SHERIFFDOM OF GRAMPIAN, HIGHLAND AND ISLANDS AT ABERDEEN

[2022] FAI 19

ABE-B382-21

DETERMINATION

BY

SHERIFF IAN WALLACE

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

into the death of

DANIEL BAGROWSKI

DETERMINATION

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

- In terms of section 26(2)(a), Daniel Bagrowski, born 13 August 1986, died at about 14:23 hours on 3 October 2016 at the premises of EIS Waste Services ("EIS") at Gallowhill, Nigg, Aberdeen.
- In terms of section 26(2)(b), the accident resulting in Daniel Bagrowski's death occurred at the premises of EIS at Gallowhill, Nigg, Aberdeen.
- In terms of section 26(2)(c), the cause of Daniel Bagrowski's death was multiple instantaneously fatal injuries sustained as a pedestrian by being struck by a forklift truck.

- In terms of section 26(2)(d), the causes of the accident resulting in Daniel Bagrowski's death were:
  i. Daniel Bagrowski walked into a yard area used by vehicular traffic. He was not paying sufficient attention, and turned his back to an approaching forklift truck being driven by Lucas Borkowski.
  ii. Mr Borkowksi did not see Daniel Bagrowski in the path of his forklift truck, and therefore took no evasive action.
- In terms of section 26(2)(e), a precaution which could reasonably have been taken and might realistically have resulted in Mr Bagrowski's death being avoided is a requirement that a forklift driver could not proceed from the weighbridge into and through the yard area of the EIS premises until he had been directed that it was safe to do so by a banksman.
- In terms section 26(2)(f), a defect in the system of working which contributed to the death was that there was no such requirement as set out in terms of section 26(2)(e), above.
- In terms of section 26(2)(g), other facts relevant to the circumstances of Mr Bagrowski's death are:
  i. The most likely explanation for Mr Bagrowski not paying sufficient attention was that he was distracted by his mobile telephone. The use of mobile telephones was prohibited on site; and
  ii. The driver of the forklift, Mr Borkowski, had restricted forward visibility due to the masts and attachments on the front of the forklift, and the container

that was being carried on the forklift. The only measure in place to address this was that forklift operators are trained to move their heads and bodies to compensate for this restricted visibility.

The Sheriff makes no recommendations in terms of section 26(1)(b) and (4) of the Act.

NOTE

Introduction

[1] At Aberdeen Sheriff Court on 4 May 2022 an inquiry was held under the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 ("the Act") into the death of Daniel Bagrowski on 3 October 2016.

[2] The death was reported to the Crown Office and Procurator Fiscal Service in October 2016. Preliminary hearings were held on 4 October 2021, 10 November 2021, and 8 December 2021. At the inquiry hearing on 4 May 2022 the Crown was represented by Mr Roderick Urquhart, senior procurator fiscal depute. EIS Waste Services Ltd ("EIS"), the employer of Mr Bagrowski, was represented by Mr Mark Donaldson, solicitor. There were no other participants to the inquiry.

The Evidence

[3] The majority of the evidence was set out in a joint minute of agreement. This included a description of the systems of work in place at EIS, and the training provided; a description of events on 3 October 2016, including a summary of CCTV evidence; medical evidence; a summary of a "visibility report" prepared by the Health and Safety Executive (see below); and a summary of actions taken by EIS after the accident.

[4] The only witness who gave evidence at the inquiry was Raymond Henderson, transport director with EIS. He was on site at the time of the accident, and gave evidence about the surrounding circumstances, and immediate aftermath. He provided further information in relation to the procedures in place at EIS, and steps that EIS had taken after the accident. There were otherwise no eye witnesses to the accident. There was no statement available from Mr Borkowski, the forklift driver. He had left the company shortly after the incident, and his whereabouts were apparently not known.

[5] CCTV footage had captured the accident. That footage is described further below. There were photographs provided of the site at Gallowhill, including of the forklift immediately after the accident.

[6] The following documents were considered in the course of the inquiry:

- A report from EIS entitled "Integrated Management System: Traffic Management Plan", dated 9 March 2016;
- A method statement document from EIS entitled "Treatment of Offshore Waste Delivered to Site", dated 2 June 2016;
- A method statement document from EIS entitled "Traffic Management/Use of Banksman", dated 4 October 2016;
- A report from EIS entitled "Integrated Management System: Traffic Management Plan", dated 31 March 2017;
- A report by the Health and Safety Executive entitled "EIS Waste Services, Aberdeen: Factors Influencing Industrial Lift Truck Operator Visibility", dated 19 May 2017 ("the visibility report"); and

- A document from EIS entitled "Safety Instructions for Visitors and Contractors"

The Legal Framework

[7] This inquiry was held in terms of section 1 of the Act and was governed by the 2017 Rules. This was a mandatory inquiry in terms of section 2 of the Act as Mr Bagrowski died as a result of an accident in the course of his employment or occupation.

[8] The purpose of the inquiry is set out in section 1(3) of the Act as being to establish the circumstances of the death and to consider what steps (if any) might be taken to prevent other deaths in similar circumstances.

[9] In terms of section 26 of the Act the inquiry must determine certain matters, namely when and where the death occurred, when and where any accident resulting in the death occurred, the cause or causes of the death, the cause or causes of any accident resulting in the death, any precautions which could reasonably have been taken and might realistically have avoided the death or any accident resulting in the death, any defects in any system of working which contributed to the death, and any other factors relevant to the circumstances of the death. It is open to the sheriff to make recommendations in relation to matters set out in section 1(4) of the Act.

[10] The procurator fiscal represents the public interest. The inquiry is not intended to establish liability, either criminal or civil. The inquiry is an exercise in fact finding,

not fault finding. It is not open to the inquiry to engage in speculation. The inquiry is an inquisitorial process.

Summary of Facts

Summary of incident

[11] Daniel Bagrowski was born on 13 August 1986. He was therefore 30 years old at the time of his death. Mr Bagrowski was married with two young children. He died on 3 October 2016 at his place of work at EIS, Gallowhill, Nigg, Aberdeen. He was killed instantly when he was struck by a forklift truck, driven by Lucas Borkowski. At the time, Mr Bagrowski was working as the site supervisor and banksman, and was responsible for directing the vehicles on the site there.

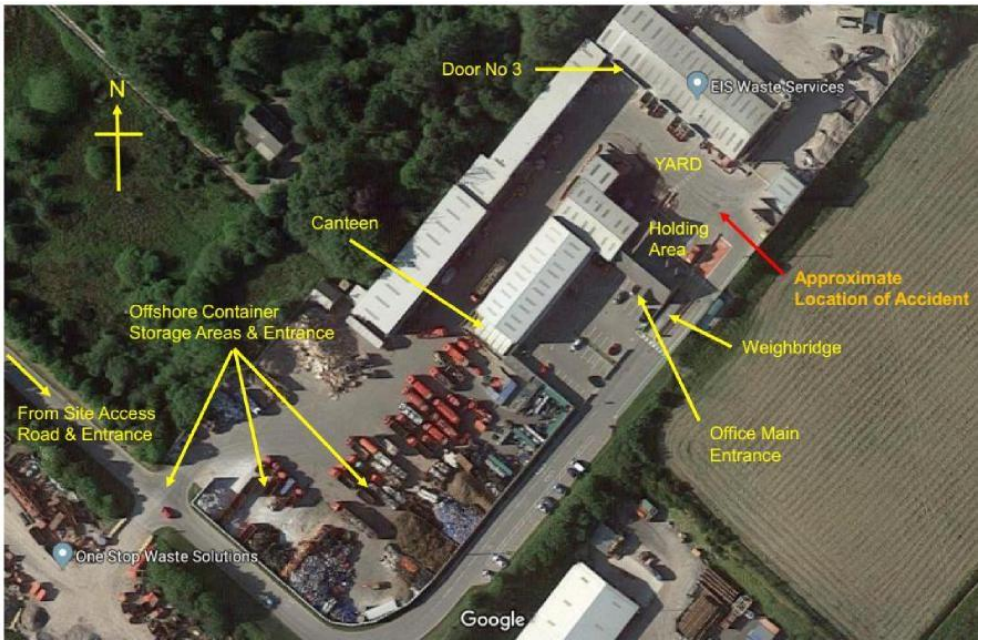
EIS Waste Services Ltd (EIS)

[12] EIS, Gallowhill, Nigg, Aberdeen, is a waste recycling facility, specialising in commercial waste and recycling services. It has been operating since 1989 and moved to the premises at Gallowhill in 1999. At the time of the incident, it had 105 employees. All general waste materials collected by EIS are delivered to Gallowhill. In 2016 EIS processed over 100,000 tonnes of waste per year.

[13] The EIS site at Gallowhill is an approximately rectangular shaped area of 14 acres, with the short sides of the rectangle positioned south-west and north-east, respectively. The site has a wide roadway running round the inside of the site, with

right-angled turns. There are large warehouse type buildings on the both sides of that roadway.

[14] At the south-west of the site is the entrance for offshore waste, and immediately inside that entrance is the offshore container storage area. The roadway then leads up the long north-west facing side of the site to the yard area. That yard area forms the north-east end of the site. The roadway continues across the length of the yard area. Large warehouse structures, used for storage, border the north-east side of the yard area. On the inside of the yard area are buildings, including an office, and a holding area for vehicles visiting the yard. At the end of the yard area, the roadway then takes a right turn (with the holding area on the inside of the roadway) to the weighbridge, which is on the south-east facing side of the site. An annotated aerial view of the site is shown below.



General safety procedures

[15] The site is used by both heavy vehicles and pedestrians. The risk of vehicles colliding with pedestrians was well recognised on the site. Rules and procedures were in place to help ensure that staff and visitors did not walk onto the roadway into the path of vehicles.

[16] At the time of the accident, there were recognised walkways which led pedestrians to designated crossing points. In the months before the accident, EIS was in discussions to have these walkways painted on the surface of the site, but had been unable to source the required type of paint. However, the demarcation between pedestrian and traffic areas was nevertheless clear. At the yard beside the holding area where the accident took place, the walkway was marked with red and white barriers. There was also yellow hatching painted on the ground to mark the boundary of the holding area. Throughout the site there were also yellow huts known as "safe havens" where staff were to retreat to during vehicle manoeuvres through the site.

[17] During the specified coffee, lunch and tea breaks all vehicle movements through the yard were stopped to allow staff to follow the designated pedestrian routes to the canteen and back. There were suspensions of vehicle movements at the beginning and end of each working day.

Mr Bagrowski: role as site supervisor and banksman

[18] Mr Bagrowski was the site supervisor. He was a well-respected and highly valued member of EIS staff. Raymond Henderson described Mr Bagrowski as being as

an excellent employee. He could not fault him. Mr Bagrowski had significant training and experience. He had worked with EIS for 10 years. He was perhaps the most experienced member of staff EIS had at that time. He was well aware of the risks associated with working on the site. Further, he took an active role in forming and encouraging good health and safety practices.

[19] In addition to being the site supervisor, the time of the accident Mr Bagrowski was also performing the duties of banksman. This involved him overseeing and directing traffic as it travelled through the site. Mr Bagrowski was authorised to walk onto the yard area used by vehicles, and was not restricted to the designated walkways in the same way as other employees. This was necessary in order for him to perform his duties as banksman. He wore high visibility clothing and a protective helmet at all times.

Mr Borkowski: forklift truck driver

[20] Mr Borkowski was fully qualified to operate forklifts up to 20 tonnes in weight before being employed by EIS. He had refresher training in March 2016. The task he was engaged in at the time of the accident was one he carried out repeatedly in the course of a working day.

The procedure for processing offshore waste

[21] The accident happened when offshore waste was being processed on the site. Offshore waste is transported in containers to the site by clients using HGVs and trailers.

The waste requires to be separated and weighed in individual "waste streams" in order that companies can declare their total recyclable waste.

[22] There are specific procedures for processing offshore waste, designed to limit the amount of traffic driving through the site. The HGVs and trailers which bring the containers of waste to the site do not drive through the site. Rather, the containers of waste are offloaded and stored in the designated offshore waste area just inside the entrance at the south west end of the site. The offshore waste containers are then moved internally on the site by forklift truck, driven by an EIS employee.

[23] The relevant steps for the forklift driver when processing offshore waste can be summarised as follows:

i. The full container of waste is driven from the storage area up the north-west facing side of the site, across the yard at the north-east end of the site, and round the corner to the weighbridge, in order to be weighed when full;

ii. The full container is then driven from the weighbridge back across the yard to the relevant area for the waste to be deposited;

iii. The empty container is then driven back to the weighbridge, in order to be weighed when empty;

iv. The empty container is then driven back across the yard, and back down the site to be stored.

[24] As stated above, the banksman is responsible for overseeing and directing traffic through the yard on the site. However, at the time of the accident, the procedures in place did not require that the banksman direct the forklift driver from the weighbridge

into the yard area (steps ii and iv, above). Rather, the forklift driver was authorised to leave the weighbridge when signalled to do so by the weighbridge operator. However, this signal from the weighbridge operator merely confirmed that the weighing process had been completed. It did not confirm that it was safe for the forklift driver to proceed into the yard. That was a matter for the discretion of the forklift driver. The forklift driver did not therefore rely on the banksman in the yard in order to be guided into the yard.

Incident on 3 October 2016

[25] In the afternoon of 3 October 2016, Mr Bagrowksi was in the yard area performing the duties of banksman. He was therefore overseeing and directing traffic through the yard. Mr Borkowski was processing offshore waste on his forklift truck, in accordance with the procedures set out above. Mr Bagrowski was present in the yard throughout.

[26] After the full container was weighed, Mr Borkowski drove from the weighbridge and turned left into the yard. After being instructed by Mr Bagrowksi, Mr Borkowski then dropped the waste in the warehouse, at "Door No 3" as indicated on the annotated photograph above, at the left side of the yard. Mr Borkowski then waited until the weighbridge was clear, and reversed the forklift onto the weighbridge in order to weigh the empty container.

[27] As stated, Mr Bagrowski was in the yard performing the duties of banksman. It would therefore be expected that he was well aware that Mr Borkowski's forklift was at

the weighbridge and would be returning back across the yard after he had weighed the empty container. However, as described above, he was not responsible for directing Mr Borkowski back into the yard.

[28] After weighing the empty container, Mr Borkowski drove from the weighbridge. He turned left onto the yard, round the holding area. There was a skip lorry parked in the holding area at that time. The driver's door was opened at about the time Mr Borkowski drove round the corner of the holding area into the yard. At this time, Mr Bagrowski walked into the middle of the roadway on the yard and turned his back to the direction of the weighbridge. It was as Mr Borkowski drove onto the yard that he struck Mr Bagrowski.

CCTV evidence

[29] There was CCTV evidence from both the site itself and the skip lorry parked in the holding area. The pictures are not perfectly clear. The footage is at times jerky. Nevertheless, the footage is very helpful in ascertaining Mr Bagrowski's movements in the seconds before the accident.

[30] Mr Bagrowski is shown in the yard area in the vicinity of the skip lorry. He is dressed in a hard hat and high visibility clothing. Mr Bagrowski approaches the front of the skip lorry. As he does so, he appears to lift his hand from his chest area and put it to the right side of his head. While walking into the centre of the roadway towards the right side of the yard, with his hand close to the side of his head, he turns so that he is facing away from the weighbridge. At approximately the same time, the door of the

driver's door of the skip lorry is seen to open. Mr Borkowski's forklift then approaches from the right side of the yard from the weighbridge, and strikes Mr Bagrowski from the rear. Mr Bagrowski is knocked down and dragged underneath the forklift. The forklift then stops.

Immediate aftermath and medical evidence

[31] The witness Raymond Henderson, transport director, was in his office which was beside the holding area. His attention was drawn to the incident. He and others went to see if they could assist Mr Bagrowski. Mr Bagrowski remained trapped under the forklift. It was clear that he had suffered fatal injuries. Paramedics attended shortly afterwards and pronounced life extinct.

[32] A post mortem examination took place on 6 October 2016. This noted the multiple injuries to Mr Bagrowski's head and body. It concluded that he had died of multiple instantaneously fatal injuries sustained as a pedestrian involved in a vehicular collision.

Forward visibility of forklift truck driver

[33] It is a feature of driving forklifts that the forward visibility of the driver can be limited. The driver's visibility is partially obscured by the masts and attachments on the front of the forklift, on which the load is carried.

[34] Mr Borkowski's visibility was further partially obscured by the empty container he was carrying on the front of his forklift. That container was 1.3m high, 1.97m long

and 2.6m wide. The container was described as a "half height" container load. The top of the container was positioned approximately level with the bottom of the driver's steering wheel. The driver would therefore be able to see over the top of the container, but an area immediately in front of the forklift would be obscured from view. The photograph below shows the forklift immediately after the accident.

[35] As part of their training, forklift drivers are taught to overcome this restriction in visibility by moving their heads and bodies to compensate. Mr Henderson confirmed that this was something that he was aware of forklift drivers doing.

[36] The HSE "visibility report" was produced to the inquiry and its conclusions were agreed. The authors of that report had run a series of tests to attempt to ascertain the

extent to which Mr Borkowksi would have been able to see Mr Bagrowski prior to the impact.

[37] The report used the two sources of CCTV footage to estimate the speed of the forklift. These gave estimated speeds of 3.4 metres per second (7.6mph) and 2.9 metres per second (6.5mph). These speeds are both in excess of the 5mph speed limit in force on the site. The report concluded:

- It would have taken Mr Borkowski approximately 10 seconds to cover the 33.4 metres between the weighbridge and location in the yard where he collided with Mr Bagrowski;
- Mr Borkowski might have been able to see at least part of Mr Bagrowski prior to 5.6 seconds before the impact;
- From approximately 5.6 seconds to 4.2 seconds prior to impact, Mr Borkowski would have had a partial view of Mr Bagrowski under or through the skip lorry cab door and, if he was leaning to his right to see around the mast, he might have had a view of Mr Bagrowski in the yard;
- From 4.2 seconds to 2 seconds prior to impact, the mast would not have obscured Mr Borkowski's view as significantly;
- At around 1.9 seconds before impact, Mr Borkowski could have had a clear view of Mr Bagrowski, although this could have been obstructed by the mast as Mr Borkowski was turning left into the yard at that point.

[38] The report concluded that Mr Borkowski's opportunity to view Mr Bagrowski could have been further reduced by competing demands on his attention, including the

skip lorry in the holding area, and Mr Borkowski's low level of expectation of encountering a pedestrian in the yard.

Other information relating to Mr Bagrowski

[39] There was evidence that Mr Bagrowski had received a number of telephone calls throughout the morning of 3 October 2016 relating to domestic matters, and that he was concerned by these calls. A senior colleague had earlier seen Mr Bagrowski on his telephone and told him that if he wished to use his telephone he should do so off the yard. The use of mobile telephones was strictly prohibited on site where work was carried out.

[40] There was a mobile telephone found in Mr Bagrowski's right chest pocket after the incident. There was no other mobile telephone found on his person.

New procedure for vehicles driving from weighbridge to yard

[41] Since the accident, EIS has introduced a new procedure for vehicles exiting the weighbridge and entering the yard. Now, the forklift must drive over a red painted area to a stop line which is marked clearly on the road surface. The forklift driver cannot proceed beyond that stop line into the yard until directed to do so by a banksman who has assessed that it is safe to do so.

Submissions

[42] Parties were agreed in relation to the findings in terms of sections 26(2)(a), (b) and (c). Their submissions are reflected in my findings under those sections set out above.

Submissions for the Crown

[43] Mr Urquhart for the Crown submitted that:

- In terms of section 26(2)(d), the cause of the accident resulting in the death was Daniel Bagrowski walking into the path of a forklift truck that was about to move off, and turning his back on that forklift truck;
- In terms of section 26(2)(e), Mr Bagrowski's death might realistically have been avoided (a) had Mr Bagrowski not used his mobile phone in the yard and had he not walked into the intended path of the forklift truck and then turned his back and (b) if EIS had had in place their current system whereby vehicles stop after leaving the weighbridge and do not enter the yard unless signalled to do so by a banksman.

[44] Mr Urquhart submitted there should be no findings in relation to any defects in systems of working in terms of section 26(2)(f). The new system for exiting the weighbridge into the yard was an improvement. It did not follow that there had been defects in the previous system. Mr Urquhart submitted there were no other facts of relevance, and that the inquiry should make no recommendations in terms of section 26(1)(b) and (4).

[45] Mr Urquhart's position was that there was no way that anyone else could have prevented Mr Bagrowski's distraction from arising, and that no criticism could be made of Mr Borkowski. His visibility would have been limited, and he could legitimately have been looking in another direction in the short period when Mr Bagrowski could have been in his line of sight. Mr Urquhart made no submissions in relation to measures which may seek to address the restricted visibility of the forklift driver.

Submissions for EIS

[46] Mr Donaldson emphasised the high standard of safety procedures in place at EIS at the time of the accident. He further emphasised that Mr Bagrowski was a highly regarded and experienced member of staff. It could not have been predicted that he would have acted in the way he did. It was not surprising that it had not been taken into consideration that he would put himself in danger. Mr Borkowski was performing a routine activity which had been carried out on countless previous occasions without incident. Mr Donaldson characterised the accident as an inexplicable event rather than a preventable accident.

[47] In terms of section 26(2)(d), Mr Donaldson submitted that the accident was caused by Mr Bagrowski positioning himself directly in the area where he knew the forklift driven by Mr Borkowski would be returning, and turning his back to the direction from which the forklift was approaching.

[48] Mr Donaldson submitted that the inquiry should make no findings in terms of section 26(2)(e). He accepted in oral submissions that the new procedure for vehicles

leaving the weighbridge was a precaution which could reasonably have been taken (section 26(2)(e)(i)). However, it could not be said that it would realistically have resulted in Mr Bagrowski's death being avoided (section 26(2)(e)(ii)). Mr Donaldson submitted that, even if that procedure had been in place, and Mr Bagrowski had accordingly directed Mr Borkowski's forklift to enter the yard, Mr Bagrowski may still subsequently have become distracted and wandered into the path of the forklift. It followed that there should be no findings in relation to any defect in any system of working (section 26(2)(f)). Mr Donaldson submitted the inquiry should make no further findings or recommendations.

Discussion and conclusions

The causes

[49] This accident took place when Mr Borkowski was performing the routine task of driving his forklift from the weighbridge. The causes of the accident can be shortly stated. First, Mr Bagrowski stood in the path of Mr Borkowski's forklift and was not paying attention. Secondly, Mr Borkowski did not see him. These are the causes this inquiry requires to address.

Training and procedures

[50] I accept that the safety procedures in place at EIS's site at Gallowhill in October 2016 were generally of a high standard, and that EIS took the health and safety of their employees seriously. There were procedures in place to limit the risk of vehicles

colliding with pedestrians on site. Even though EIS had not been able to carry out the painting work to demarcate the walkways through the site before October 2016, the walkways for pedestrians moving through the site were sufficiently clear. In any case, given the specific nature of Mr Bagrowski's duties, he was not restricted to the walkways and was necessarily required to enter areas of moving traffic. The extent to which those walkways were visible at the time is therefore of limited significance to the circumstances of this accident.

[51] I accept that Mr Bagrowski was a highly competent and experienced member of staff. I am satisfied that there is no issue in relation to Mr Bagrowski's training or experience. Mr Bagrowski was further well aware of the procedures that were being followed at the specific time. He was directing vehicles in the yard at that time, and so he was aware of their specific movements. He should have been well aware that Mr Borkowski would shortly be returning from the weighbridge and driving across the yard.

[52] Against this background, Raymond Henderson found it inexplicable that Mr Bagrowski had acted in the way he had. Mr Henderson compared Mr Bagrowski's actions to standing in the middle of Union Street, Aberdeen, with his back to the traffic.

The cause of Mr Bagrowski's distraction

[53] Mr Henderson concluded that Mr Bagrowski had been distracted by a telephone call immediately before being struck by the forklift truck. This was a conclusion that was supported by both Mr Urquhart for the Crown and Mr Donaldson on behalf of EIS.

I accept that the most likely available explanation for Mr Bagrowski's apparent distraction was using his mobile telephone. It is consistent with the facts set out in relation to the telephone calls Mr Bagrowski had received that morning. The CCTV footage is consistent with Mr Bagrowski answering a telephone call. He appears to take something from his pocket and hold it to his ear. The manner in which he is shown to stop and turn around is consistent with a person's instinctive movements when answering a telephone call. The recovery of the telephone from his pocket would clearly indicate that any phone call had been completed before he was struck. The picture is not entirely clear, but it is a reasonable possibility that Mr Bagrowski was distracted by his mobile telephone.

[54] The use of mobile telephones was prohibited on site. I accept that that prohibition was actively enforced. If the cause of Mr Bagrowski's distraction was indeed answering a telephone call, it is clear he had deliberately acted contrary to that prohibition. He had been told that day not to use his phone on site. In all the circumstances, I do not consider that any finding should be made in terms of reasonable precautions or systems of work in relation to Mr Bagrowski having his mobile telephone on site. There remains some uncertainty in the conclusion that the cause of Mr Bagrowski's distraction was his mobile telephone. A rule that all employees hand in their mobile telephone on entry to site may be reasonable in the circumstances. However, such a rule may not prevent a senior employee having his mobile telephone with him, in the absence of unreasonably intrusive measures.

[55] In any case, it can be concluded that Mr Bagrowski moved unexpectedly into the path of traffic whilst not paying attention. This was entirely out of character. Events happened so quickly and unexpectedly that there is no reasonable means by which anyone could have intervened at the time to prevent Mr Bagrowski acting in that manner.

The forklift truck

[56] No issues arise in relation to Mr Borkowski's training, qualifications, or experience. As stated above, the findings from the visibility report suggest that he was driving in excess of the 5mph speed limit imposed on site. However, given the distance and low speed involved, it is on balance unlikely that the accident would have been avoided, or the outcome would have been different, had Mr Borkowski been driving within that speed limit.

[57] The explanation for Mr Borkowski not seeing Mr Bagrowski is largely to be found in the restricted forward visibility afforded by the forklift Mr Borkowski was driving. Visibility was limited by the masts and attachments on the forklift, and the container he was carrying.

[58] The inquiry did not have the benefit of an account from Mr Borkowski. The visibility report prepared by HSE was, however, a very useful exercise in attempting to reconstruct events in order to assess the extent to which Mr Borkowski could have seen Mr Bagrowski. There are limits to this exercise. It is not known to what extent Mr Borkowski was moving his head to increase his forward visibility. It is unlikely that

he would have been as focussed on doing so as the authors of the visibility report had been: Mr Borkowski was carrying out a routine and repetitive task he had conducted many times without incident; those carrying out the tests for the visibility report were doing so as part of an investigation into a fatal accident. Nevertheless, it can be concluded that Mr Borkowski's forward visibility would have been restricted to a significant degree, even if he had made attempts to increase that visibility by moving his head and body.

[59] The authors of the report further concluded that Mr Borkowski's ability to see Mr Bagrowski could also have been limited by competing demands on his attention, the open driver's door of the skip lorry in the holding area, and the fact he would not have expected to see anybody on the yard.

[60] From the CCTV footage alone it can be concluded that Mr Borkowski did not in fact see Mr Bagrowski. The speed of the forklift was constant up until it struck Mr Bagrowski. As there is no question that Mr Borkowski intended to strike Mr Bagrowski, the only reasonable explanation is that he did not see him.

[61] Parties approached the inquiry with a focus on the actions of Mr Bagrowski, which I have identified as the first cause of the accident. There was no information provided to the inquiry in relation to potential technological solutions or fixes for the restricted visibility of forklift drivers. I raised some potential solutions with Mr Henderson in the course of his evidence. One potential solution considered was forklifts having cameras attached which could afford drivers full visibility by way of a screen in the cabin. This was not something Mr Henderson had seen or been aware of. Another

issue considered was warning alarms which could indicate when a forklift was moving and the driver had limited visibility, similar to those used by large vehicles when reversing. A further solution might be a sensor/alarm which sounded to indicate to a forklift driver that there was an obstacle in front. Mr Donaldson submitted that forklift drivers could, and did, take a practical measure of reversing in situations where forward visibility was a particular issue.

[62] There was an insufficient basis for the inquiry to make any finding or recommendation in relation to any technological solutions designed to address a forklift driver's restricted forward visibility. In all the circumstances, I did not consider that the inquiry should be continued for further investigation in relation to these matters. It would likely have occasioned further disproportionate investigation and delay in relation to matters that are likely to have been considered in the relevant industries. Given Mr Henderson's evidence that, in all his experience, he was not aware of forklifts with cameras attached, it is difficult to see how it could be a reasonable precaution for EIS to have used such forklifts. Further, one can identify the potential limits of alarms attached to vehicles in a yard where there are a number of other moving vehicles which also have to be taken account of. I consider that, in order to perform the purpose of the inquiry, it was sufficient to raise these questions, and note the issue in relation to the forklift driver's limited visibility as a relevant fact in terms of section 26(2)(g).

[63] In any case, I was satisfied that the precaution set out below in relation to the procedure for vehicles exiting the weighbridge and entering the yard would likely be at least as effective as any of the potential technological solutions considered.

The procedure for exiting the weighbridge and entering the yard

[64] As explained above, it was left to the discretion of Mr Borkowski, the forklift driver, to proceed from the weighbridge into the yard. This discretion was to be exercised while hampered by his restricted forward visibility, as described above. This discretion would apparently be exercised with confidence that the only people in the yard would be banksmen, and that they who would be well aware of all the vehicle movements within the yard.

[65] Mr Donaldson, on behalf of EIS, emphasised that Mr Bagrowski's actions were entirely out of character and could not be predicted. He therefore submitted that this was "in the realms of an inexplicable event rather than preventable accident."

[66] I accept that it was entirely unexpected that Mr Bagrowski acted in the way he did. However, I disagree that it follows the accident was not preventable. Momentary distraction is a known risk in a workplace such as EIS's site at Gallowhill. Individual momentary lapses in concentration may be unpredicted at any specific time, but over the course of time they are near inevitable. A person (including a banksman) being in the line of traffic on the site was a known risk. This could be caused by unexpected distraction, as in this case, but also by a person falling, or otherwise becoming immobile in a dangerous area for any number of unpredicted reasons. Precautions should be taken to mitigate the consequences of such unpredicted events.

[67] There were good systems in place to limit the risk of vehicles striking pedestrians, such as walkways, crossing points, "safe havens", and suspensions of traffic

during breaks etc. The role of the banksman in guiding traffic was a further safeguard against pedestrians being struck by vehicles. However, as noted above, there was no requirement for the banksman to direct the forklift driver from the weighbridge into the yard. Rather, it was left to the discretion of the partially sighted forklift driver to decide whether it was safe to proceed. This would clearly increase the risk of the forklift striking a pedestrian. Moreover, it is clear that the forklift driver did not require to be aware of the whereabouts of the banksman before proceeding. This would in turn increase the risk of striking the banksman himself.

[68] Mr Bagrowski had been directing Mr Borkowski in the yard prior to Mr Borkowski proceeding to the weighbridge. It was therefore assumed that Mr Bagrowski would be aware that Mr Borkowski would be driving back across the yard from the weighbridge. That was an assumption which had a sound basis, and would prove to be correct in the vast majority of cases. However, when the assumption proved misplaced, there was no safeguard. It is clear that Mr Borkowski drove in complete ignorance of Mr Bagrowski's presence in his path.

[69] This failure to ensure that the forklift driver (with restricted forward visibility) could only proceed into and through the yard if directed to do so by a banksman forms the basis for my findings in terms of both sections 26(2)(e) and (f) of the Act.

[70] It is to EIS's credit that the procedure that is now in place forms the basis for my findings under section 26(2)(e) and (f). As set out above at paragraph [41], above, the forklift driver can now only proceed into the yard if directed to do so by a banksman. That banksman will have assessed that it is safe to do so. If that procedure had been in

place on 3 October 2016, then Mr Borkowski could not have proceeded into the yard until directed to do so by Mr Bagrowski.

[71] That would have had the effect of ensuring that Mr Borkowski would not have proceeded without being aware of the whereabouts of Mr Bagrowski; that Mr Bagrowski would have applied his mind to whether it was safe to proceed; and that he would have been well aware of the movements of the forklift. This is a precaution which both ensures that all employees involved are forced to stay alert to the dangers, and takes proper account of the limited visibility of the forklift driver. It helps protect all pedestrians on the site, including banksmen.

[72] This new system does not wholly eliminate the risk of the type of distraction shown by Mr Bagrowski. However, if this procedure had been in place on 3 October 2016, the consequences of Mr Bagrowski becoming distracted would likely have been benign. If Mr Bagrowski had become distracted before Mr Borkowski drove into the yard, Mr Borkowski would merely have had to endure the frustration of remaining at the stop line until such time as he could get Mr Bagrowski's attention. Mr Donaldson, on behalf of EIS, submitted that, even with this new system in place, there would still be the same risk associated with Mr Bagrowski becoming distracted after the forklift had proceed into the yard. I do not accept that. Clearly, after Mr Bagrowski had directed the forklift to proceed (and accordingly had his attention fixed on the forklift), it would be far less likely that he would then become so distracted that he was wholly unaware of the forklift's whereabouts. And even in that unlikely event, Mr Borkowski would be

aware of where Mr Bagrowski was and far more likely to see that Mr Bagrowski had become distracted and act accordingly.

[73] I am therefore satisfied that the procedure of ensuring that a forklift does not proceed from the weighbridge, into and through the yard unless directed to do so by a banksman is a precaution which could reasonably have been taken and might realistically have resulted in this tragic accident and death being avoided. Further, I am satisfied that the absence of this procedure was a defect in the system of working then in place which contributed to the death. The systems of working in place at EIS were otherwise of a high standard. I am satisfied, however, that this was a defect in otherwise good safety procedures. EIS is to be commended for continuing to take steps for ensuring the safety of its employees after this incident.

Conclusion

[74] Daniel Bagrowski was by all accounts both a valued employee and a committed family man. I would like to conclude this determination by expressing my condolences to his family, friends, and colleagues. They will all have been greatly affected by his tragic death.