SHERIFFDOM OF TAYSIDE, CENTRAL AND FIFE AT DUNFERMLINE

[2021] FAI 56

DNF-B104-21

DETERMINATION

BY SUMMARY SHERIFF ALISON MICHIE

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

into the death of

DAVID INNES ANDERSON

Dunfermline, 1 September 2021

The Summary Sheriff, having considered the information presented at the Inquiry determines that:

(1) **In terms of section 26(2)(a) of the Inquiries into Fatal Accidents and Sudden Deaths etc (Scotland) Act 2016 ("the 2016 Act") (where and when the death occurred).**

David Innes Anderson, born on 21 June 1961, died at a property in Dunino, Fife. Life was pronounced extinct at 13.04 hours on 14 October 2020.

(2) **In terms of section 26(2)(b) of the 2016 Act (where and when any accident resulting in death occurred).**

Mr Anderson died as a result of injuries sustained in an accident which occurred at approximately 12.20 hours on 14 October 2020 at a property in Dunino, Fife.

(3) **In terms of section 26(2)(c) of the 2016 Act (the cause or causes of death).**

The cause of Mr Anderson's death was due to electrocution from overhead electrical power lines.

(4) **In terms of section 26(2)(d) of the 2016 Act (the cause or causes of any accident resulting in the death).**

The accident was caused when a hedge trimmer, then being operated by Mr Anderson, came into direct contact with the overhead electrical power lines or came sufficiently close to those power lines to enable the electricity to arc from the power lines onto the hedge trimmer.

(5) **In terms of section 26(2)(e) of the 2016 Act (any precautions which (i) could reasonably have been taken and (ii) had they been taken, might realistically have resulted in the death or any accident resulting in the death, being avoided)**.

Had a formal risk assessment been carried out an exclusion zone could have been created under the overhead power lines. Such an exclusion zone would have identified the risk and served as a reminder of the existence of the overhead lines.

(6) **In terms of section 26(2)(f) of the 2016 Act (any defects in any system of working which caused or contributed to the death or any accident resulting in the death).**

The failure to conduct a site specific risk assessment and thereafter to create and observe an exclusion zone was a defect in a system of working which contributed to the death of Mr Anderson.

(7) **In terms of section 26(2)(g) of the 2016 Act (any other facts relevant to the circumstances of the death).**

There are no other circumstances relevant to the cause of death.

NOTE

Introduction

[1] The Inquiry was held into the death of Mr Anderson under section 1 of the 2016 Act at Dunfermline Sheriff Court on 1 September 2021. Miss Swansey represented the Crown. No other parties were represented at the Inquiry and Mr Anderson's family did not participate.

[2] This was a mandatory inquiry in terms of sections 2(1) and 2(3) of the 2016 Act. At the time of his death Mr Anderson was in the course of his employment, working as a self-employed landscape gardener. It is not the purpose of the inquiry to establish criminal or civil liability – it is to establish the circumstances of the death and to consider what steps, if any, might be taken to prevent other deaths in similar circumstances.

The legal framework

[3] The preliminary hearing was held on 5 August 2021. The Crown indicated that the Health and Safety Executive did not intend to be represented at the inquiry and the family of Mr Anderson did not intend to be represented or participate although I was informed that members of his family wished to be kept advised as to the outcome of proceedings and that the Crown were in ongoing communication with them. As no other parties intended to participate in the inquiry the Crown indicated that it was intended to proceed by way of a Notice to Admit Information which would agree a

number of facts and the Crown Productions without the need for parole evidence. I indicated that I would wish to hear evidence from Garry Miller, Inspector Health and Safety Executive who had prepared the Health and Safety Executive Final Report and that witness should be available at the inquiry.

[4] Evidence and information was agreed in the Notice to Admit Information and that was read out for the record by the Procurator Fiscal Depute at the commencement of the inquiry on 1 September 2021. The Crown had lodged the following productions which were all covered within the Notice to Admit Information:

(1) Health and Safety Executive Final Report by HSE Investigator Garry Miller;

(2) Health and Safety Executive Report – Inspection of Powerlines at the Locus by Kenneth Morton, HM Principal Specialist Inspector (Electrical Engineering);

(3) Sketch of the hedge at the locus with measurements;

(4) Details of the Stihl hedge trimmer with measurements;

(5) Avoiding Danger from Overhead Power Lines – HSE Guidance Note GS6 (Fourth edition);

(6) Report from Dr Nixon detailing Mr Anderson's medication;

(7) Final Post Mortem Examination Report dated 9th December 2020;

(8) Witness statement from Stuart Anderson taken by Garry Miller, HM Inspector Health and Safety on 10 November 2020.

Summary

[5] Mr Anderson was a self-employed landscape gardener and was the sole owner of a landscaping business called "Four Seasons". Mr Anderson employed his son, Stuart Anderson, to work full time in the business.

[6] At approximately 10.00 hours on 14 October 2020 Mr Anderson and Stuart Anderson arrived at a property in Dunino, Fife to carry out hedge cutting work on the beech hedges in the garden of that property. It is a privately owned residential property. The beech hedges are cut once a year and this was the third year that Mr Anderson had carried out hedge cutting at this property.

[7] The beech hedge that Mr Anderson was cutting borders the garden of the property on one side and a field on the other side and is 15 metres in length. On the garden side the hedge measures 2.5 metres in height but, due to a retaining wall, it measures 4.03 metres in height on the field side. The width of the hedge is 3.4 metres.

[8] Above a section of the hedge, at the south end, is an 11,000-volt overhead electrical power line consisting of two parallel horizontal lines. The height of that power line is 5.5 metres above ground on the garden side of the hedge.

[9] In his statement Stuart Anderson states that both he and his father were aware of the overhead lines but did not discuss them as they considered the line to be sufficiently high not to be a problem.

[10] Stuart Anderson was cutting the hedge on the field side and Mr Anderson was cutting the hedge on the garden side. Given the greater height to the top of the hedge from the field side and the less stable ground conditions of the field, the top of the hedge

was cut by Mr Anderson from the garden side. Mr Anderson used a 3 metre aluminium ladder to access the top of the hedge.

[11] Mr Anderson used a Stihl KM 131 R CombiEngine with adjustable long reach hedge trimmer to cut the hedge. The length of that is 2.44 metres. Mr Anderson would have been able to cut the side of the hedge with that but in order to cut across the 3.4 metre width of the hedge at the top Mr Anderson inserted a 1 metre carbon fibre shaft extension. This extension fitted between the motor and the hedge cutter blade. With the extension fitted, the length of the hedge cutter was 3.44 metres.

[12] When standing on the aluminium ladder with the extension fitted to the hedge trimmer Mr Anderson was able to cut the entire width of the hedge from the garden side of the hedge. This avoided the need to attempt to cut the top of the hedge from the field side which was less accessible, the ground being both lower and less level than on the garden side.

[13] At approximately 12.20 hours Stuart Anderson finished cutting his side of the hedge on the field side and came round to the garden side of the hedge. At that time he found his father Mr Anderson slumped on the ground between a small wall and the ladder. Mr Anderson was unresponsive. Due to the noise from his hedge cutter Stuart Anderson had not heard anything from the other side of the hedge. The householder called 999 and both the householder and Stuart Anderson started CPR and continued until the ambulance arrived. There was no response from Mr Anderson.

[14] Paramedics arrived at 12.33 hours and continued CPR. Mr Anderson did not respond to treatment. Life was formally pronounced extinct at 13.04 hours.

Cause of death

[15] On 19 October 2020 a post mortem was carried out on Mr Anderson's body by Dr SallyAnne Collis, Consultant Forensic Pathologist and Dr Thomas Prickett, Speciality Trainee 4 Forensic Pathologist. Mr Anderson had suffered numerous burns related to electrocution. Dr Collis concluded that the cause of death was the result of electrocution causing a cardiac arrhythmia and sudden death. The cause of death was certified as;

1a Electrocution

HSE Investigation

[16] On 21 October 2020 Kenneth Morton, HM Principal Specialist Inspector (Electrical Engineering) Health and Safety Executive, visited the site of the accident accompanied by two managers from Scottish Power Energy Networks (SPEN). The purpose of this visit was to obtain witnessed measurements of the height of the overhead power lines. His findings are contained in a report dated 25 November 2020.

[17] Schedule 2 of the Electrical Safety, Quality and Continuity Regulations 2002 (ESQCR) specifies that the minimum height above ground for an overhead power line carrying up to 33,000 volts and crossing locations other than roads is 5.2 metres. On 21 October 2021 the overhead power lines were measured by SPEN employees in the presence of Kenneth Morton and found to be 5.5 metres above ground on the garden side of the hedge. This exceeded the minimum clearance of 5.2 metres.

[18] Garry Miller has been an employee of the Health and Safety Executive for over 35 years and is an HM Inspector of Health and Safety. He prepared a report, dated

11 January 2021, into this incident. Garry Miller gave evidence at the inquiry on 1 September 2021. Mr Miller indicated that the findings of Kenneth Morton regarding the clearance height of the power lines allowed that to be eliminated as a possible cause of the accident.

[19] In his report Mr Miller highlighted that section 3(2) of the Health and Safety and Work etc Act 1974 provides that;

> "It shall be the duty of every self-employed person [who conducts an undertaking of the prescribed description] to conduct [the undertaking] in such a way as to ensure, so far as reasonably practicable, that he and other persons (not being his employees) who may be affected thereby are not thereby exposed to risks to their health and safety".

Gardening is not included in the list of "Prescribed undertakings" and, accordingly, Mr Anderson had no obligation in terms of section 3(2) of the 1974 Act with regard to his own safety. Though as an employer he would have had obligations in respect of his employees. His son and employee Stuart Anderson was working on the other side of the hedge where it was not possible to encroach upon the overhead power lines and, accordingly, Mr Miller concluded that there had been no failure on the part of Mr Anderson to discharge his duties under the 1974 Act towards his son.

[20] In evidence Mr Miller stated that with the extension fitted to the hedge cutter, the cutting edge would be heavier than the motor end and significant effort would be required by Mr Anderson to keep the equipment level. The weight of the hedge cutter would make it difficult to hold the equipment out in front of the body with straight arms for any length of time if no harness was being used. There was no evidence of use of a harness.

[21] Mr Miller noted a small area of uncut hedge. Considering where the ladder was found after the accident, Mr Miller considered that Mr Anderson would have needed to move the ladder from that position in order to cut the last part of the hedge. It was the assessment of Mr Miller that in preparing to come down from the ladder Mr Anderson has brought the hedge cutter back towards his body and lifted it simultaneously. This action has inadvertently allowed the cutter to make contact with the overhead power lines or to come sufficiently close to them to allow the electricity to arc onto the hedge cutter. This is supported by the location of the burn marks found on the plastic motor cover of the hedge cutter, the ladder and on Mr Anderson's body.

[22] This is reflected at paragraph 5.7 of Mr Miller's report where he states;

> "From the pattern of injuries to Mr Anderson it is clear that he had been standing on the fourth top rung of the ladder. The motor of the hedge trimmer had been level with the top rung of the ladder, the hedge and Mr Anderson's groin, at a height of approximately 2.5 metres. Mr Anderson had then raised the 3.44 metre long hedge trimmer towards the vertical with the motor pivoting at his groin level. As the cutting end of the hedge trimmer was raised it either made contact with the overhead electric lines or came sufficiently close for the electricity to arc from the 11,000 volt overhead lines onto the cutting head of the trimmer, then travel to ground through Mr Anderson and the aluminium ladder. The lines were at a height of 5.5 metres and the combination of Mr Anderson, the aluminium ladder and the hedge trimmer made a combined height of 5.94 metres, without the need for Mr Anderson to reach upwards."

HSE Guidance Note GS6 (Fourth Edtion); "Avoiding Danger from overhead power lines"

[23] In his report dated 25 November 2020, Kenneth Morton refers to the HSE publication GS6 (Fourth Edition) Avoiding danger from overhead power lines. Paragraphs 23 – 29 of this guidance are entitled; "Working underneath overhead lines" and provide guidance for carrying out short-duration ground-level work underneath

overhead lines where there is a risk of contact from tools or equipment. The Guidance Note states that where there is such a risk of contact a risk assessment should be carried out. The risk assessment must take into account any situation that could lead to danger from overhead wires and includes the following example; "if someone may need to stand on top of a machine or scaffold platform and lift a long item above their head".

[24] Further the guidance provides that if the power cannot be switched off then an exclusion zone around the line should be established. The minimum extent of that zone varies according to voltage of the line. For 11,000 volt lines the exclusion zone should be a minimum of 3 metres. Under no circumstances must any part of a plant or equipment such as ladders, poles and hand tools be able to encroach within the exclusion zone. The exclusion zone should also allow for uncertainty in measuring the distances and for the possibility of unexpected movement of the equipment due, for example, to wind conditions. Long objects should be carried horizontally and close to the ground so that no part can reach into the exclusion zone, even when fully extended.

[25] In his evidence Garry Miller states that the relevant area of the beech hedge below the overhead lines could have been marked out as an exclusion zone, even with some tools, which would have acted as a reminder to Mr Anderson as to the presence of the overhead lines when he was working in that area of the hedge.

Submissions for the Crown

[26] The Crown made oral submissions at the conclusion of the inquiry which were also provided in writing. In respect of section 26(2)(e) the Procurator Fiscal submitted

that a reasonable precaution that could have been taken by Mr Anderson was to adhere to the guidance contained within the HSE Guidance Note GS6 (fourth edition) "Avoiding Danger from Overhead Power Lines". Specifically, that in terms of this guidance, a site specific risk assessment should have been undertaken and a minimum 3 metre exclusion zone should have been established in respect of the overhead lines.

[27] In relation to section 26(2)(f) the Procurator Fiscal submitted that the failure to adhere to the HSE guidance relating to working underneath overhead power lines was a defect in a system of working which contributed to the accident which resulted in the death of Mr Anderson.

Conclusion

[28] The findings made in terms of sections 26(2)(a) to (d) of the 2016 Act are uncontroversial and self-explanatory. In terms of section 26(2)(e) the test I must apply is whether adhering to the guidance contained within the HSE Guidance Note GS6 (fourth edition) "Avoiding Danger from Overhead Power Lines" is a reasonable precaution which might realistically have resulted in Mr Anderson's death being avoided.

[29] I accept from the statement of Stuart Anderson that Mr Anderson was aware of the overhead lines and appreciated the dangers posed by them but did not consider that his work would encroach upon the overhead lines. There is no evidence that any form of risk assessment was carried or that an exclusion zone was established at the relevant area of the hedge before starting the work.

[30] On 14 October 2020 Mr Anderson was carrying out the same work which he had completed successfully on several previous occasions. The familiarity of the work he was doing may have led Mr Anderson to overlook the danger from the power lines. While Mr Anderson would not have had the benefit of knowing the measurements of the ladder, hedge cutter and height of the power lines, which have been made available to this inquiry, had a risk assessment been conducted in advance of starting work it may have alerted Mr Anderson to the combined height of his ladder and the extended hedge cutter and the proximity to the overhead lines.

[31] Had that risk been identified it should have led Mr Anderson to identify an exclusion zone in the area beneath the overhead lines. Identifying an exclusion zone in advance of starting work serves as a reminder of the danger and protects against momentary lapses in concentration while focussed on the work. This may also have led Mr Anderson to decide to carry out the hedge cutting in the area beneath the power lines in a different way, for example by cutting the top of the hedge from both sides of the hedge and not using the 1 metre extension to the cutter. Carrying out a risk assessment and establishing an exclusion zone might realistically have avoided the accident which resulted in the death of Mr Anderson.

[32] For the reasons set out above I consider that the failure to follow the HSE guidance and to conduct a risk assessment and create and observe an exclusion zone was a defect in the system of working which contributed to the death of Mr Anderson.

[33] I am satisfied that it is appropriate to make the findings stated above, having regard to the terms of the information contained in the Crown Productions and the

evidence led at the inquiry. I do not consider that any additional findings in my determination are required in terms of section 26(1)(a) or any recommendations in terms of section 26(1)(b) and (4) of the 2016 Act. On the evidence available to me, there were no reasonable precautions which might be taken to prevent other deaths in similar circumstances.

[34] As I close this determination I would wish to join with the other participants to this inquiry in offering my sincere condolences to the family of David Anderson for their loss.