DANGEROUS LIAISONS

Operators transporting hazardous freight are subject to continuously evolving ADR regulations, covering everything from inspection and maintenance to technician skills. Steve Banner reviews developments

General hauliers feeling over-burdened with legislation may care to spare a thought for tanker operators and particularly those transporting hazardous cargoes. As well as having to comply with all the rules pertaining to mainstream transport, they are also subject to regulations written with enhanced health and safety in mind.

These so-called ADR regulations are revised every two years so operators in the sector need to keep abreast of changes. ADR denotes the European Agreement concerning the International Carriage of Dangerous Goods by Road and is enacted in UK law as the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.

"ADR is being discussed by a working party in Geneva at present with a cut-off date of May 2016," states Allan McKenzie, senior technical manager at the SMMT (Society of Motor Manufacturers and Traders). "The amended agreement will then be published before 2017, when it will come into force."

This time around, no major alterations are planned, he says, although that situation could change. "There is, for example, a document on the table that addresses the electrical systems on ADR vehicles and seeks to clarify the cable that should be fitted," he explains.

Tanker manufacturers watch ADR closely because of the all-encompassing influence it has on truck and body designs. "We're tightly constrained by what ADR dictates," says Graham Baker, UK sales manager for G Magyar. And he adds that other associated regulations lace the corset even tighter – a point taken up by Chris Anderson, commercial director at Whale Tankers.

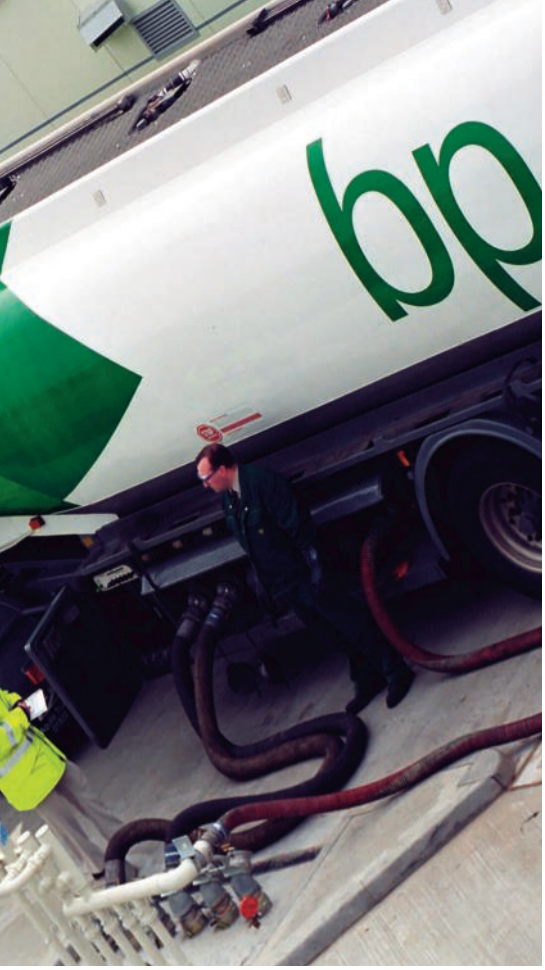
PRESSURE DIRECTIVE

He cites the impact of recent changes to the European Union's Pressure Equipment Directive: the first in 17 years. The amendments came into force in July 2014 and are being transposed into domestic law by EU member states. "As a result of the directive we've had to add more rings to our vacuum tankers, to strengthen them, and reduce the bay length," states Anderson. "That has typically increased their unladen weight by around 100kg – when we're constantly trying to save weight so customers can carry more payload."

And there's another point. New legislation almost always makes vehicles heavier – Euro 6 is a prime example – so taking weight out is an ongoing challenge. "Tanker builders took most of the measures required to cut weight – fitting alloy wheels, for example – 15 years ago," says Anderson.

Yet there is no prospect of regulatory relaxation any time soon. Indeed the reverse is likely – not least following the case of several tankers built in South Africa being brought into service in the UK despite incorrect certification in their country of origin. "That led to some very detailed scrutiny by the DfT [Department for Transport], the HSE [Health and Safety Executive] and the VCA [Vehicle Certification Agency], resulting in the tankers concerned being taken out of use," comments Freight Transport Association head of engineering Andy Mair. "The few [circa 70] that remain will be withdrawn by the end of this year."

Since this action, says Mair, the DfT has reviewed and clarified the appointment conditions for AIBs – Authorised Inspection Bodies – and introduced a database for vehicle



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inspection certificates. As a result, before first use, tanks and pressure vessels must now be tested, inspected and certified by AIBs (including the FTA's own Vehicle Inspection Service) appointed by the secretary of state for transport. There must also be a schedule of periodical inspection.

"We've seen a significant increase in the level of scrutiny being applied by the VCA and UKAS [United Kingdom Accreditation Service] when they carry out annual assessments of our standards and procedures," comments Mair. That said, he believes the changes add value. "The online database for certificates is a positive move as it ensures consistency across all the AIBs and provides an audit trail for road tanker certification."

Meanwhile, tanker inspections in service remain key, and for road fuel tankers, these are underpinned by the Safe Loading Pass Scheme (SLPS). Established in the UK in 1989, this too has been revised by representatives of the UK Petroleum Industry Association and the Tank Storage Association, with management by the FTA.

SAFE LOADING

The revisions were announced last April and mean that all road tankers loading at participating terminals must be inspected at least once every six months by qualified technicians. Previously, inspections were six monthly only for vehicles operated by contractors. Those operated by the oil majors ran to an annual inspection schedule. Now, a current SLPS disc has to be displayed by each vehicle – separate discs for tractor units and trailers – with penalties including barring vehicles without discs from entering terminals.

If discs are lost, stolen or have been defaced, terminal operators can check on a website launched several months ago – www.safeloadingpass.com – to check on compliance. The SLPS scheme also aims to ensure that technicians and workshops involved in tanker inspection and maintenance work to the standard.

ADR technicians have to complete a one-day SLPS inspection course, which includes a pass/fail assessment of both knowledge and skills. Candidates suitable for the course are likely to have been continuously employed in road fuel tanker R&M for at least three years, or have passed a petroleum tanker maintenance and repair course (following a syllabus by the Energy Institute) within the previous six months.

Probably as a result, incidents involving tankers are mercifully rare. However, when they do occur, the consequences include serious disruption, damaging publicity and substantial fines. In October this year, for example, Flogas Britain was fined £25,000 plus £9,000 costs after a leakage from a tanker carrying LPG (liquefied petroleum gas) caused the emergency services to evacuate 15 people from nearby houses.

Having heard a loud bang and seen gas vapour leaking from the underside of the tanker while it was being off-loaded, the driver initiated an emergency shutdown. However, that failed to close the main isolation valve fully and vapour continued to leak from a broken flange on the pump. Around six tonnes of LPG was lost in what HSE inspector Mahesh Mahey described as "a serious and dangerous occurrence".

No wonder, then, that safety regulations are so strict for vehicles involved in transporting dangerous goods. TE