SHERIFFDOM OF SOUTH STRATHCLYDE, DUMFRIES AND GALLOWAY AT LANARK

[2019] FAI 44

LANB111/19

DETERMINATION

BY

SHERIFF NIKOLA C STEWART

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

IAN ALEXANDER STRUZIK

Lanark, 20 September 2019

The Sheriff having considered the information presented at the inquiry finds and determines in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc (Scotland) Act 2016 that:-

1. In terms of section 26(2)(a) of the 2016 Act Ian Alexander Struzik born 26 May 1968 and residing at the time of his death at Forth, died at approximately 1835 hours on 18 December 2017 at the Lochlyoch from Howgate road to the A73. This was the time when his life was formally pronounced extinct.

2. In terms of section 26(2)(b) of the 2016 Act the accident resulting in his death took place within a barn at Lochlyoch Farm, Thankerton, Biggar ML12 6NH at some point between 1500 and 1835 hours on 18 December 2016.

3. In terms of section 26(2)(c) of the 2016 Act the cause of death was blunt force injuries to face and neck due to a trailer accident.

4. In terms of section 26(2)(d) of the 2016 Act the accident occurred as Mr Struzik attempted to remove a faulty brake hose on a Marshall QM11 trailer manufactured in June 2002. In the course of that operation he raised the bed of the trailer to enable better access to the brake pipe before inadvertently disconnecting the flexible hydraulic hose which was being relied upon to retain the tipper body in the raised position. As a result hydraulic fluid flowed out of the hose causing the bed of the trailer to suddenly fall, impacting Mr Struzik and resulting in his death.

5. In terms of section 26(2)(e) of the 2016 Act precautions in the form of the use of mechanical support placed and secured between the underside of the raised body and upper chassis of the trailer would have prevented the accident resulting in Mr Struzik's death.

6. In terms of section 26(2)(f) of the 2016 Act it was foreseeable due to its method of construction that access beneath the trailer body may be required to replace hydraulic hoses. It was foreseeable that employees might choose to raise the trailer bed to achieve easier access to hydraulic hoses. The lack of any risk assessment highlighting the inherent dangers of carrying out maintenance work on the underside of a raised trailer bed and detailing the reasonable precautions to be taken by employees to avoid crushing and impact hazards contributed to the death of Mr Struzik.

7. In terms of section 26(2)(g) of the 2016 Act there are no other facts which are relevant to the circumstances of the death.

RECOMMENDATIONS

In terms of section 26(1)(b) of the 2016 there are no recommendations as to any of the matters mentioned in sub-section (4) which might realistically prevent other deaths in similar circumstances.

NOTE

The legal framework.

[1] A fatal accident inquiry was held under the Fatal Accidents and Sudden Deaths Etc. (Scotland) Act 2016 ("the 2016 Act") into the death of Ian Alexander Struzik who died on 18 December 2017. He was at the time of his death acting in the course of his employment as a farm worker at Lochlyoch Farm, Thankerton, Biggar, and his death was the result of an accident which occurred in the course of that employment. In terms of section 2(3) of the 2016 Act an inquiry was required to be held into the circumstances of his death.

[2] The Procurator Fiscal issued notice of the inquiry on 11 July 2019. The first order was granted on 19 July 2019 and a preliminary hearing was held within Lanark Sheriff Court on 27 August 2019. Ms Caldwell, Senior Procurator Fiscal Depute, appeared throughout for the Crown. The only interested party represented at the inquiry was the deceased's employer, J&A Galloway Limited, who was represented throughout by Ms Anderson. The family were interested in the outcome and conduct of the inquiry but were not represented. The inquiry was held on 2, 3 and 6 September 2019.

[3] It became clear at the preliminary hearing that many matters were capable of agreement and a Joint Minute of Agreement between the Crown and J&A Galloway Limited was tendered at the inquiry. The scope and extent of the inquiry was thereby limited. A total of nine witnesses were led in evidence by the Crown.

[4] This inquiry is held under section 1 of the 2016 Act and governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017 (SSI 2017/103). The inquiry was initiated by the procurator fiscal, who represents the public interest, in accordance with his statutory duty to do so. The purpose of an inquiry under section 1(3) of the Act is (a) to establish the circumstances of the death and (b) consider what steps, if any, might be taken to prevent other deaths in similar circumstances.

Circumstances

[5] Mr Struzik ("the deceased") had been employed as a farm worker with J&A Galloway Limited since approximately 1985 and continued to be so employed until his death. His duties included feeding cattle, tractor work, attending to slurry, mucking out sheds, harvesting and cutting grass to make silage. He had no formal qualifications in relation to machinery work or maintenance but had built up experience throughout a working life spent on farms.

[6] The deceased's employers, J&A Galloway, own two neighbouring farms: Lochlyoch Farm and Syde Farm. The company directors are Elizabeth Galloway and her partner David Struzik. David Struzik is the deceased's brother. In terms of management hierarchy, Ms Galloway was in charge and focused primarily on working

with farm livestock. David Struzik also had management responsibility and worked both with livestock and machinery but had a keen interest in machinery. The deceased was an experienced farm worker and as a result had a degree of autonomy in his organisation of tasks to be performed. Also employed on the farm at the relevant time were Ryan Evetts and David Hodge. Both were then approximately 18 years old. Tom Linton was working in a self-employed capacity on the farms at the time of the deceased's death.

[7] When problems with machinery arose on the farms, they would be reported to David Struzik and, depending on the nature of the problem, would be attended to on the farms by either or both the deceased and David Struzik, assisted at times by Ryan Evetts, or if more serious, be taken for repair by mechanics. The replacement of brake hoses was something which would routinely be attended to on the farm. Once removed a replacement brake hose would be ordered as replacements were not available as a matter of course on the farms.

[8] The company owned six trailers including a type QM11 trailer manufactured in June 2002 by Charles J Marshall (Aberdeen) Ltd and purchased by the company on 31 January 2013. The trailer consisted of a twin axle chassis on top of which was fitted an open topped tipper body which pivoted around the rear of the trailer chassis and had an opening rear tailgate. A brake pipe on the trailer burst whilst Ryan Evetts was using it on Saturday, 16 January 2017. On the instructions of David Struzik, Mr Evetts parked the tractor with the trailer attached in the entrance of an agricultural shed on the farm. The intention was to repair the burst brake hose on Monday or Tuesday of the next

week. Other trailers were available for use on the farm pending repair of the Marshall trailer.

[9] On Monday 18 December 2017 the deceased was last seen alive at approximately 2.30 when he told Ms Galloway that he intended to clear a space at Syde Farm for a delivery of sawdust expected the next day. At 2.44 pm Ryan Evetts spoke to him by telephone. At approximately 3pm the deceased went to repair a catch on a gate. At approximately 5.15 pm Ryan Evetts returned his tractor to the silage pit area near the agricultural shed at Lochyloch Farm. He saw a tractor with trailer in question attached and could hear a radio but saw no sign of the deceased. No lights were on although it was getting dark. He thought the deceased had been working at the trailer but he did not respond to his call. At approximately 6pm Ms Galloway went in search for the deceased having not heard from him. At the silage pit she saw his high visibility vest under the Marshall trailer and, realising he was there, called for assistance from David Struzik and emergency services. On arrival David Struzik lifted the trailer bed off the deceased with the help of a telehandler, having realised that the hydraulic lifting system for the trailer was inoperative. There was no sign of any prop or lever having been used by the deceased to secure the trailer in the tipped position.

[10] The Scottish Fire and Rescue Service attended at Lochyloch Farm at approximately 18.22 hours. They were first responders. On arrival they saw a tractor with trailer attached. The trailer was in the raised position, with the telehandler used by David Struzik to raise the platform still *in situ*. The deceased was found to be lying flat

on the ground. Ambulance Service staff attended shortly thereafter and confirmed that he was a fatality.

[11] The deceased had received no instructions to repair that trailer that day and had not intimated his intention to do so to any of his co-workers. Had it been his intention to use the trailer to clear an area at Syde Farm for the sawdust delivery, he could have used any of at least two alternative trailers which were available.

[12] The trailer was the subject of an inspection by the Health and Safety Executive Field Operations Directorate. The mechanical inspection followed upon a visit to the scene of the accident by Inspectors Lesley Hammond and Peter Dodd on 19 December 2017 during which they noted significant amounts of white coloured oil underneath the middle of the trailer. A spanner was lying on the chassis of the tractor.

[13] Mr Dodd, a specialist in mechanical engineering, was asked to inspect the trailer to determine whether the trailer body had lowered unintentionally from a raised position and if so, the cause and what measures could have been taken to prevent it occurring. Having done so, he concluded that the fatal accident occurred when the tipper body inadvertently lowered because a flexible hydraulic hose containing pressurised hydraulic fluid relied on to retain the tipper body in the raised position was disconnected causing the hydraulic fluid to escape and the tipper body to lower due to the gravitational force acting on it. He also concluded that the fatal accident would have been prevented if a mechanical support had been placed between the underside of the raised body and the upper surface of the chassis.

[14] The flexible hydraulic hose which had been disconnected was one of three flexible hydraulic hoses connected between the trailer and the tractor. The third hose had been disconnected from a four way connector located on the chassis in front of the front axle. The other two hoses were connected to the two hydraulic cylinders which provided the trailer's tipping function. The hydraulic circuit for the tipping function of the trailer was a closed circuit in which hydraulic fluid would normally always be present. The tipping cylinders were single acting cylinders whereby the flow of pressurised hydraulic fluid caused the piston rods to move in one direction only; in this instance to extend and raise the body. The tipper body would normally remain in the position it had been raised to due to the containment and incompressibility of the hydraulic fluid in the circuit. A loss of hydraulic fluid from the hydraulic circuit would cause the raised body to lower unintentionally if no other measures had been put in place to prevent this. Disconnecting the hydraulic hose from the four way connector would allow the hydraulic fluid to escape from the circuit.

[15] There was no reason for the deceased to disconnect the flexible hydraulic hose. The fault identified in the trailer was in the hydraulic brake hose. Both hoses were similarly black in colour and approximately 25 mm in diameter and with no visible markings to identify them. Identification of which hose is which is largely dependent on tracing where they lead to. Whilst that tracing and disconnection operation could be carried out without raising the trailer bed, by crawling underneath, better access is obtained by raising it.

Conclusion

[16] The mechanism and circumstances of the accident are not disputed. The deceased inadvertently removed the wrong hose, mistaking the flexible hydraulic hose supplying hydraulic fluid to the four way connector for the brake hose which was inserted into a receptacle above the drawbar of the trailer. Disconnecting the hydraulic hose would cause hydraulic fluid to escape from the hydraulic circuit and the tipper body to lower due to the gravitational force acting upon it. The white substance identified at the scene was hydraulic fluid which came from the disconnected hose. The trailer bed would have lowered without warning within seconds in the absence of any form of mechanical support placed between the underside of the raised body and the upper surface of the chassis.

[17] The deceased's body was found underneath the bed of the trailer. The inadvertent and unexpected lowering of the tipper body trapped and crushed the deceased who received fatal crushing injuries to his face and neck.

[18] Companies such as J&A Galloway who employ five or more employees are required by law to complete a risk assessment for each work activity. A risk assessment should have been carried out in respect of this trailer, including risk assessing the repair of any lifting machinery, how it gives rise to risk and detailing preventative measures to avoid the risk identified materialising. It would then have to be published in order that all employees would be aware of its terms. No such risk assessment had been completed by the company. It is a known risk associated with trailers such as this one that if a leak is introduced into the hydraulic hoses which maintains the trailer bed in the

raised position, fluid will escape and the trailer body will descend. The speed of descent depends on the amount and rapidity of the escaping fluid. Any such risk assessment would have identified the potential for crushing or impact hazards if a body was placed between the upper chassis or the surface on which the trailer was standing and the lowering body of the trailer bed. It would have detailed as a safe way to raise the trailer bed, the use of a rigid prop between the raised trailer bed and chassis.

[19] There is a dispute between witnesses as to whether the universal practice employed when changing brake hoses on the Marshall Trailer was, as suggested by David Struzik, to disengage the trailer from the tractor and to retain the trailer bed in the lowered position or to raise it. Ryan Evetts gave evidence that when he was involved in the removal of burst hydraulic brake hoses or otherwise worked on the underside of the trailer, he did so with the bed raised and secured with a prop and that he had been advised by the deceased to make sure the trailer was always propped and secure before working underneath it. The deceased told him to use wooden sleepers to prop it. That was the method he had seen used on the farm by the deceased and his brother. David Struzik denies ever using or seeing the deceased use this method and maintains that he was required to and did access hydraulic hoses only when the trailer bed was in the lowered position. He is supported in this by Elizabeth Galloway. The dispute about the appropriate method highlights the practical usefulness of a risk assessment detailing *inter alia* the approved method. In any event, no prop was used by the deceased on this occasion. The work was not carried out with the trailer bed in the lowered position. Whilst it would have been possible to do so in that position, easier access to the brake

pipe is achieved when the trailer bed is raised and it was foreseeable that that method could be employed in preference to the more constricted access allowed when the bed was in the lowered position. The provision of props with newer versions of the trailer and the availability of commercial props exemplifies this. The use of a prop placed between the underside of the raised body and the upper surface of the chassis of the trailer would have secured the raised trailer bed and prevented this fatal accident.