at all times, and automatic nozzles should be fitted to pumps." It's a good idea to remove the clips from these nozzles that allow them to be 'locked on', and the practice of drivers using lumps of wood or other objects to hold them open should also be discouraged, he recommends.

Finally, Hannan advises considering where the diesel might flow were it to spill out of the tank. Operators should ask themselves whether keeping a comprehensive spill kit next to the filling area is enough on its own, or whether a separate catchment area draining to a common interceptor is required. Ultimately, the best place to go for specific advice is the same company to turn to if it all went wrong - the insurance company. [IE](#)

FURTHER INFORMATION

*COSHH essentials for service and retail (HSE SR16) - www.is.gd/ilayif
'Cleaning up' - www.is.gd/exabe*

Fundamentally, the TankSafe Optimum is an anti-theft device, and though TISS was aware of its other benefits, it was surprised how many customers were fitting it for health and safety reasons. "I would guess around 15% are purchased for that and environmental reasons now," Rose says. "So we do now advertise it as a three-in-one device, protecting against skimming, brimming and spillage."

As well as Mercedes, TISS supplies IVECO, which offers TankSafe as a



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