SHERIFFDOM OF TAYSIDE, CENTRAL AND FIFE AT DUNDEE

[2024] FAI 46

DUN-B208-24

DETERMINATION

BY

SHERIFF TIMOTHY NIVEN-SMITH

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

into the death of

ANDREW CALDER SINCLAIR

DUNDEE, 5 November 2024

Determination

The Sheriff having considered all the evidence and the submissions of parties, determines in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths Etc (Scotland) Act 2016 ("the Act") that:

1. In terms of section 26(2)(a): *where and when the death occurred*

   Andrew Calder Sinclair, born 25 February 1961, ("Mr Sinclair") who resided at Aberfeldy, died at the premises of DK Logs, Brae of Murthly, Pitilie Farm, Aberfeldy, PH15 2EL ("DK Logs") at 16:09 hours on 6 September 2022.

2. In terms of section 26(2)(b): *where and when any accident resulting in the death occurred*

   The accident resulting in Mr Sinclair's death occurred at approximately 15:30 hours on 6 September 2022 at the premises of DK Logs. At the time, Mr Sinclair was employed by DK Logs to operate a "Palax C1000" Firewood Processing Machine ("FPM").

3. In terms of section 26(2)(c): *the cause or causes of the death*

   The cause or causes of death were 1(a) blunt force arm and neck injuries and 1(b) entrapment by log chipper machine.

4. In terms of section 26(2)(d): *the cause or causes of any accident resulting in the death*

   The cause of the accident was the presence of Mr Sinclair near the moving cogs of the transverse conveyor of the log deck of the FPM whilst the conveyor was operating, which led to entanglement.

5. In terms of section 26(2)(e): *any precautions which could reasonably have been taken and, had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided*

   Reasonable precautions would have been for Mr Sinclair to have operated the FPM by standing at the control panel, not jamming the hold-to-run controls and leaving the control panel. Mr Sinclair should have operated the FPM as per the on-job training received at DK Logs.

6. In terms of section 26(2)(f): *any defects in any system of work which contributed to the death, or any accident resulting in the death*

   There were no defects in any system of work which contributed to the accident resulting in Mr Sinclair's death.

7. In terms of section 26(2)(g): *any other factors which are relevant to the circumstances of the death*

   There are no other factors which are relevant to the circumstances of Mr Sinclair's death.

Recommendations

In terms of section 26(1)(b): having considered the information presented at the inquiry, no recommendations are made.

NOTE

Introduction and contents

[1] This determination follows an inquiry into the death of Mr Sinclair who died on 6 September 2022 at the premises of DK Logs, Aberfeldy. It contains ten chapters namely:

1 Introduction and contents

2 The legal framework

3 Participants and representation

4 The inquiry process

5 What happened

Background

FPM

Incident

Accident investigation

6 Productions

7 Witness Statements

8 Summary of relevant evidence

9 Submissions

10 Conclusions

The legal framework

[2] This was a mandatory inquiry under section 2(3)(b) of the Act as Mr Sinclair's death was the result of an accident at work in the course of his employment.

[3] Fatal Accident Inquiries and the procedure to be followed in the conduct of such inquiries are governed by the provisions of the Act and the Act of Sederunt (Fatal Accident Inquiry Rules) 2017. In terms of section 1(3) of the Act, the purpose of an inquiry is to establish the circumstances of the death and to consider what steps, if any, may be taken to prevent other deaths occurring in similar circumstances. It is not the purpose of the inquiry to establish civil or criminal liability (section 1(4) of the Act).

[4] Section 26 of the Act requires the Sheriff to make a determination, which in terms of section 26(2) is to set out the following five factors relevant to the circumstances of the death, insofar as they have been established to their satisfaction. These are:

(i) when and where the death occurred;

(ii) the cause or causes of such death;

(iii) any precautions that could have reasonably been taken, and if so might realistically have avoided the death;

(iv) any defects in any system of working which contributed to the death;

(v) any other facts which are relevant to the circumstances of the death.

[5] In terms of section 26 subsections (1)(b) and (4), the inquiry is to make such recommendations (if any) as the Sheriff considers appropriate as to:

(a) the taking of reasonable precautions;

(b) the making of improvements to any system of working;

(c) the introduction of a system of working; and

(d) the taking of any other steps.

[6] In order to identify precautions which, had they been taken, might realistically have avoided the death, or to identify defects in the system of working which contributed to the death it is necessary that the Sheriff is satisfied on the balance of probabilities that those precautions or the defects in the system of working contributed to the death. Likewise, in order to make recommendations the Sheriff has to be satisfied that there is reasonable possibility that the recommendations may prevent deaths in similar circumstances.

[7] The Procurator Fiscal represents the public interest. An inquiry is an inquisitorial process and the manner in which evidence is presented is not restricted. The court proceeds on the basis of evidence placed before it by the Procurator Fiscal and by any other party to the inquiry. The determination must be based on the evidence presented at the inquiry and is limited to the matters defined in section 26 of the Act. Section 26(6) of the Act provides that the determination shall not be admissible in evidence or be founded on in any judicial proceedings, of any nature. This prohibition is intended to encourage a full and open exploration of the circumstances of a death, while also reflecting the position that it is not the purpose of a Fatal Accident Inquiry to establish civil or criminal liability (section 1(4)).

[8] The scope of the inquiry extends beyond mere fact-finding. It looks to the future and seeks to prevent deaths occurring in similar circumstances. Where the circumstances have given cause for serious public concern an inquiry may serve to restore public confidence and allay public anxiety.

Participants and representation

[9] The Procurator Fiscal represents the public interest in a Fatal Accident Inquiry and Mrs A Yousaf, Procurator Fiscal Depute, Health and Safety Unit, Crown Office appeared.

[10] DK Logs were represented by Mr B Smith, Kings Counsel, instructed by Clyde & Co, solicitors, Glasgow.

[11] I am grateful to those who appeared at the inquiry for their professionalism and assistance in the conduct of the inquiry. Their cooperation and, in particular, the agreement of an extensive joint minute greatly assisted me, significantly reduced the amount of court time required to complete the inquiry and, in this case, ensured that vital resources provided to the Aberfeldy community were not depleted by the attendance of those working at the Aberfeldy and Kinloch Rannoch Medical Centre and Scottish Fire and Rescue Service attending court to give uncontentious evidence.

The inquiry process

[12] The first notice of an inquiry was received on 15 April 2024. An order was made for a preliminary hearing on 6 June 2024. A further preliminary hearing was held on 4 July 2024. The inquiry was due to hear evidence on 5 and 6 September 2024. The Procurator Fiscal commenced the inquiry by reading into evidence the joint minute of agreement. Paragraph 15 of the said minute incorporated the following witness statements into evidence:

A Scott Martin, dated 7 September 2022 and 13 February 2023.

B Don Martin, dated 13 December 2022 and 31 March 2023.

C Garry West, dated 7 September 2022.

D Lynda McCaughey, dated 8 September 2022.

E Kevin McCaughey, dated 8 September 2022.

[13] The Procurator Fiscal Depute then led evidence from Kerry Ann Cringan, former HM Inspector of Health and Safety, David Charles Gostick, HM Principal Specialist

Inspector of Health and Safety (Mechanical Engineering) and Andrew David Paterson Anderson Wilson, partner of DK Logs. DK Logs led no evidence.

[14] Given the substantial amount of evidence that was agreed, there was no need for evidence to be led on 6 September 2024, all evidence being concluded on 5 September 2024. Senior counsel for DK Logs lodged type written submissions for 6 September 2024 which were supplemented by oral submissions having heard the Procurator Fiscal Deputes oral submissions on that date.

What happened

[15] This chapter sets out a narrative of what was established on the evidence.

Background

[16] Mr Sinclair was aged 61 years of age at the time of his death, having been born on 25 February 1961. He formerly resided in Aberfeldy, Perthshire.

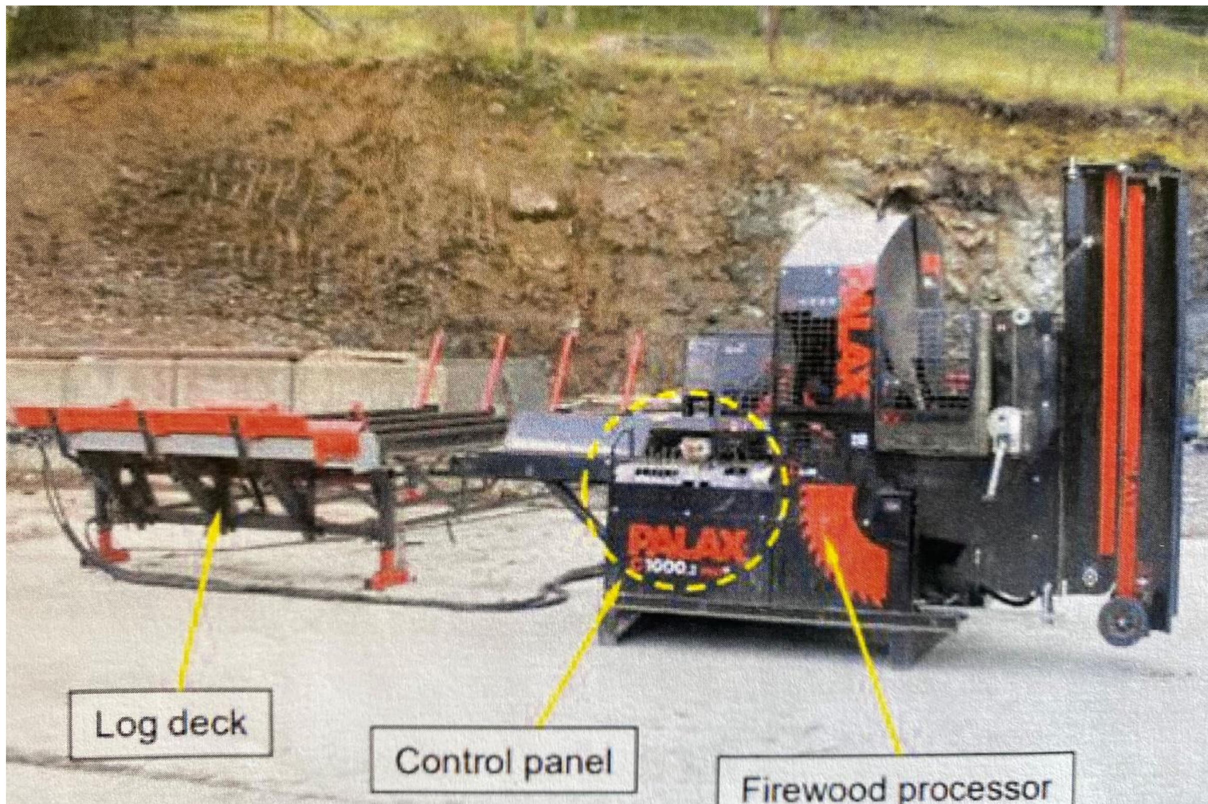
[17] DK Logs is a partnership owned by Andrew David Paterson Anderson Wilson (known as David) and his wife Karen Wilson. The business operates from a yard situated at Brae of Murthly, Pitilie Farm, Aberfeldy, Perthshire PH15 2EL. The partnership purchases timber from forestry contractors which is then processed into firewood for commercial and residential purposes using a Palax C1000 Firewood Processing Machine ("FPM").

[18] Mr Sinclair was, at the time of his death, employed by DK Logs as the operator of the FPM and had been so employed for approximately 1½ years. At the time of

Mr Sinclair's death DK Logs employed one other person Scott Martin who was employed as a labourer. One of Mr Martin's tasks was to use a Doosan 14 tonne digger to lift lengths of tree onto the log deck for Mr Sinclair to process into firewood using the FPM.

FPM

[19] The Firewood Processing Machine comprises of two separate components namely, the log deck and the Firewood Processing Machine, shown below in an image from DK Logs (production number 2 with the output conveyor (far right of image) in a folded inoperable position).



[20] The log deck (image above) consists of three main parts:

(i) The main log conveyor formed by four sets of chains where several lengths of tree can be held awaiting processing.

(ii) A transverse conveyor formed by four sets of toothed cogs which is used to transfer lengths of tree to the firewood processor.

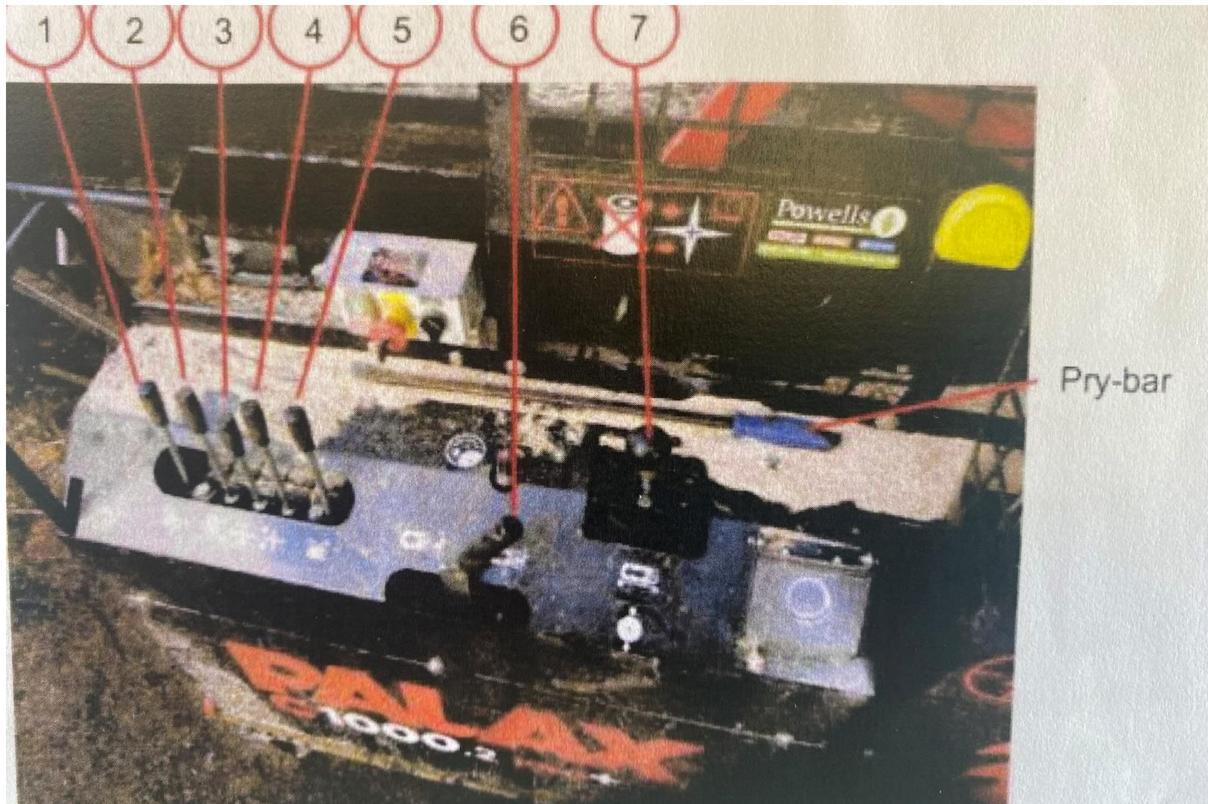
(iii) A log lift transfers lengths of tree from the storage conveyor to the transfer conveyor.

[21] The three main parts of the log deck can be seen in the image below, said image is taken from page 8 of David Gostick's report (production number 6 for the Procurator Fiscal Depute).

[22] The log deck is controlled by the controls on the firewood processor and powered by hydraulic hoses from the FPM. Under normal working conditions the log deck will be set up to supply lengths of tree to the FPM by aligning the transverse conveyor of the log deck with the infeed conveyor of the FPM. Lengths of tree are fed from the log deck into the FPM via the infeed conveyor. The FPM is capable of processing logs up to 40 centimetres in diameter and can produce cut off lengths up to 55 centimetres. The lengths of tree move from left to right form the log deck to the FPM where the lengths of tree pass under a clamp and into the actual processing area. Sections of tree are cut off by a circular saw which moves forwards out of a housing and lowers to cut the tree. The cut logs then fall into a lower chamber where they are pushed to the right by a hydraulic splitting ram and pass through a splitting blade. Split logs fall onto the output conveyor and are lifted to an output pile. The pile of logs produced are those that would commonly be used in a domestic open fire or mutlifuel stove. A chute at the rear of the machine allows for sawdust created by the firewood processing to escape from the processing area.

[23] Access to the cutting and splitting chamber (processing area) is via an interlocked guard which can be lifted. The guard includes a guard locking mechanism which acts to prevent the guard from being lifted whilst the saw and/or splitting arm is operational. When the interlock guard is lifted the saw and splitting arm should be incapable of operation.

[24] All of the operating controls for the FPM (and the log deck) are located in the middle front of the machine (labelled "control panel" in the image of the log deck and FPM above) and shown in greater detail in the image below.



[25] The controls on the FPM are described as "hold to run" in other words the operator must apply a force to one or more of the levers to operate the machine, the type and situation of the control panel are designed to ensure a safe system of working in combination with the interlocking guard preventing access to the processing area. The FPM is designed to be operated by a single operator again to ensure other persons are not present when the controls are used.

Incident

[26] The incident occurred on 6 September 2022. Mr Sinclair arrived at work in the morning and was working operating the FPM, he was the sole operator of the machine. At approximately 15.20 hours Mr Sinclair was seen operating the FPM and all was in order. At about 15.30 hours Scott Martin attended at the area of the FPM to ascertain if Mr Sinclair required the log deck supplied with more lengths of tree. On approaching the FPM Scott Martin saw that Mr Sinclair had his arm caught in the toothed rollers of the transverse conveyor of the log deck. Mr Martin told police who noted a statement from him less than 24 hours after the incident on 7 September 2022 that the machine was still running when Mr Sinclair was caught in the rollers. In a second statement noted by Police Scotland on 13 February 2023 Mr Martin said that in addition to the fact the machine was running: "there was nothing on the roller that feeds the logs into the wood cutting machine, and there was nothing on the wood cutting machine." Mr Martin also said that: "the saw blade was still running at this time." Mr Martin told police he pressed the red emergency stop button on the control panel. He made no reference to the controls being "jammed" in any way by the use of a pry-bar or other item.

[27] Mr Martin summoned the assistance of Mr David Wilson who immediately attended to assist Mr Sinclair. Mr Wilson told Mr Martin to phone 999. Mr Wilson tried to unhook Mr Sinclair from the teeth of the rollers. A mechanic Don Martin who was onsite repairing separate machinery elsewhere on the premises of DK Logs approached the area of the FPM in possession of a Stanley knife and cut Mr Sinclair's T-shirt to extricate him from the machinery. Mr Sinclair was unresponsive. Mr Martin was

receiving information from ambulance control to commence chest compressions which Mr Wilson commenced. A short time later Mrs Wilson of DK Logs appeared in possession of a defibrillator and shortly after Garry West support watch commander of Scottish Fire and Rescue Service arrived at the locus.

[28] Mr West noticed injuries to Mr Sinclair's right hand and injuries to his right arm, with visible bruising on the arm and shoulder area. The watch commander noted that Mr Sinclair was lying almost between the log deck and FPM and he saw what looked like bits of clothing the same colour as Mr Sinclair's T-shirt caught in the log deck. Mr West attached the defibrillator pads to Mr Sinclair which advised "no shock" and he continued with chest compressions. Whilst undertaking chest compressions he was speaking with ambulance control looking for an estimated time of arrival for ambulance. He was told that it would be 25 to 35 minutes, said ambulance travelling from Perth. CPR was continued until medical staff arrived on scene from the nearby medical practice at Aberfeldy.

[29] At about 15.50 hours Doctor and Mrs McCaughey (doctor and practice nurse respectively), attended from the nearby medical practice and offered assistance to Mr Sinclair. Mrs McCaughey took over CPR from Mr West, her husband Doctor McCaughey providing breaths during the CPR. The couple continued with CPR for approximately 5 minutes and Doctor McCaughey confirmed with Mr West that CPR had been ongoing for about 30 minutes, there was no shockable rhythm. The doctor found Mr Sinclair's pupils to be fixed and dilated and after consulting with ambulance control, he pronounced life extinct at 16.09 hours.

Accident investigations

[30] On 7 September 2022 Kerry Ann Cringan, HM Inspector of Health and Safety, employed by the Health and Safety executive (HSE) was advised of the incident of 6 September 2022. Mrs Cringan was asked to meet with David Gostick, HM Principal Inspector of Health and Safety (Mechanical Engineering), employed by HSE and travel to DK Logs, Aberfeldy to assist Police Scotland with the investigation into the death of Andrew Sinclair. At DK Logs Kerry Ann Cringan and Mr Gostick met with Detective Constable Claire James.

[31] On 7 September 2022 David Gostick examined the Palax 1000 FPM and log deck on site, having been tasked to examine the machinery to determine the cause of Mr Sinclair becoming entangled. Whilst there Mr Gostick took a series of photographs and two videos.

[32] On 9 September 2022 Mr Gostick returned to DK Logs, Aberfeldy to observe the FPM in operation. Mr Wilson of DK Logs was present, as were officers from Police Scotland. Mr Gostick viewed the FPM in operation. During that visit Mr Gostick visited a neighbouring business "Gatehouse Logs" where the proprietor Mr Black showed an identical FPM under operation.

[33] The investigation found that there were no defects in the hold to run controls located on the control panel of the FPM.

[34] The investigation found that Mr Sinclair's clothing (a green top) had become entangled in the toothed cogs of the transverse conveyor of the log deck. For Mr Sinclair

to have become entangled the toothed cogs have to have been operational. The toothed cogs are hydraulic. The operation of the toothed cogs can only be done by an operator at the control panel of the FPM.

[35] The investigators considered for Mr Sinclair to have become entangled in the toothed cogs of the transverse conveyor of the log deck the hold to run control for the infeed conveyor on the FPM control panel must have been "jammed" in the run position to allow Mr Sinclair to leave the FPM control panel and the toothed cogs still to be spinning. If the hold to run controls were "jammed on" and Mr Sinclair approached the log deck, then he could have become entangled as found on 6 September 2024. If the hold to run controls were not "jammed on", then the toothed cogs could not have rotated when Mr Sinclair was near them, in which case he could not have become entrapped.

[36] The investigation found evidence to support their working theory that someone had "jammed" the hold to run controls. A blue handled pry-bar was found lying on top of the control panel for the FPM (pry-bar can be seen in the image of the controls *supra)*. Mr Gostick was able to jam the pry-bar in the hold to run controls, leave the control panel and approach the log deck.

[37] The investigators found that the interlock guard preventing access to the saw and splitting ram had been disabled (it was missing). This allowed an operator to open the guard whilst the machine was working. This defect did not contribute to the accident.

Productions and labels

[38] Crown production number 1 is a book of photographs (numbered 1 to 45) showing *inter alia* the yard at DK Logs, the Palax 1000 FPM, the toothed cogs of the transverse conveyor of the log deck, including teeth with green material entangled therein.

[39] Crown production number 2 is a book of photographs (numbered 46-93) showing *inter alia* various views of the now deceased lying in proximity to the log deck and FPM.

[40] Crown production number 3 is a book of photographs (numbered 94-124) showing *inter alia* views of a Palax 1000 FPM.

[41] Crown production number 7 is a book of photographs (39 images) taken by Mrs Kerry Ann Cringan, HM Inspector of Health and safety on 7 September 2022.

[42] Crown production number 6 is a report by Mr David Gostick, HM Principal Specialist Inspector (Mechanical Engineering), dated the 5 December 2022.

[43] Defence production number 1 is a statement of David Wilson of DK Logs.

[44] Defence production number 2 for DK Logs is a photograph of a Palax C1000 FPM of the same type as that being used by the deceased Andrew Sinclair at the time of his death.

Witness statements

[45] A statement of Scott Martin, labourer at DK Logs, Aberfeldy, taken on 7 September 2022 by Detective Constable Mark Ross.

[46] A statement of Scott Martin, labourer at DK Logs, Aberfeldy, taken on 13 February 2023 by Detective Constable Nathan Shields.

[47] A statement of Don Martin, vehicle technician, taken on 13 December 2022 by Detective Constable Chris McLeod.

[48] A statement of Don Martin, vehicle technician, taken on 31 March 2023 by Detective Constable Mark Ross.

[49] A statement of Garry West, Support Watch Commander, Scottish Fire and Rescue Service, taken on 7 September 2022 by Detective Constable Claudia Hunter.

[50] A statement of Lynda McCaughey, practice nurse, taken on 8 September 2022 by Detective Constable Laura Greehow.

[51] A statement of Doctor Kevin McCaughey, taken on 8 September 2022 by Detective Constable Mark Ross.

[52] Defence production number 1 statement of Andrew David Paterson Anderson Wilson (known as David Wilson) taken by Julie Brodtkorb, solicitor on 24 July 2024.

Summary of relevant evidence

Scott Martin

[53] Scott Martin told Detective Constable Nathan Shields when providing Police Scotland with a statement on the 7 September 2022 that:

> "as I was walking over to the splitter I saw something caught up in the end. As I got closer I realised it was Andy and his arm had got caught in the machine. The machine was still running."

He also told the officer that:

> "David and I then ran over to where Andy was. I went over and hit the emergency stop button which stopped the machine …..David then tried to unhook Andy from the machine."

Don Martin

[54] Don Martin told Detective Constable Chris McLeod when providing Police Scotland with a statement on the 15 December 2022 that:

> "I went to see if I could help and got a Stanley knife out of the van to cut the clothing free from the machine. Andrew was wearing a high viz jacket but had taken it off and it was his shirt I think that was stuck in the machine."

Garry West

[55] Gary West, Support Watch Commander, Scottish Fire and Rescue Service told Detective Constable Claudia Hunter when providing Police Scotland with a statement on the 7 September 20222 that:

> "I was able to see this and the male's chest as the green top I described appeared to have been torn off. The male had a blanket to his lower body. The male was lying almost in-between and in close proximity to what I would say was a log conveyor and a wood processor. I would describe them as a machine that travels the logs down to the machine that chops/ splits them. I could see within the cogs of the log conveyor belt what appeared to be bits of clothing, the same colour as the casualty's t-shirt."

[56] Crown production number 1 a book of photographs, in particular photographs 42 and 43 show green material adhering to the toothed cogs of the transverse log conveyor. Image 43 shows that the green material has wound round the teeth and become entangled in the cogs.

David Gostick

[57] David Gostick is a member of the Institution of Mechanical Engineers, and he is registered as a Chartered Mechanical Engineer with the Engineering Council. He holds a Bachelor of Engineering (BEng) (Hons) and a Degree in Mechanical Engineering from the University of Southampton. Prior to joining HSE he worked in industry as a mechanical engineer in the fields of aerospace and scientific instrumentation. He joined HSE in 2012 and in March 2022 was promoted to the role of Principal Mechanical Engineer. David Gostick visited DK Logs on 7 and 9 September 2022 and examined the FPM and watched the machine in operation. Mr Gostick photographed the green material caught in the toothed cogs of the transverse log conveyor. He examined the controls located on the control panel and found that: during his examination of the operation of the FPM the controls functioned correctly and returned to neutral (safe) position when released. The functions operated by these controls stopped immediately when the controls were released. The transverse conveyor on the log deck in which Mr Sinclair was entangled was operated by the control for the infeed conveyor on the FPM. The control for the infeed conveyor on the log deck is operated using control numbered seven in the image of the control panel *supra.*

[58] Mr Gostick believed in order for Mr Sinclair to have become entangled in the transverse conveyor of the log deck then the hold to run controls for the conveyor must have been "jammed" to prevent it returning to neutral.

[59] During his site visits at DK Logs Mr Gostick observed the following which he considered of significance:

(i) Scratch marks in the paint on the guarding above the FPM controls.

(ii) Scratch marks in the paint on the guarding to the side of the FPM controls.

(iii) A stick placed next to the FPM controls.

(iv) A blue handled "pry bar" lying on top of the control panel for the FPM.

(v) Metal interlock rod missing from its position at the rear of the FPM.

[60] Mr Gostick addressed each of his observations - in light of Mr Sinclair's entrapment - as follows: Mr Gostick found that the top of the control panel of the FPM was covered in sawdust. Lying on top of the control panel was the blue handled pry-bar that was free from sawdust. Mr Gostick considered in his report that:

> "it is possible that the pry-bar was free from sawdust due to it having been used for some other purpose immediately prior to the incident. It is not clear what this other purpose may have been as the machine appeared to function correctly during my observation of its operation".

Mr Gostick considered that the presence of the pry-bar and the presence of the scratch marks described *supra* were indicative that the pry-bar had been used to "jam" the controls in the run position and that this occurred on a regular basis. Mr Gostick noted that had the pry-bar been used to "jam" the controls it was not in that position when the police photographed the FPM. Considering the finding of the pry-bar Mr Gostick whilst on site carried out several tests to ascertain if the pry-bar could be used to "jam" the hold to run controls and found that it could be. Mr Gostick was able to "jam" the hold to run controls such that the infeed conveyor and the transverse log conveyor both

operated continuously even when the controls were released, this would allow lengths of tree to move from the log deck to the infeed conveyor of the FPM. Mr Gostick having found the stick propped up against the control panel of the FPM carried out an experiment to ascertain if the length of stick permitted him to work the control panel remotely by standing holding the stick in the area of the log deck, he found it could however, he could only reach the controls on the far left of the panel (looking at the control panel as if standing in front of it) and therefore, he could only operate the log lift and not the transverse log conveyor.

[61] Mr Gostick concluded that had the pry-bar or another item been used to "jam" the controls that would be an unsafe practice as it would remove the safeguarding by distance provided by the combination of hold to run controls and the large reach distance between the operator station and the hazards of the log conveyor; allowing the operator to reach hazardous parts of the machinery during operation.

[62] Under cross-examination Mr Gostick conceded that there could be many uses for the pry-bar, none of which involved "jamming" the controls of the FPM. In particular, it was accepted that his examination of the FPM and his visit to another site supported the position that logs could and would become jammed and would require to be prised out, he accepted that was the case. With regards the scratches seen on the metal caging it was suggested that these marks could have been caused by the attaching of a measuring tape (via a metal belt attachment) used to measure logs and the hanging of other tools such as spanners. Mr Gostick conceded that could be the case. Regarding the wooden stick it was asserted that was used to clear the sawdust chute, Mr Gostick said he had

not heard evidence to that effect but that was plausible. Mr Gostick accepted a number of propositions put to him by Mr Smith on behalf of DK Logs which included that when Mr Sinclair became entrapped he was not at the control panel, whatever Mr Sinclair was doing he was not processing wood by cutting or splitting, Mr Sinclair had overcome the operating safety features of the FPM, Mr Gostick accepted each of these propositions were accurate, in his opinion.

[63] The significance of the metal interlock rod missing from the rear of the machine was that the guard preventing access to the saw and splitting arm under normal conditions did not operate such that the machine could be worked with one hand whilst another was used to lift the guard and access the dangerous components. Mr Gostick found a rod which was identical to the missing rod sitting on a concrete block behind the FPM. He understood that the rod he found had been taken from the other FPM (in storage), which was also missing the interlocking bar. Mr Gostick was of the opinion that the FPM should not have been in use at the time of the incident due to the disconnected interlocking guard. Mr Gostick did accept that the absence of the metal interlocking rod was not a cause of the accident and was not responsible for Mr Sinclair's death.

Kerry Ann Cringan

[64] Mrs Kerry Ann Cringan had been employed by the HSE as a HM Inspector for 19 years, she retired in the summer of 2023. She largely corroborated the preliminary investigations spoken to by David Gostick. The witness confirmed that she had carried

out an investigation into the training records for the deceased and ascertained there were none however, she had been told by David Wilson that the deceased had been trained on a previous Palax machine and when the machine the subject of the investigation arrived at DK Logs the deceased had been involved in setting it up.

David Wilson

[65] David Wilson owns DK Logs with his wife Karen Wilson. DK Logs has operated for approximately 17 years. At the time of the Mr Sinclair's death DK Logs produced firewood for commercial and domestic customers. Since the accident of 6 September 2022 operations have been scaled back, only commercial customers are now supplied. Prior to Mr Sinclair's employment David Wilson operated the FPM daily. Prior to the accident Mr Sinclair was employed for about 1½ years, the deceased had previously worked on an estate and had been involved in cutting firewood. When Mr Sinclair started at DK Logs Mr Wilson showed him how to operate the FPM. Mr Wilson then observed Mr Sinclair operating the FPM and they took turns to operate the FPM for a few days, until Mr Wilson was comfortable that Mr Sinclair was competent on using the FPM. Initially, Mr Wilson would load the firewood onto the log deck and Mr Sinclair would operate the FPM. During this early period Mr Wilson would always be in "eye or ear shot" of Mr Sinclair. Mr Wilson confirmed that no formal training records were kept. Mr Wilson maintained that he did have morning talks (which he described as "toolbox" type) although these talks were not formally recorded. Mr Wilson would not

have allowed Mr Sinclair to use the FPM if he was not satisfied that he was competent to do so. Mr Wilson was happy with Mr Sinclair's work ethic and his standard of work.

[66] Mr Wilson confirmed that the FPM in use on the day of Mr Sinclair's death had been purchased in 2021 for circa forty thousand pounds (£40,000). Mr Wilson confirmed that there were two identical FPM on site but only one was set up for daily use.
Mr Sinclair had assisted in setting up the FPM he was using on 6 September 2022. All machinery at the time of the incident was serviced by the main dealers. All plant and machinery were kept in good condition and replaced every couple of years. The FPM operated by Mr Sinclair at the time of his death and the identical FPM have both been replaced by Posch FPM's. The change of machinery was not borne out of concerns by Mr Wilson regarding the safety of the Palax machines. Mr Wilson had not had any issues with the Palax FPM.

[67] Mr Wilson confirmed that he recognised the part of the FPM photographed in figures 15 and 16 in Mr Gostick's report. Mr Wilson confirmed these images showed the "interlock control rod" which required to be removed to gain access to the cutting/splitting area of the FPM. Mr Wilson said that he was aware that these rods are prone to bending. Mr Wilson was not aware that the rod was missing from the FPM in use on 6 September 2022. Mr Wilson explained that Mr Sinclair dealt with small changes such as "blades/belts". When asked when he became aware that the rod was missing, he did not know exactly but accepted it was probably after the incident. Mr Wilson accepted that prohibition notices were served by HSE for both FPMs on site requiring the interlocking rods to be reconnected. Mr Wilson confirmed that the prohibition

notices were complied with and both interlocking bars were replaced. Mr Wilson contended that the missing bar would not have played any part in Mr Sinclair's accident given that the rod prevented access to the processing area only.

[68] Mr Wilson was asked about the stick shown in figures 13 and 14 in Mr Gostick's report. He could not say whether he had seen that exact stick before but explained that the sawdust chute tends to choke up and a stick might be used to clear the chute. Asked if he had seen that or a similar stick used to work the levers on the control panel of the FPM, he said he had never seen that done. Asked if he had seen Mr Sinclair do that he said, "not at all".

[69] Mr Wilson was asked about the blue pry-bar shown in figure 20 of Mr Gostick's report. Mr Wilson explained that the trees being processed into firewood will often have a "nugget or branch" on them making them tight when they enter the FPM. The pry-bar will often be used to turn the log to allow the firewood to be processed or to dislodge a log that has become stuck, the pry-bar usually sits on the front of the machine. Asked if he had seen the pry-bar used to overcome the hold to run controls, he said he had never seen that done. He said if he had seen that he would have put a stop to it. Mr Wilson was asked if Mr Sinclair was deploying the pry-bar to jam the hold to run controls would he have seen that. Mr Wilson said that if he had come into the yard and seen anyone doing that, he would have immediately approached them and asked, "what's the problem?"

[70] Mr Wilson was asked during his examination in chief about CCTV at the yard. Mr Wilson confirmed that he had CCTV installed at the yard, but it did not cover the

area where Mr Sinclair was operating the FPM. Asked if he viewed the CCTV post the accident, he confirmed that he had. Mr Wilson confirmed that the police watched the CCTV (he had shown them it) and they wanted to take possession of it. He maintained that the police struggled to download the footage so he contacted the supplier of the CCTV equipment to see if they could help. Mr Wilson maintained that the police came about three or four times to download the CCTV, without success. Mr Wilson said that the hard drive was taken to Stirling to see if the supplier could download it for the police. Mr Wilson vehemently denied any attempt to obfuscate the CCTV as was being hinted/suggested by the Crown by their line of questioning.

[71] In cross-examination Mr Wilson confirmed that his statement was adopted. Mr Wilson was not entirely sure how the scratch marks shown in figures 11 and 12 of Mr Gostick's report had occurred but explained that tools were often hung on the metal guarding such as a tape measure and spanners. Mr Wilson was asked in detail about the operation of the FPM and explained that in detail by reference to the various controls on the control panel. The importance of the detail is that Mr Wilson could see no reason why an operator would want to keep the transverse log conveyor and the in-feed conveyor moving by jamming the controls, as it would not help you to do the job of processing firewood under explanation that the hold to run controls have to be used in multiple directions by the operator to create firewood. Asked if he had ever seen Mr Sinclair jamming the controls he was adamant he had never seen that happen. Asked if he had shown Mr Sinclair to jam the controls, he said, "no need to do that."

[72] Mr Wilson could not now recollect if he stopped the FPM on the day of Mr Sinclair's accident or not. Mr Wilson thought he had stopped the FPM by pressing the "Emergency Stop" button, he could not recall if the machine was running or not. Mr Wilson accepted that for Mr Sinclair to have become entangled in the log deck it must have been running at the time.

[73] Mr Wilson confirmed that since Mr Sinclair's death he has engaged the services of an independent health and safety advisor. The independent advisor carried out a site inspection on 23 September 2022. The advisor has prepared a health and safety policy for DK Logs and carried out several risk assessments. The independent advisor is retained and carries out inspections every 6 months. All employees now undertake a LANTRA training scheme prior to the operation of the FPM.

Submissions

Submissions by the Procurator Fiscal Depute

[74] The Procurator Fiscal Depute commenced her submissions by conveying her sincere condolences to the relatives of the deceased.

Section 26(2)(a)

[75] The Procurator Fiscal Depute submitted that paragraph 1 of the joint minute covered this.

Section 26(2)(b)

[76] The Procurator Fiscal Depute submitted that paragraphs 1 and 11 of the joint minute covered this.

Section 26(2)(c)

[77] The Procurator Fiscal Depute submitted that paragraph 12 of the joint minute covered this.

Section 26(2)(d)

[78] The Procurator Fiscal Depute submitted that Mr Sinclair had become entrapped in the FPM because several safety features had been overridden. Firstly, the metal interlocking rod at the rear of the machine which prevented the cage from being lifted during operation had been removed. The presence of the rod - under normal working conditions - requires the machine to be stopped and the rod removed to gain access to the saw and splitting arm. The scratches on the cage above the controls and to the side of the controls in combination with the recovery of the pry-bar were all indicative of the hold to run controls being overridden on numerous occasions.

Section 26(2)(e)

[79] The Procurator Fiscal Depute submitted that a precaution would have been for the operators of DK Logs to ensure the interlocking rod was always present whilst the machine was in use. In addition, if a component had become damaged it should have

immediately been reported and been replaced. The Crown submitted that staff checks should have been implemented and CCTV covering the FPM should have been installed so that employees would be aware that they were constantly being monitored. In addition, the management should have carried out *ad hoc* walkabouts and carried out *ad hoc* checks of the operator of the FPM.

Section 26(2)(f)

[80] The Procurator Fiscal Depute submitted that the system of work in place was defective. The over-riding of the FPM as demonstrated by the use of the pry-bar and the scratch marks suggested this was not a one-off over riding of the system. It was submitted that the absence of CCTV evidence to the inquiry provided evidence of a defective system of work.

Section 26(2)(g)

[81] The Crown had no other factors that they considered relevant to the circumstances of Mr Sinclair's death.

Submissions for DK Logs

[82] Mr Smith asked that the court record DK Logs condolences to Mr Sinclair's family.

[83] The court was not invited to make formal findings in fact.

[84] Mr Smith agreed with the submissions of the Crown regarding section 26(a) to 26(2)(c).

[85] Mr Andrew Sinclair was experienced and skilled at the use of the FPM. The deceased had received on the job training at DK Logs and was competent. The absence of written training records was unimportant. Whilst DK Logs owned two FPM's only one was in operation at the time of Mr Sinclair's death. The FPM was well maintained and in good working order. There were no defects in the machine which could have contributed to the accident. Whilst the FPM was found to be missing the interlocking metal rod at the rear of the machine, a rod of similar type was found nearby. It transpired that the metal rod from the second FPM (in storage) had been removed to fit onto the FPM in use. At the time of the accident, it had not yet been fitted. It was conceded this was a serious defect, which resulted in the service of prohibition notices to both FPMs but only in so far as the absence of the interlock rods. The notices were immediately complied with although, regrettable their absence played no part in the death of Mr Sinclair.

[86] The circumstances of the accident as known are that the deceased's clothing and arm/upper body has become entangled in the moving cogs of the transverse conveyor of the log deck. The transverse conveyor will only operate if the control lever is in the forward position, it would have been impossible for Mr Sinclair to have operated that lever whilst standing at the log deck, it is a reasonable inference for the court that the control was "jammed" in the forward position by some means.

[87] Mr Wilson was unable to explain or understand why Mr Sinclair would wish to operate the FPM in this way. He had not been shown to "jam" the controls.

[88] On the evidence it is not possible to determine what Mr Sinclair was doing at the time of his death.

[89] Mr Smith submitted that there was no evidence that Mr Sinclair or anyone else had previously jammed the hold-to-run controls on the control panel of the FPM, let alone no evidence that if it had been done it was known to DK Logs. The submission of the Crown that CCTV cameras covering the FPM would have discouraged or prevented an operator from jamming the controls and acted as a precaution pre-supposes he said that the operator was doing something repeatedly when there was no evidence to that effect. Mr Smith submitted that the absence of CCTV footage to the inquiry was through no fault of DK Logs. Further, it was submitted that police officers had viewed the footage and therefore even if the footage itself for technical reasons was not available the police officers who viewed the footage could have been called to indicate what was or was not on the footage they viewed. That in all the circumstances, the absence of the CCTV was simply absence of evidence, it could not yield to any inference particularly if I accepted the evidence of Mr Wilson regarding his efforts to provide the police with the CCTV. The installation of CCTV covering the FPM would not have avoided the death of Mr Sinclair, in the circumstances.

Decision

Section 26(2)(d)

[90] The dominant or operative cause of the accident resulting in the death was the presence of Mr Sinclair near the moving cogs of the transverse conveyor of the log deck of the FPM, whilst the conveyor was operating, which consequently led to entanglement. The missing interlocking rod played no part in the death of Mr Sinclair as was expressed by Mr Gostick in his report at paragraph 5.11 page 24, Crown production number 6 and accepted in his evidence.

Section 26(2)(e): any precaution which (i) could reasonably have been taken; and (ii) had they been taken, might realistically have resulted in death, or any accident resulting in the death, being avoided.

[91] There is no evidence that any reasonable precaution might have been taken by DK Logs which might realistically have resulted in death being avoided. Whilst the interlocking rod is part of the safety system of the FPM the absence of the rod here played no part in the death of Mr Sinclair. There was no evidence that Mr Sinclair had been seen on any previous occasion operating the FPM by "jamming" on the controls accordingly, there was no basis for suggesting it was a practice that he or any other user of the FPM on site had engaged in, less still any evidence that it was known of (and condoned) by the owners of DK Logs. Against, the evidential matrix the installation of CCTV which covered the FPM would not have prevented Mr Sinclair "jamming" the controls on the 6 September 2022 as CCTV would not have captured Mr Sinclair doing

that before, it not being established that it was a practice engaged in either routinely or on any occasion before the 6 September 2022. In this regard I preferred the evidence of David Wilson to Mr Gostick. The operation of the FPM, in accordance with the on-job training required the operator to be safely positioned at the control panel. If Mr Sinclair stood at the control panel to operate the FPM, he could not have become entangled in the log deck. Mr Sinclair following his on-job training in the use of the FPM would have been a precaution which could have reasonably been taken, and if so, might realistically have avoided Mr Sinclair's death.

Section 26(2)(f): any defects in any system of working which contributed to the death or any accident resulting in death

[92] There is no evidence of any defect in the system of work adopted by DK Logs at the relevant time, which contributed to the death. The operation of the FPM, in accordance with the on-the-job training required the operator to be safely positioned at the control panel. Had that system of work been adopted by the deceased the accident could not have occurred as it did. The system of work adopted by Mr Sinclair himself on this occasion involved overcoming the hold to run controls and to that extent was clearly defective.

[93] The Crown through the police carried out CCTV investigations at DK Logs. Mr Wilson had provided police officers access to the CCTV system and officers were shown the available footage. As Police Scotland's investigation continued, they were unable to download the footage from the hard drive to disc/USB. There could be no

suggestion that DK Logs or Mr Wilson attempted to obfuscate evidence, the police were shown the available footage, and the hard drive was provided to police. The cameras installed did not cover the FPM area. The absence of CCTV evidence was no fault of DK Logs and was of no evidential value even had it been available. The absence of CCTV to the inquiry was not indicative of a defective system of work.

[94] No submissions were made in terms of section 26(1)(b) and (4)(a) regarding the taking of precautions which might realistically prevent deaths in similar circumstances.

Conclusion

[95] It appeared from the evidence presented to the inquiry that Mr Sinclair had been involved in the setting up of the FPM he became entangled in when it was first purchased by his employers. Mr Sinclair was trained on the job to use the FPM. Mr Sinclair routinely used the FPM, without supervision. Mr Sinclair had not been shown to "jam" the controls by anyone at DK Logs. The report by Mr Gostick and his evidence to the inquiry leads me to the conclusion that the deceased did not follow his on-job training on 6 September 2022, and he must have "jammed" the controls of the FPM, left the safety of the control panel and approached the log deck whilst the log conveyor was operational for him to have become entangled.

[96] I cannot speculate why Mr Sinclair "jammed" the hold to run controls and left the control panel. I can only conclude based on the evidence that Mr Sinclair did do that.

[97] Finally, I would like to offer my most sincere condolences to Mr Sinclair’s family and friends for their loss.