SHERIFFDOM OF GRAMPIAN, HIGHLAND AND ISLANDS AT INVERNESS

[2017] FAI 22

B165/17

DETERMINATION

BY

SHERIFF GORDON FLEETWOOD

UNDER THE FATAL ACCIDENTS AND SUDDEN DEATHS INQUIRIES (SCOTLAND)

ACT 1976

into the death of

STEVEN CURRIE MITCHELL

Inverness, 16 October 2017

The Sheriff, having resumed consideration of the Fatal Accident Inquiry into the death of Steven Currie Mitchell determines in terms of section 6 of *The Fatal Accidents and Sudden Deaths (Scotland) Act 1976* as follows:-

In terms of section 6(1)(a)

Steven Currie Mitchell (d.o.b 22nd August 1987) domiciled in Inverness died at or about 1310 hours on 19th December 2015 on the A835 road at Ardcharnich south of Ullapool.

In terms of section 6(1)(b)

Mr Mitchell died as a result of 1(a) smoke inhalation and acute thermal injury due to or

as a consequence of 1(b) fuel tanker collision with a roadside rock face and subsequent vehicle fire.

In terms of section 6(1)(c)

I have no recommendation to make under this section.

In terms of section 6(1)(d)

I have no recommendation to make under this section.

In terms of section 6(1)(e)

I have no recommendation to make under this section.

FINDINGS IN FACT

- [1] Steven Currie Mitchell was employed by Highland Fuels Ltd as a delivery driver. His duties included delivery of dangerous loads, such as diesel. He was suitably qualified for this post.
- [2] On 19 December 2015 at about 1249 hours, in the course of his employment, Mr Mitchell was driving a fuel tanker, containing diesel, on the A835, heading to Ullapool. The vehicle was in a good state of repair, with no mechanical defects.

 Mr Mitchell had completed all necessary daily checks before driving the vehicle, including checking the fire extinguishers kept on the vehicle.

- [3] At Ardcharnich the vehicle left the road, entered a ditch on its offside, toppled onto its off side and struck a rock face. Mr Mitchell survived the collision but was unable to exit the cab because damage to the cab had trapped his right leg.
- [4] In the absence of any other cause the accident was probably caused by driver error on Mr Mitchell's part probably by his becoming distracted but no further definite conclusion is possible on the evidence.
- [5] Witnesses arrived on the scene shortly after the accident. Mr Mitchell was alive and conscious. These witnesses attempted, unsuccessfully, to enter the cab of the lorry. Attempts were made to remove the windscreen of the vehicle and attempts were made to open the passenger door of the cab.
- [6] A fire had started in the cab of the lorry. A fire extinguisher which had been in the cab of the vehicle was retrieved from the nearby ditch and passed to Mr Mitchell who used it to restrain for a short time the progress of the fire.
- [7] A fire extinguisher was retrieved from the rear of the vehicle where it was stored. It was found to be inoperative. It was correctly stored in the vehicle; it had a safety pin in place. When the pin was removed and the handle depressed no powder was ejected.
- [8] The fire developed quickly and those who had tried to rescue Mr Mitchell had to retreat for their own safety. Development of the fire was accelerated by diesel from the cargo tank of the vehicle leaking out due to damage sustained in the collision.
- [9] The SFRS arrived shortly thereafter and controlled the blaze. By the time they arrived the fire in the cab was such that Mr Mitchell had certainly succumbed to smoke and fire.

- [10] Subsequent examination of the vehicle revealed that the likely cause of the fire was electrical, emanating probably from damage to the electrical wiring in the cab of the vehicle consequent on the collision.
- [11] Subsequent examination of the fire extinguisher which the rescuers tried to use revealed that it had become depressurised prior to the accident. This probably happened when a person unknown removed the safety pin from the extinguisher, briefly depressed the handle and replaced the safety pin. This caused the device to become depressurised over a period of about twelve hours.
- [12] Mr Mitchell died as a result of 1(a) smoke inhalation and acute thermal injury due to or as a consequence of 1(b) fuel tanker collision with a roadside rock face and subsequent vehicle fire.

NOTE

PRELIMINARY

[1] This was a mandatory Inquiry because Mr Mitchell died during the course of his employment. It was heard by me on 29 and 30 August 2017. The Crown were represented by Mr Barclay, Procurator Fiscal Depute, Mr Mitchell's family by Mr Cowie, solicitor and Mr Mitchell's employer, Highland Fuels Ltd, by Mr Graham, solicitor. I am obliged to them for the careful and professional way they presented and examined difficult and sensitive evidential issues. The purpose of the Inquiry was not to establish fault or blame on any one person or organisation but to examine the surrounding facts

and circumstances and make any recommendations required to prevent or reduce the chance of a similar incident.

[2] A substantial Joint Minute was produced and is incorporated into the findings in fact above as appropriate. As a consequence a number of the witnesses who gave oral evidence gave evidence in chief simply by acknowledging authorship of a report lodged by the Crown and adopting that report as their evidence in chief. Where a witness's evidence was not in any way controversial the evidence of the report lodged was admitted as the witnesses' evidence. There were a number of witnesses who gave oral evidence, they were Malcolm MacLeod, John Bellshaw, Robin Forrest, Alan Douglas, Ivan Hornsby, James Ross, Alistair MacIntosh, Alun Whyte, Michael Howden, Neil MacGregor, Gerard McCulloch and PC David Housby. I found all witnesses to be credible, they were all doing their best to answer truthfully the questions asked. By and large I consider I can rely on witnesses' recollections of events. There were some discrepancies between the accounts given by eye witnesses but given the extremely stressful circumstances of the events and the passage of time these discrepancies struck me as of no great moment and to be expected.

EVIDENCE

[3] The first witness was Malcolm MacLeod. He is a retained fire fighter based in Ullapool. At about 1300 hours on 19 December 2015 he was called out to attend a road traffic accident on the A835 about three miles south of Ullapool. He and colleagues in two fire appliances arrived at the scene about eight or nine minutes after receiving the

call. On arrival he saw a fuel tanker which had left the road, was partially on its near side and was well ablaze. The fire was so fierce Mr MacLeod and his colleagues had to stay a safe distance away while using water to try to bring the fire under control. He was told there was a person in the cab of the vehicle. He was of the view that there was no prospect of that person still being alive such was the extent of the blaze. After the blaze was extinguished he assisted in removing the body of the occupant of the cab. He discovered that damage to the cab consequent on the accident had trapped this person's right leg.

[4] Next to give evidence was John Bellshaw. His occupation, HGV driver, is relevant to his evidence. On 19 December 2015 he was driving his car on the A835 when he arrived at the scene of the accident. A lady approached him and told him there was someone in the cab of the vehicle. The vehicle was a fuel tanker and was tipped onto its offside. He climbed onto the nearside of the vehicle and tried to open the door there but was unable to. He fell off the cab into bushes, got up and looked into the cab. The occupant was conscious and spoke to the witness, saying, "I'm burning, get me out". The witness could see a fire in the cab. There was a small fire extinguisher lying on the road and it was passed to the occupant of the cab through a gap in the partially detached windscreen and the fire in the cab subsided when this was used. The occupant told the witness there was a fire extinguisher at the rear of the vehicle. The witness retrieved this. When he tried to operate it, it was not working. The fire in the cab had restarted and spread and was now such that the witness and others who had arrived had to retreat.

He had been concerned there would be an explosion because of the fact fuel leaking from the tanker was burning.

- [5] The next witness was Robin Forrest who was travelling to Ullapool on the relevant date when he happened upon the accident. He went to the front of the vehicle, it was on its side. He could see the driver in the cab. He appeared to be trapped by his right leg. He said he couldn't get out. The witness tried to remove the windscreen which was partly displaced but was unable to do this. Other people arrived, including Mr Bellshaw who retrieved a fire extinguisher from the rear of the vehicle. The vehicle was now burning in the area of the cab. The cab was filling with smoke which was getting thicker and darker. The driver was still showing signs of life, he was conscious. He recalled attempts to operate the fire extinguisher, these were unsuccessful. The pin was removed and the handle pressed but nothing happened. By now the fire was spreading and becoming fiercer. He felt there was no option but to retreat as he and the others present were in potential danger. He was of the view that if the fire extinguisher retrieved from the vehicle had been operative the driver may have had a chance of surviving until the SFRS arrived. The fire service arrived shortly thereafter.
- [6] Alan Douglas is a retired gentleman. He spent part of his working life as a security guard and is trained and experienced in the use of fire extinguishers from this part of his working life. He was traveling on the A835 with his wife when he came upon the accident. He recalled the vehicle lying at an angle, tipped towards the off side. He approached the vehicle, a fuel tanker. He saw a man trapped inside the cab, the man said his leg was trapped and he could not get out of the cab. Mr Douglas was unable to

enter the cab. He could see there was smoke in the cab. The engine of the vehicle was still running. He asked the man in the cab to turn off the engine and he did. Flames were now coming from the underside of the vehicle. Other witnesses came on the scene, one of them climbed on the cab and fell off. The fire extinguisher from the cab of the vehicle was found in the ditch and passed to the man in the cab. He used it and this stopped the fire temporarily. This man who fell off the cab retrieved a fire extinguisher from the rear of the vehicle. Mr Douglas tried to use it. He was trained in the use of such extinguishers. He pulled out the pin, pressed the handle and nothing happened. The pressure gauge was in the green area which to him meant it was properly pressurised. The fire was now of a ferocity that required those present to retreat. Diesel fuel from the tank of the vehicle was leaking onto the roadway. His wife, who was at his car and had been telephoning the 999 system called to say the fire service was en route.

Ivan Hornsby was a work colleague of Mr Mitchell, the deceased. He had seen him at Highland Fuels Ltd's Inverness depot on the morning of 19 December 2015. He had known Mr Mitchell for about five years. His mood was normal. He expressed no qualifications about the work he was planned to do that day. He told Mr Hornsby he had to do a call in town and was then going to Ullapool. The witness saw Mr Mitchell carry out the daily checks required before using his vehicle. These checks are recorded on a form that is completed by the driver. In particular the fire extinguishers kept on the vehicle require to be checked to ensure they are charged, within time limits and operative. The check that they were charged was to look at the pressure gauge and ensure it was in the green part of the gauge. If an extinguisher was found to be faulty

there was a system in the depot to change it there and then. When being trained in transporting dangerous goods (such as diesel) the training had included use of fire extinguishers. He understood that Mr Mitchell had received such training.

- [8] Next to give evidence was James Ross. At the relevant time he had been employed by Chubb, the suppliers of fire extinguishers to Highland Fuels Ltd, as a service engineer. This job involved attending at Highland Fuels Ltd's Inverness Depot annually to service the fire extinguishers supplied. On the due date he attended at the depot at about 7.30 hours. Drivers brought the devices from their vehicles and the witness serviced them, This consisted of ensuring they were in good working order and properly pressurised. Some extinguishers were not fit for further use and were replaced at this service. He did not press the handle of the devices as this released powder from within the device. He would find devices with broken or missing locking pins. He routinely left a supply of such pins at Highland Fuels Ltd because he knew they were prone to breaking when the devices were handled. He understood Highland Fuels Ltd to have a supply of extinguishers in stock to replace apparently faulty devices between services.
- [9] Alistair MacIntosh, the next witness, is operations director at Highland Fuels Ltd. He knew the deceased. He was a tanker driver and was properly qualified in that role. He had been due to make a call at Ullapool on 19 December 2015. He was familiar with the route. The task he was assigned that day was well within his capabilities. If he had discovered any difficulty or problem with his vehicle, its fittings or its load he would have known to report these to the depot manager and not to use the vehicle until

matters were in order. If he had reported that a fire extinguisher appeared faulty it would have been replaced, spares were kept for that eventuality. The company kept a supply of safety pins for fire extinguishers as these were prone to break. The vehicle had been fitted with a "tilt switch" but it had previously been turned off on all company vehicles where it was fitted. These devices cut out all electrics in the vehicle in the event it tipped. The switches had been fitted at the insistence of a customer in connection with a contract with that customer. In use they had been found to be unreliable and to lead to the electrics in a vehicle cutting out suddenly during normal use. After discussion within the Highland Fuels Ltd and with another contractor with the same device the decision had been taken to turn the tilt switch off. It had been decided that the potential danger of a vehicle suddenly losing all power on the road outweighed the potential benefit of it turning off all electrics when the vehicle tipped over.

[10] The next witness was Alun Whyte. His evidence in chief was agreed in the Joint Minute to be the Report written by him and comprising Crown Production 6. Mr Whyte is employed by the Scottish Fire and Rescue Service (SFRS) as a Fire Investigation Officer. He examined the vehicle in question at Sheriffmill Garage, Elgin on 8 January 2016. He noted that the main electrical cut off switch was found in the ON position. Damage to the dashboard meant he could not determine if the master switch which was situated there was on or off. The likely cause of the fire was electrical. The witness was unable to be conclusive as to whether this was a fault which developed before the accident, and contributed to it, or whether it was a result of electrical arcing in the damaged wiring after the accident. The latter was more likely. The presence of a large

quantity of diesel from the tank of the vehicle would have accelerated development of the fire. He was asked about the use of a "tilt switch". His understanding was that such a device cuts off all electrical power when activated. He was not familiar with the operation of such devices.

- [11] Michael Howden is a vehicle examiner with DVSA. The joint minute agrees that his report (Crown Production 3) be his evidence but he gave brief oral evidence. His report was to the effect that other than the substantial collision and fire damage suffered by the vehicle it was otherwise well maintained and free of mechanical defects. In particular there appeared to be no problem with either steering or braking the vehicle.
- [12] Next was Neil MacGregor. He is a fire safety engineer of many years' experience. He is suitably qualified to give expert evidence on fire safety matters and about the use, maintenance and checking of fire extinguishers. Crown Production 8 is a Fire Extinguisher Inspection Report prepared by Mr MacGregor following on an inspection by him on 25 December 2015 of the fire extinguishers recovered from the vehicle. This report was admitted as his evidence in chief. His examination of the devices found no external damage. One extinguisher was found to weigh 200 grams less than it would if full and the other to be 100 grams light. In both the powder was found to be dry and free flowing. There was powder in the valve and hose. The safety pin was missing from each device and the handles were undamaged. Both devices were unpressurised. The gauges indicated this and no powder was expressed when the handles were depressed to operate the devices. Mr MacGregor's conclusion from this was that at some time more than twelve hours before the accident the safety pins had been removed and the handles

briefly depressed causing a small amount of powder to be ejected. The inevitable consequence of this is that the valve which retains the gas which ejects the powder leaks because its seal is broken. After about twelve hours the pressure would be nil. He was asked about the evidence the court had heard about the gauge apparently showing the devices correctly pressurised at the locus. He explained that the gauge has a black line in the middle of the gauge below the green (or correct pressure) area. At a quick glance, particularly in a stressed situation, this can give the wrong impression that the devices are pressurised. He could only speculate about when the devices had become depressurised. He was asked about safety pins in the handles of the devices and the evidence the Inquiry had heard about Mr Ross leaving a supply of these with Highland Fuels Ltd to enable them to replace broken or missing pins. He expressly disapproved of such a practice. The safety pin was there to ensure that depressurisation such as had apparently occurred in this case did not happen. If a pin broke or was removed the supplier or maintainer of the devices should be contacted.

- [13] Crown Production 7 is a Health and Safety Executive (HSE) Report by Gerard MacCulloch, an HSE Investigator. This report was admitted as his evidence. This report added little to the evidence already heard because it outlined the steps taken to investigate the accident by HSE, this in turn had been transmitted to COPFS and formed the basis for the matters raised at the Inquiry. His conclusion was that no enforcement action was necessary.
- [14] The final witness was David Housby, a police constable. He prepared Crown Production 4a Collision Investigation Report. He is well qualified to produce such

reports and it was admitted as his evidence. His conclusion was that the accident which led to Mr Mitchell's death happened when the vehicle he was driving failed to negotiate a slight inclining left hand bend, it then travelled across the oncoming carriageway and entered a ditch on its offside. This caused it to roll onto its side, collide with a rock face and come to rest on its offside. There had been an attempt by Mr Mitchell to steer away from the ditch but this attempt had been unavailing. In the absence of any evidence of mechanical defects causing the vehicle to act as it did PC Housby was of the view that the accident was due to driver error, possibly caused by distraction. He could not say what that distraction may have been.

SUBMISSIONS

- [15] Mr Barclay for the Crown made a brief and focused submission to the effect that the evidence allowed the court only to make findings in terms of sections 6(1)(a) and (b) of the 1976 Act. He did submit that the court could make a finding in terms of section 6(1)(c) that the accident could have been avoided by Mr Mitchell successfully negotiating the bend where the vehicle left the road. He did not consider findings in terms of sections 6(1)(d) and (e) to be appropriate on the evidence.
- [16] Mr Cowie, for Mr Mitchell's family, lodged written submissions. I am obliged to him for these. These were supplemented by oral discussion. The essence of these submissions was an invitation to find that Highland Fuels Ltd operated an unsafe system of work by allowing employees to replace safety pins in fire extinguishers and that there was no safe system in place for ensuring that fire extinguishers on vehicles

were in good working order. Further he submitted that the decision to turn off the tilt switch fitted to the vehicle may have prevented the fire which caused Mr Mitchell's death.

[17] Mr Graham, for Highland Fuels Ltd, adopted the Crown position and made no further submission.

DISCUSSION

- [18] The first thing I must do in this section is not strictly relevant to my determination but, in my view, is necessary given the evidence I heard. That is, to record my appreciation and admiration for those witnesses who came upon the accident by chance and who thereafter attempted to rescue Mr Mitchell with courage and resource. These are, John Bellshaw, Robin Forrest, and Alan Douglas. Although their efforts were unavailing there is no doubt they did all they could to try to save Mr Mitchell at considerable risk to themselves.
- [19] Turning to the question of the determination again there is no doubt about the place, date, time and cause of Mr Mitchell's death. These were all matters of agreement and were part of the Joint Minute entered into by parties to the Inquiry. These are as set out in my findings under sections 6(1)(a) and (b) of the 1976 Act. Mr Mitchell died as a result of a fire which started in his vehicle after the vehicle left the road and crashed into a rock face, falling on its off side. Damage within the cab of the vehicle trapped his right leg and prevented him leaving the cab. A number of questions arise from these circumstances which the court requires to answer. These, in my view are: why did the

vehicle leave the road? How and why did the fire start? Was there anything in the system of work operated by Highland Fuels that caused or contributed to the death? In particular were the lack of working fire extinguishers attributable to Highland Fuels Ltd's system of work and was the fact that the tilt switch was turned off a factor indicative of an unsafe system adopted by the company? If the fire extinguisher that the rescuers attempted to use had been working, would it have saved Mr Mitchell? Can or should the court make any recommendations to prevent a similar accident? [20] To answer the first question. The vehicle was mechanically sound and free from defects. There were no eye witnesses to the accident save Mr Mitchell. There was no evidence to suggest his driving in any way fell below the standard expected of a normally competent driver. He was used to driving the vehicle and trained in the carriage of hazardous cargoes. The police collision report comes to the conclusion from examining the roadway and the vehicle that the most plausible explanation, I am afraid, is an error on Mr Mitchell's part, probably caused by his becoming distracted. Beyond that I am of the view that any conclusion would be speculation and for that reason feel I

[21] Turning to the fire. I am satisfied that the fire probably started as a result of damage to the wiring within the vehicle when it collided with the rock face. This damage led to the electrical components within the vehicle overheating and igniting which then spread to other parts of the vehicle. The fire was probably accelerated by the

cannot make a determination under section 6(1) (c) as submitted by the Crown. In the

absence of any eye witness evidence I am of the view that such a finding goes further

than the evidence I heard and accepted would allow me to go.

presence of diesel as a result of the vehicle's cargo tank being fractured in the collision. I must note that although Mr Mitchell clearly survived the impact and was conscious when the witnesses at the scene arrived the main electrical cut off switch was on. There was a switch on the dashboard which would cut off all electrical power but fire damage meant it could not be determined if it was on or off. Whether Mr Mitchell could have stopped or reduced the spread of the fire by any actions of his own is not a conclusion I am in a position to reach.

- Turning to Highland Fuels Ltd's system of work this was subject to criticism by Mr Cowie for the family of Mr Mitchell. There is no doubt that the two powder fire extinguishers located on the vehicle were inoperative. There is little doubt that the reason for this is that they became depressurised as a result of the safety pins being removed, a small amount of powder ejected and the safety pins replaced. This had the effect of breaking the seal that retained the propellant and causing the devices to depressurise over a period of about twelve hours. There was no evidence as to when or how this happened. The gauges on the devices showed them to be depressurised but the evidence of Mr MacGregor was that at a casual glance or when operating the devices in a stressful situation the gauges could be misread.
- [23] Highland Fuels Ltd had a system in place to ensure that fire extinguishers met legal requirements and were inspected regularly. There was an annual inspection by a representative of the manufacturer. More importantly the daily checks which the drivers of Highland Fuels Ltd's drivers were required to carry out included checking the fire extinguishers. There was evidence this was routinely done. There was evidence that the

training the drivers had included checking these devices. There was a system in place for replacing damaged or inoperative devices. When all these matters are considered I come to the conclusion that the person ultimately responsible for the fire extinguishers on his vehicle being in good order and operative was Mr Mitchell. His employers had done what was required by putting in place a system that was safe if operated properly. I agree with Mr Cowie's submission that the evidence of Mr Ross about leaving spare safety pins was not a good practice for the reason given by Mr MacGregor but I can find no evidential link between that and the accident. The evidence from the witnesses at the scene was that the safety pin was in place when the device was retrieved from its storage place in the vehicle.

[24] The evidence regarding the tilt switch was brief and incomplete, too incomplete in my view to allow me to come to any settled conclusion. The undisputed evidence was that such switches were not a regulatory requirement. They had been fitted to *inter alia* Mr Mitchell's vehicle at the insistence of a customer for a particular contract. They had been found to be a safety hazard when in everyday use and had been switched off. I heard little or no evidence about how these devices work, what they do when operated, what effect it has on the electrics in the vehicle, in particular the effect if there are damaged or exposed wires causing arcing. In these circumstances I am unable to come to any conclusion about whether the absence of a tilt switch was a contributory factor to the fire and Mr Mitchell's death. Consequently I have made no Findings in Fact about the tilt switch.

- [25] There was clear evidence that the fire extinguishers kept on the vehicle were inoperative. That raises the question, had one or both of these been working, would or could Mr Mitchell's death have been avoided? The evidence was that the fire probably started as a result of damage to the electrics in and near the cab. There was evidence that the fire was probably caused by arcing events with the damaged wiring. The evidence was that the small extinguisher from the cab retarded briefly the blaze but it flared up again quickly. The fire grew and spread quickly, accelerated to an extent by the diesel from the cargo tank. By the time the SFRS attended, about ten minutes after the alarm was raised, the blaze was out of control and Mr Mitchell certainly dead, the evidence was that anyone in the cab could not still be alive. Taking all these factors into account I am unable to come to the conclusion that Mr Mitchell was likely to have survived had the rescuers had a working fire extinguisher to hand. I have considered Mr Forrest's evidence about Mr Mitchell having had a chance of surviving if the inoperative fire extinguisher had worked. I am unable to accept that as likely or feasible given the power of the fire, the speed at which it developed and the extent to which it had taken hold when the SFRS arrived promptly on the scene.
- [26] In light of the above I have no findings to make in respect of sections 6(1)(c),(d),or (e) of the 1976 Act.
- [27] I have already praised those who attempted to rescue Mr Mitchell. In doing that I was echoing the submission made by Mr Cowie for the family, who expressed their thanks to those persons. In turn I extend the condolences of the court to Mr Mitchell's

family. I know some at least of them were in attendance and they sat through what can only have been very distressing evidence with dignity and fortitude.