Common as MUCK

The humble gully emptier trundles along municipal roads, clearing drains to keep traffic flowing. But its sophisticated pressure equipment also requires regular – and in some cases specialist – attention, reports Steve Banner

Torrential autumn rains place huge pressure on Britain's surface water drains. If they are blocked with mud, twigs, old sweet wrappers and flattened soft drink cans, then they are going to overflow. That will lead to flooding, closed roads and potentially thousands of pounds worth of damage done to domestic and commercial property. On the other hand, if the drains have been cleared of debris by gully emptiers, then it will be a different story. To ensure they can handle the job, however, these highly specialised trucks have to be properly maintained.

Gully emptier tanks are pressure vessels, and as such are subject to the Pressure System Safety Regulations 2000 and the accompanying ACOP (approved code of practice) and guidance, says Whale Tankers managing director Mark Warmington. "They apply to anything that operates above 0.5bar," he says.

That means that they should be looked after in accordance with a written scheme of maintenance drawn up by a competent person, he says, and their tanks inspected annually. A competent person has to conduct the inspection. Everything done to a gully emptier, including the results of the annual inspection, has to be recorded in a technical file that must accompany it when it is eventually sold second-hand.

Dominating the UK gully emptier market, Solihull, West Midlands-based Whale builds 300 to 350 specialist tankers annually, primarily on 12- to 32-tonne chassis. Its 17-acre site is said to be one of the largest liquid waste vacuum tanker and jetting equipment manufacturers in Europe. Also, the company employs more than 20 mobile technicians, the majority of whom are Lloyds Register-approved, says Warmington, so proving their competence. They carry out some 1,500 tank inspections annually between them (pictured above), alongside other tasks.

The company's commercial director, Chris Anderson, recommends that gully emptiers working for at least 40 hours a week should be serviced four times per year. He continues: "The annual regime consists of A, B, C and D services. We class the A and C services as minor ones, and they include around 80 different checks of items such as pressure relief valves, door clamps, universal joints and sight glasses. With the B and D services, we change the lubricants and items such as the hydraulic filter, while the D service includes the mandatory annual tank

inspection. The A and C services take 2.5 hours, the B service 3 to 3.5 hours and the D service 4.5 hours."

Fewer problems are likely to arise if operators carry out some regular checks themselves, Anderson advises. He adds: "The water and vacuum filters should be inspected daily, for example, while the pressure release valves should be examined weekly to ensure they are moving freely. Lubricant levels should be checked at the same time, including the level in the jetting pump, and the door seal faces should be cleaned."

Also stressing the importance of checks is Paul Neville, general manager, rental contracts, at hire company Go Plant Fleet Services. He states: "A combination of daily, weekly and monthly checks and maintenance is crucial. It protects the individual using the equipment from a health and safety perspective, maximises the vehicle's reliability, keeps downtime to a minimum, and let's not forget that these vehicles are expensive. We're talking about an investment of over £100,000. Daily and weekly checks should include the vacuum pump air filter and casing, the power take-off drive belt's tension and condition, and the float ball in the front tank. Monthly checks should involve applying high-temperature grease to the power take-off bearing blocks. The rear tank should be washed out, the main tank lubricated with old engine oil, and the partition wall moved up and down the tank to ensure smooth operation. Excess oil should be wiped out.

"The main thing that goes wrong with gully emptiers, though, arises if the filters aren't checked and cleaned by the operator daily," continues Neville. "That tends to create a lack of vacuum, causing the equipment to underperform." The company has 14 gully emptiers in service across seven contracts, one available for spot hire (pictured left), and another four due for delivery in the coming months.

Enterprise Flex-E-Rent managing director Danny Glynn agrees that operators have an important role to play in this area. "We advise that the driver should check the filters and water traps on the gully equipment as part of the daily walk-around inspection," he says. The company, which acquired SHB Hire earlier this year, has a roster of 68 medium gully emptiers on 18-tonne chassis, and one on a 26-tonnne chassis.

Trucks are subject to statutory safety inspections no matter what type of body they are fitted with. Ideally, the gully emptier service and its safety inspections should coincide to minimise downtime, says Glynn. "In our case, they are usually on six-, eight-, ten or 13-week schedules, and we inspect the gully equipment at the same time as the chassis inspection," he states.

A number of the in-house service technicians at rental fleet Dawsongroup Sweepers – it has over 20 who are mobile – have undergone service and repair training. Managing director Paul Shires states: "The pumps, valves, hoses and related attachments all need periodic attention, and if there is a problem, then our mobile technicians have a first-fix rate of over 90%," he states. Dawsongroup Sweepers has 55 gully emptiers on its books, and a further 24 on order; it operates workshops in Brighouse, West Yorkshire and Pucklechurch near Bristol, and is about to open one in Glasgow.

Whale's mobile technicians tackle most repairs; they will send tankers back to its Solihull workshop if safe working at height arrangements for tasks such as changing a top boom hose cannot be arranged elsewhere. With 16 technicians, the site also has IRTE Workshop Accreditation. "Virtually everything can be done from ground level, though," Anderson stresses.

His colleague and superior Warmington voices concerns about the standard of some of the repairs being carried out by third parties, especially when it comes to welding. The individuals carrying out the work are not always qualified to do so, he contends. "You can't simply call in the local fabricator and ask him to do it," he remarks. Furthermore, required procedures – such as the non-destructive testing of the weld by a competent third party – are not always followed, Warmington reports. "We come across poor welding all too often and it is a problem that is quite difficult to put right. It may result in the gully emptier being condemned." TE

FURTHER INFORMATION

PSSR ACOP (rev. 2014) – www.is.gd/ocokip

IRTE Workshop Accreditation – www.is.gd/egubah