## IN THE DISTRICT COURT AT MANUKAU

## I TE KŌTI-Ā-ROHE KI MANUKAU

## CRI-2019-057-000232 [2023] NZDC 8436

## WORKSAFE NEW ZEALAND Prosecutor

v

## EATIM NEW ZEALAND LIMITED Defendant

Hearing:	13 to 15 December 2021, 7 and 8 June 2022, 31 October 2022 and 1 November 2022
Appearances:	Mr Ian Brookie and Mr Angus Everett for the Prosecutor Mr Paul White for the Defendant
Judgment:	10 May 2023

## **RESERVED DECISION OF JUDGE NR WEBBY**

## Introduction

[1] On 17 February 2018, Harchet (Harry) Singh Gill (Mr Gill), a diligent<sup>1</sup> and rigorously trained<sup>2</sup> worker, died alone in a paddock being harvested for potatoes near Puni. He was fatally crushed in a potato harvester. He had become entrapped in the moving parts of the harvester. He died at the scene.

<sup>&</sup>lt;sup>1</sup> Page 318 Notes of Evidence (NOE).

<sup>&</sup>lt;sup>2</sup> Page 306 NOE.

## The Hilder Mk3 Harvester

[2] The potato harvester, a towed Hilder Mk3 harvester (the Harvester) was owned and operated by Eatim Limited (Eatim). It was purchased in used condition on an "asis" basis in February the year before.<sup>3</sup> Hilder harvesters were made in Australia.<sup>4</sup> They are well regarded by commercial potato growers for their use in the heavy volcanic soils<sup>5</sup> around Pukekohe. They are sought after and when they become available, they are quickly purchased by growers in the area.<sup>6</sup>

## Eatim

[3] Eatim's business, for the most part, involved growing potatoes and onions in the Pukekohe and Waikato regions. Mr Gill had been employed by Eatim since January 2017, first casually and then on a permanent basis from April 2017. Eatim's two directors, Mr Eamon Balle and Mr Tim Balle, were involved in the day-to-day operations of the business. At the time, it was a "very small" operation. It had two employees based in the Pukekohe region. One was Mr Gill. It also had two employees based in Matamata. The site where Mr Gill died, had been leased by Eatim for the purpose of growing and harvesting potatoes.

### How did the Harvester function?

[4] A Tractor towed the Harvester. The Tractor also served as a source of mechanical and hydraulic power for the Harvester. The mechanical power came via a power take-off device (PTO), which took power from the tractor's engine and conveyed it, by way of a PTO shaft, to a mechanical input on the Harvester. The Harvester's own system of gears, shafts and chains then served to make it function.

[5] In general terms the Harvester functioned by:

<sup>&</sup>lt;sup>3</sup> For \$13,000 (excluding GST).

<sup>&</sup>lt;sup>4</sup> They were made in Tasmania.

<sup>&</sup>lt;sup>5</sup> Page 4 of Exhibit D

<sup>&</sup>lt;sup>6</sup> Page 399 NOE.

- (a) Lifting potatoes out of the ground (with web elevators at the front of the machine).
- (b) The potatoes moved into a cleaning system, which consisted of a network of powered conveyers and rollers under the picking table. The system removed dirt and plant stems ("haulm") from the potatoes.
- (c) The potatoes then moved via a conveyer up onto, and across, the picking table.
- (d) Between two and four workers stood either side of the picking table. They removed potatoes with defects and excess dirt by hand.
- (e) The potatoes were then placed into a bunker near the front of the machine. This is emptied as required.

[6] It was still possible for the Harvester to remain running when the Tractor and the Harvester were stationary.

## Guarding on the harvester

[7] Extensive work had been done by Eatim to return the Harvester to "service ready" condition. This involved significant remedial mechanical work. Guarding was also installed on some previously unguarded areas of the Harvester. The guarding was placed on both sides of the picking table (just beneath the platforms where the workers stood). The guards were put in place to prevent access to the powered conveyers and rollers that the freshly dug potatoes were conveyed upon. The guards consisted of four screens. There were two on each side. They were made of steel mesh and box sectional steel. After being fabricated they were painted red. The four guards were secured in place by anti-luce/drop-lock fasteners. They were not interlocked to the harvester's conveyer system. That meant that the guards could be removed by a worker while the Harvester was still operating.

[8] Eatim knew that the guards would need to be removed on a regular basis. This was to allow the area to be cleaned of mud, dirt, clumps, potatoes and other foreign

objects. Sometimes this would need to occur up to 10 to 15 times in a day. The same area also needed to be accessed in order to maintain and repair the Harvester.

[9] The guarding selected was copied from the guarding on a Hilder harvester owned and operated by Balle Brothers. Although not a guarding expert, Eatim considered Mr Michael Antoneivich (Mr Antoneivich), to be the "very best person to undertake [the] work".<sup>7</sup> Eatim did not contact a specialist engineer or guarding expert.<sup>8</sup> Eatim considered that the Harvester had been brought up to the identical standard of the Balle Brothers harvester. Eatim considered the Harvester to be "the best standard" and "compliant".<sup>9</sup>

## The events of 17 February 2018

[10] Mr Gill arrived on site at approximately 6.30am. He was responsible for the harvesting activity on site that day. This included training and supervising the workers. His role involved driving the *John Deere*<sup>10</sup> tractor (the Tractor) which towed the Harvester. Four seasonal workers worked on the Harvester grading potatoes.

[11] He discussed the harvesting plan for the day with Mr Eamon Balle. That involved continuing to harvest "Moonlight" potatoes. The contract workers arrived on site. They were given a safety briefing by Mr Gill. They were told that they should <u>only</u> get on and off the harvester when the machine was stopped. Harvesting began. Mr Gill drove the Tractor towing the Harvester. Four seasonal workers stood on platforms beside the picking table.

[12] Work stopped around 8:00 am. Mr Gill cleaned the Harvester. The ground was wet. This had caused a build-up of mud on the Harvester. He cleaned the mud off. He used a shovel. Work commenced again. At 10:00 am work stopped for morning tea. Mr Gill cleaned the Harvester again. The Harvester and the Tractor were switched off. He removed one of the guards. He went inside the Harvester. He

<sup>&</sup>lt;sup>7</sup> Page 359 NOE.

<sup>&</sup>lt;sup>8</sup> Page 360 NOE.

<sup>&</sup>lt;sup>9</sup> Page 362 NOE.

<sup>&</sup>lt;sup>10</sup> The Tractor was owned and operated by Eatim. It had been purchased brand new on 8 January 2018 for \$99,000 (excluding GST) and registered six weeks before 17 February 2018.

cleaned the conveyer. Harvesting continued again until 12:00 pm. He told the workers to go and have lunch. He stayed with the Tractor and Harvester. The workers walked about 100 metres to their cars.

[13] Mr Gill removed a guard on the left side of the Harvester. He entered the main conveyer system through an area just below the picking table. The Harvester was still running. Mr Gill was drawn into the network of rotating rollers of the conveyer system. He was fatally injured.

[14] One of the workers came back to the Harvester to get his lunch and cigarettes. He saw Mr Gill's body inside the Harvester. He didn't know how to the turn off the two machines. He ran back to the other workers. They came back to the Harvester. One of the men phoned his brother. He told Mr Shane Balle what had happened. Mr Balle came to the site. He quickly switched off the Tractor. The Harvester was not running by this time.

[15] Mr Gill died at the scene. His body had to be extracted from the Harvester. The cause of his death was *multiple blunt force trauma* inflicted as a result of becoming entangled/entrapped in the moving parts of the Harvester while it was still running.

# The WorkSafe Investigation

[16] WorkSafe commenced an investigation into Mr Gill's death that same afternoon. Shortly after the investigation commenced the CEO of Potatoes New Zealand, Stuart Wright, issued a statement:<sup>11</sup>

Harvesters are extremely dangerous machinery, which need to be managed well to protect our workers. Potatoes NZ urges growers throughout NZ to stop and look what can be done to ensure that the likes of this accident does not occur to another worker.

[17] WorkSafe instructed Chartered Professional Engineer Mr Jack Mains (Mr Mains) on 19 February 2018. Mr Mains, together with WorkSafe Inspector Andrew Bunyan (Mr Bunyan), inspected the Harvester on 23 February 2018.

<sup>&</sup>lt;sup>11</sup> Exhibit 29.

[18] On 16 January 2019 Mr Mains advised that the applicable standard for machine guarding in New Zealand was AS/NZS4024. Mr Mains considered that with machinery like the Harvester, where there were multiple guards that may have to come off to clear a blockage, the only practical option was to use what is known as a trapped key system<sup>12</sup>. In essence, he advised that this "failsafe interlocking system" involved<sup>13</sup>:

- A key operated lock is securely electrically wired into either the tractor's PTO clutch or ignition system such that when the key is removed either the PTO is disengaged, or the tractor's engine is stopped.
- This key is then carried to the harvester and used to unlock a guard, such that it can then be opened or removed.
- Essentially the key is trapped and cannot be disengaged until the guard is replaced and locked in place.
- The key can then be taken back to the tractor to re-liven which ever circuit is interrupted.
- One key can be used to open multiple guards, but only one at a time.
- If multiple guards need to come off at one time, there are "exchange box" systems available which permit one key (the one in the tractor control circuit) to release several keys, which can be used to open several guards. The key required for the tractor control system cannot be released until all of the guard keys are back in the exchange.

[19] He also considered that once the machine had been assessed and any necessary modifications made, these should be certified by a competent practitioner. If this step was not taken, there was a risk that any guarding modifications made with good intentions, but incorrectly or incompletely executed, may give a false sense of security about the machine's safety.

[20] On 28 February 2018 Mr Bunyan issued Eatim<sup>14</sup> with a 'Probation Notice'<sup>15</sup> for inadequate guarding on the Harvester. The notice was issued for "reasons including the absence of any interlocking guards".<sup>16</sup> The Harvester has remained out of service since this time.

<sup>&</sup>lt;sup>12</sup> Page 5 Exhibit D.

<sup>&</sup>lt;sup>13</sup> Page 8 Exhibit 26.

<sup>&</sup>lt;sup>14</sup> Emailed to Mr Eamon Balle on 28 February 2018.

<sup>&</sup>lt;sup>15</sup> Exhibit 9.

<sup>&</sup>lt;sup>16</sup> Page 198 to 199 NOE.

[21] After the 'Prohibition Notice' was issued, Eatim instructed guarding expert, Mr Nicholas Frame (Mr Frame), to inspect the Harvester with regards to how it may or may not comply with the requirements of AS/NZS4024. He inspected the Harvester on 6 March 2018. On 9 March 2018 he reported<sup>17</sup> to Eatim, that a possible method to interlock the panels (to prevent operation while the guards were removed) was to use a "trapped key" system:

A method for locking off the tractor PTO drive to the harvester could be investigated, that then releases the key or keys for the guards needing to be removed. While the guards are open, the keys cannot be returned to allow any possibility of unexpected start-up.

[22] He provided Eatim with information (and diagrams) on trapped key interlock systems. These included the "Rockwell Guardmaster" available (from "NHP") and other brands <u>available</u> in New Zealand, including "Fortress" and "Haake" (from Ellis & Co) and "Castell".<sup>18</sup>

[23] On 12 March 2018, as part of the WorkSafe investigation, Mr Bunyan made an information request<sup>19</sup> of Eatim. On 28 March 2018 he received the information sought.<sup>20</sup> Eatim<sup>21</sup> confirmed that the guarding on the Harvester had been modelled on the Balle Brothers harvester ("regarded as industry leaders in this area"). Eatim advised that it was impossible to fully guard the Harvester while still having it operational. The guarding in place was the best that could be done to prevent inadvertent access. Mr Bunyan ultimately rejected the contention that the machine was "as safe as it can reasonably be made".<sup>22</sup>

[24] On 20 November 2018 Mr Bunyan interviewed Eatim's directors, Mr Eamon Balle (Mr Eamon Balle) and Mr Tim Balle (Mr Tim Balle).<sup>23</sup>

<sup>&</sup>lt;sup>17</sup> Page 2 Exhibit 31.

<sup>&</sup>lt;sup>18</sup> Page 7 Exhibit 31.

<sup>&</sup>lt;sup>19</sup> Pursuant to s168(e) of the Health and Safety at Work Act 2015.

<sup>&</sup>lt;sup>20</sup> Exhibits 5, 15, 16 and 17.

<sup>&</sup>lt;sup>21</sup> Exhibit 14.

<sup>&</sup>lt;sup>22</sup> Page 201 and 224 NOE.

<sup>&</sup>lt;sup>23</sup> Exhibit 21 (Interview recording) and Exhibit 22 (Interview transcript).

### The Charge

[25] On 27 March 2019 WorkSafe charged Eatim under the Health and Safety at Work Act 2015 (HASWA). The charge alleges that Eatim contravened ss 48 and 36(1)(a) of HASWA:

Being a PCBU having a duty to ensure, so far as reasonably practicable, the health and safety of workers who work for the PCBU, including Harchet Gill, while the workers were at work in the business or undertaking, namely operating the Hilda Mk3 potato harvester, serial number ASR196, did fail to comply with that duty, and that its failure exposed the workers to a risk of death or serious injury.

### Particulars:<sup>24</sup>

It was reasonably practicable for Eatim Limited to have ensured the potato harvester was adequately guarded in accordance with AS/NZS 4024, by the use of guarding interlocked to the harvester's energy source, to ensure that guarding was incapable of removal until the harvester's energy source was isolated and locked in a safe condition.

- [26] Four elements require proof beyond reasonable doubt:
  - (a) First, Eatim was a PCBU.<sup>25</sup>
  - (b) Second, Eatim had a primary duty in relation to its workers,<sup>26</sup> including Mr Gill.
  - (c) Third, Eatim failed to comply with its duty, by not installing interlocked guarding on the harvester, in accordance with the definition of reasonably practicable;<sup>27</sup> and
  - (d) Fourth, Eatim's failure to comply with its duty exposed workers to a risk of death or serious injury.

<sup>&</sup>lt;sup>24</sup> Initially the charge also included the particular that it was reasonably practicable for Eatim Limited to have ensured a systematic hazard and risk assessment in accordance with AS/NZS 4024, associated with the use, maintenance, cleaning and repair of the potato harvester, was undertaken by a competent person. This particular was deleted by agreement on 29 April 2020.

<sup>&</sup>lt;sup>25</sup> Section 17 of HASWA.

<sup>&</sup>lt;sup>26</sup> Section 19 under ss 36(1)(a) and (2) of HASWA.

<sup>&</sup>lt;sup>27</sup> In s 22 of the Act and the principles in ss 3, 30 and 31 of HASWA.

### The first element

[27] It is not disputed that Eatim was a PCBU. At the relevant time Eatim was carrying on the business of cultivation and harvesting of horticultural products, including potatoes.<sup>28</sup> I am satisfied beyond reasonable doubt that WorkSafe has proved this element of the charge.

### The second element

[28] Mr Gill was a "worker" for the PCBU. This is not disputed. He was employed by Eatim at the time of his death<sup>29</sup>. The contract workers used for harvesting were also "workers".<sup>30</sup> This is not disputed. Eatim had a duty<sup>31</sup> to ensure, as far as reasonably practicable, the health and safety of its workers, including Mr Gill. This is not disputed. I am satisfied beyond reasonable doubt that WorkSafe has proved this element of the charge.

## The fourth element

[29] WorkSafe is required to prove that Eatim's failure to discharge its duty "exposed" its workers to a risk of death or serious injury. This element turns on the risk of death or serious injury, rather than it actually occurring.

[30] The risks associated with the moving parts on machines like the harvester were well known. Harvesters are extremely dangerous machinery.<sup>32</sup> The hazards involved included the powered rollers and conveyer belts which operated inside the harvester. They created in-running nip points. Exposure to the in-running nip points risked entrapment in the machine. The risk arose because in a worker could remove one (or all) of the guards, while the machine was still running, to get inside the harvester to clean it.<sup>33</sup> The type of harm very likely to result from a worker's entrapment (or

<sup>&</sup>lt;sup>28</sup> Admitted facts dated 8 December 2021 at paragraph [1].

<sup>&</sup>lt;sup>29</sup> Admitted facts at paragraph [2].

 $<sup>^{30}</sup>$  Under s 19(1)(b) or (c) of HASWA.

 $<sup>^{31}</sup>$  Under s 36(1)(a) of HASWA.

<sup>&</sup>lt;sup>32</sup> Exhibit 29.

<sup>&</sup>lt;sup>33</sup> Admitted facts at paragraph [32].

entanglement) was death or serious injury.<sup>34</sup> The realised risk in this case was the fatal crushing of Mr Gill by the exposed moving parts of the harvester.<sup>35</sup>

[31] Eatim recognised this risk. Eatim's 'Hazard Register' recognised "entanglement" with tractor attachments as a "significant hazard". Eatim's 'Safety Rules' recognised that "removing or bypassing a guard would expose a worker to a <u>high level</u> of danger".

[32] Had Eatim employed the trapped key system, Mr Gill would not have been able to access the harvester, by removing the guards when the machine was still running. This is not in dispute<sup>3637</sup>. He would have been isolated from the risk of death or serious injury. He would not have become entrapped (or entangled) by the inrunning nip points of the harvester. The failure to take this step clearly exposed Eatim's workers, to a risk of death or serious injury. I am satisfied beyond reasonable doubt that WorkSafe has proved this element of the charge.

The issue: Was it reasonably practicable for Eatim to have installed interlocking guarding on the harvester?

[33] The primary focus, and the sole issue, of this trial has been Eatim's decision to retrofit the Harvester with quick release or anti-luce guards, which could be removed when the Harvester was still running, rather than interlocking (specifically trapped key system) guards. WorkSafe contends that this is a "clear and compelling" case where Eatim should have gone much further than it did to protect the safety of its workers.

[34] The question to be determined is, was it reasonably practicable for Eatim to have installed the trapped key system on this Harvester? Was there, at the relevant time, an available and suitable means to effectively interlock guards to the Harvester's energy source, that would <u>still</u> allow it to perform its intended operations? WorkSafe contends that it <u>was</u> reasonably practicable for Eatim to have done so. Eatim contends

<sup>&</sup>lt;sup>34</sup> Admitted facts at paragraph [33].

<sup>&</sup>lt;sup>35</sup> Admitted facts at paragraph [34].

<sup>&</sup>lt;sup>36</sup> Page 530 NOE.

<sup>&</sup>lt;sup>37</sup> Page 453 NOE.

that it was <u>not</u> reasonably practicable to do so. Moreover, it would have been completely impractical to do so, when considered in the context of harvesting.

WorkSafe's case

# [35] WorkSafe contends that:

- (a) Eatim, albeit well intentioned, fell into error by copying the guarding on the Balle Brothers harvester: The danger in copying another duty holder is that you copy their mistakes.<sup>38</sup>
- (b) Eatim did not seek guidance from a suitably qualified person. It is an essential step for any guarding modifications made on machines to be signed off by a competent person (in accordance with AS/NZS4024).
- (c) Because Eatim failed to seek guidance from a suitably qualified person, its risk assessment failed to identify interlocking guarding as the appropriate guarding option. Neither Eatim nor Balle Brothers were aware of interlocking guarding (specifically the trapped key system) as a means of <u>isolating</u> the serious and foreseeable risks involved.
- (d) The guarding on the Harvester was inadequate and unsafe. Eatim failed to adequately guard the Harvester. It did not do all that was reasonably practicable in the circumstances to ensure the health and safety of its workers. This failure exposed its workers, in particular Mr Gill, to a risk of serious harm or death. This obvious risk was realised when Mr Gill was killed.
- (e) Eatim failed to take, what WorkSafe considers to be, a relatively simple and cost-effective step to isolate its workers from the risks involved. The <u>only</u> safe option to protect its workers were interlocking (specifically the trapped key system) guards.

<sup>&</sup>lt;sup>38</sup> Page 107 NOE.

- (f) The trapped key system was the best option. It could be installed by a suitably qualified person. It was available to Eatim at the relevant time. It was knowledge that was available to Eatim at the relevant time. As a duty holder in charge of this type of machinery, it was knowledge that Eatim ought to have known at the relevant time.
- (g) The system would not prevent the Harvester from functioning as it ought to. Moreover, it would only "marginally" increase the time required to clean or clear a blockage inside the machine.
- (h) Ultimately, it was reasonably practicable for Eatim to have installed the interlocking (specifically the trapped key system), which could not be removed while the machine was still running.

## Eatim's case

- [36] Eatim contends that:
  - (a) The trapped key system fails to have regard to the nature of harvesting.<sup>39</sup> The WorkSafe witnesses who advocate for such a system have never observed a harvester in operation. Mr Frame, who witnessed a harvester operating, was clear that it was not practical to interlock the guards.<sup>40</sup>
  - (b) WorkSafe is effectively proposing an "invention". There has been no evidence presented that the trapped key system exists anywhere on a towed harvester in New Zealand. It is a concept rather than an actual solution. If it was practical to interlock guarding it would have already been done.<sup>41</sup>

<sup>&</sup>lt;sup>39</sup> This includes there being no dedicated tractor/harvester pairings and the need for regular "inching" (which needs to take place with the guards off while the machine is running).

<sup>&</sup>lt;sup>40</sup> Page 470 NOE.

<sup>&</sup>lt;sup>41</sup> Page 398 NOE.

- (c) Despite, WorkSafe's contention that the system should be adopted to remove the fallibility of human interaction,<sup>42</sup> the jumper system (required for use if multiple tractors are to be used) was considerably more complicated but had the same ability to be overridden by workers.
- (d) WorkSafe has had an "inappropriately myopic focus" on AS/NZS4024. It has ignored another applicable standard AS/NZS2153. AS/NZS4024 and the Best Practice Guidelines provide general guidance only. They are not law. A breach of AS/NZS 4024 is not ipso facto a breach of the Act. AS/NZS4024 has not been incorporated into the Act. It provides aspirational guidance<sup>43</sup> only. AS/NZS4024 makes no specific reference to a Hilder Mk III harvester or any other agricultural machine. WorkSafe has inappropriately treated AS/NZS4024 as setting a mandatory requirement to fit interlocking guards on the harvester. The Best Practice Guidelines does not set compliance with AS/NZS4024 as a mandatory requirement.
- (e) A finding that it <u>was</u> reasonably practicable to interlock the side guards on the harvester would mandate that this step needs to be taken by all duty holders in the potato harvesting industry. It would impact, not only Eatim, but would place an impossible requirement on the industry which could not be complied with.

## Relevant Law - the Health and Safety at Work Act 2015

[37] Section 3 provides that the main purpose of the Act is to provide for a balanced framework to secure the health and safety of workers and workplaces:

### 3 Purpose

- (1) The main purpose of this Act is to provide for a balanced framework to secure the health and safety of workers and workplaces by—
  - (a) protecting workers and other persons against harm to their health, safety, and welfare by eliminating or minimising risks arising from work or from prescribed high-risk plant; and

<sup>&</sup>lt;sup>42</sup> Page 171 NOE.

<sup>&</sup>lt;sup>43</sup> Jones v WorkSafe New Zealand [2015] NZHC 781 at [57].

- (b) providing for fair and effective workplace representation, consultation, co-operation, and resolution of issues in relation to work health and safety; and
- (c) encouraging unions and employer organisations to take a constructive role in promoting improvements in work health and safety practices, and assisting PCBUs and workers to achieve a healthier and safer working environment; and
- (d) promoting the provision of advice, information, education, and training in relation to work health and safety; and
- (e) securing compliance with this Act through effective and appropriate compliance and enforcement measures; and
- (f) ensuring appropriate scrutiny and review of actions taken by persons performing functions or exercising powers under this Act; and
- (g) providing a framework for continuous improvement and progressively higher standards of work health and safety.

[38] Section 3(2) reinforces the importance of worker health and safety by calling for the "highest level of protection" as is reasonably practicable:

In furthering subsection (1)(a), regard must be had to the principle that workers and other persons should be given the highest level of protection against harm to their health, safety, and welfare from hazards and risks arising from work or from specified types of plant as is reasonably practicable.

[39] Section 30 provides:

### 30 Management of risks

- (1) A duty imposed on a person by or under this Act requires the person -
  - (a) to eliminate risks to health and safety, so far as is reasonably practicable; and
  - (b) if it is not reasonably practicable to eliminate risks to health and safety, to minimise those risks so far as is reasonably practicable.
- (2) A person must comply with subsection (1) to the extent to which the person has, or would reasonably be expected to have, the ability to influence and control the matter to which the risks relate.
- [40] Section 36 provides:

## **36 Primary duty of care**

(1) A PCBU must ensure, so far as is reasonably practicable, the health and safety of -

- (a) workers who work for the PCBU, while the workers are at work in the business or undertaking; and
- (b) workers whose activities in carrying out work are influenced or directed by the PCBU, while the workers are carrying out the work.
- (2) A PCBU must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.
- (3) Without limiting subsection (1) or (2), a PCBU must ensure, so far as is reasonably practicable,
  - (a) the provision and maintenance of a work environment that is without risks to health and safety; and
  - (b) the provision and maintenance of safe plant and structures; and
  - (c) the provision and maintenance of safe systems of work; and
  - (d) the safe use, handling, and storage of plant, substances, and structures; and
  - (e) the provision of adequate facilities for the welfare at work of workers in carrying out work for the business or undertaking, including ensuring access to those facilities; and
  - (f) the provision of any information, training, instruction, or supervision that is necessary to protect all persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking; and
  - (g) that the health of workers and the conditions at the workplace are monitored for the purpose of preventing injury or illness of workers arising from the conduct of the business or undertaking.
- [41] The High Court<sup>44</sup> has stated of s 36:

[52] The title to s 36 describes the duty as the "primary duty of care". Contrary to Mr Nicholson's submission, the adjective "primary" in this context means first in terms of being of fundamental application and importance, rather than the numerical first in a sequence. Section 36 itself is expressed in broad terms, and in light of the Act's overarching purpose being to secure the health and safety of workers and workplaces, it is properly viewed as setting out the Act's foundational duty [Emphasis added]. The remaining duties in Subpart 2 of Part 2 (outlined above) are more specific iterations of that foundational duty and provide guidance for particular instances. In answer to the first of Linfox's questions of law, I therefore consider that Judge Mahon was correct to characterise s 36 of the HSW Act as the apex of the code.

<sup>&</sup>lt;sup>44</sup> Linfox Logistics (NZ) Ltd v WorkSafe New Zealand [2018] NZHC 2909 at [52].

[42] Section 48 of the Act provides:

# 48 Offence of failing to comply with duty that exposes individual to risk of death or serious injury or serious illness

- (1) A person commits an offence against this section if -
  - (a) the person has a duty under subpart 2 or 3; and
  - (b) the person fails to comply with that duty; and
  - (c) that failure exposes any individual to a risk of death or serious injury or serious illness.

### Reasonably practicable

[43] The phrase reasonably practicable is defined in s 22:

### 22 Meaning of reasonably practicable

In this Act, unless the context otherwise requires, reasonably practicable, in relation to a duty of a PCBU set out in subpart 2 of Part 2, means that which is, or was, at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters, including—

- (a) the likelihood of the hazard or the risk concerned occurring; and
- (b) the degree of harm that might result from the hazard or risk; and
- (c) what the person concerned knows, or ought reasonably to know, about—
  - (i) the hazard or risk; and
  - (ii) ways of eliminating or minimising the risk; and
- (d) the availability and suitability of ways to eliminate or minimise the risk; and
- (e) after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.
- [44] Reasonably practicable:<sup>45</sup>

... s a narrower term than 'physically possible' and seems to me to imply that a computation must be made by the owner, in which the quantum of risk is

<sup>&</sup>lt;sup>45</sup> WorkSafe v Department of Corrections [2017] NZDC 819 with reference to Edwards v National Coal Board [1949] 1 KB 704 at 712 per Asquith LJ.

placed on one scale and the sacrifice involved in the measures necessary for adverting the risk (whether in money, time or trouble) is placed on the other; and that if it can be shown there is a gross disproportion between them - the risk being insignificant in relation to the sacrifice - the defendants discharge the onus on them.

[45] The s 22 assessment<sup>46</sup> is not a counsel of perfection by hindsight.<sup>47</sup> The High Court<sup>48</sup> has confirmed that whether a practicable step has been taken cannot be determined after the fact, with the benefit of hindsight. The relevant point to determine what was practicable is the point "immediately prior" to the incident:

[36] The Act does not require an employer to ensure complete protection of an employee. Rather the Act imposes an obligation on an employer to take all reasonably practicable steps to guard against potential hazards. Whether a practicable step has been taken cannot be determined with the benefit of hindsight or on what was known after the event. The relevant point in determining what is practicable is the point in time immediately prior to the incident.

[46] The s 22 reasonably practicable test needs to be applied in context.<sup>49</sup>

[47] What the PCBU concerned knows or ought reasonably to have known about the hazard or risk and ways of eliminating the risk<sup>50</sup> refers to an objective body of knowledge, not the PCBU's subjective knowledge. The High Court has stated:<sup>51</sup>

I construe the definition of "all practicable steps" as essentially one of objective fact, viewing the matter at a stage shortly before the injury through the eye of an employer<sup>52</sup> conducting the respondent's operation and with the knowledge that such employer could reasonably have been expected to possess as to the nature of prospective harm from the machine [or risk or hazard].

[48] A good health and safety system, addressing not only hazards and risks, but human factors and errors is required to ensure safety:<sup>53</sup>

[17] Dr Callaghan said that when formulating health and safety processes the initial focus must be on elimination of error. Health and safety processes

<sup>&</sup>lt;sup>46</sup> Which is similar to the "all practicable steps" test in s 2A of the HSE Act.

<sup>&</sup>lt;sup>47</sup> Marshall v Gotham Co Limited [1954] AC 360 at 373 (UKHL) cited in Department of Labour v Solid Timber Building Systems New Zealand Ltd (below) at [29].

<sup>&</sup>lt;sup>48</sup> Waimea Sawmillers Limited v WorkSafe New Zealand [2016] NZHC 915 at [36].

<sup>&</sup>lt;sup>49</sup> WorkSafe New Zealand v Athenberry Holdings Limited [2018] NZDC 9987 at [143].

<sup>&</sup>lt;sup>50</sup> Section 22(c)(i) and (ii) of the Act (similar to the "all practicable steps" test in the HSE).

<sup>&</sup>lt;sup>51</sup> Department of Labour v Solid Timber Building Systems New Zealand Ltd, High Court Rotorua, AP464A/44/2003, 7 November 2003 at [35].

<sup>&</sup>lt;sup>52</sup> Now a PCBU.

<sup>&</sup>lt;sup>53</sup> WorkSafe v Department of Corrections [2017] NZDC 819 at [17] and [18].

must be designed properly to take account of all actors' capabilities and to address errors before they arise. Responsibilities and accountabilities need to be unambiguously understood, and any gaps need to be addressed prior to work commencing ...

[18] Proper formulation of health and safety processes is not sufficient on its own, however. A good health and safety system also will detect errors and contain or mitigate those errors. If a person departs from the health and safety processes developed, this deviation needs to be both detected and addressed. If not, the deviation will appear acceptable to the individual involved and the deviation will likely recur.

[49] The High Court stated<sup>54</sup>, in a case concerning inadequate guarding of machinery at a timber mill, that an employer's duty extends to guarding against risks that may arise, such as a worker acting contrary to instructions, so long as they are reasonably foreseeable:

In assessing the risk of harm posed by the vertical chain and sprocket remaining exposed, Waimea needed to be mindful of the fact that even trusted and experienced employees, such as Mr Rolfe, could foreseeably take shortcuts and behave contrary to common sense when working on the machinery in question. The 1995 guidelines, the Australian Standard and the ACC guidelines refer to the obligation of an employer to assess the risk of a hazard against the background of the possibility of an employee acting contrary to common sense. It is for this reason the industry guidelines recommend the placing of guards over chains and sprockets.

[50] A similar approach, to the question of employee carelessness, was adopted by the High Court (in a sentencing context)<sup>55</sup>:

The nature of a victim's conduct is relevant when it comes to considering such conduct as a mitigating factor in the offending, or the weight to be attached to it. Not all such conduct should be treated the same. A victim's intentional or wilful disregard for safety practices may well mitigate otherwise seriously culpable conduct on the part of an employer. But guarding against workplace accidents that result from the foolish carelessness of employees is part of the role of the Health and Safety in Employment Act.

[51] A distinction between industry norms and industry standards has also been made by the Courts:<sup>56</sup>

[84] However, industry norms and industry standards are not the same thing. I infer that there was a somewhat casual attitude from people in the industry to door-opening events, but this does not mean that this was industry standard. It is not enough to prove that nobody else was reporting these

<sup>&</sup>lt;sup>54</sup> Waimea Sawmillers Limited v WorkSafe New Zealand [2016] NZHC 915.

<sup>&</sup>lt;sup>55</sup> Department of Labour v Eziform Roofing Products Ltd [2013] NZHC at [52].

<sup>&</sup>lt;sup>56</sup> *Civil Aviation Authority v The Alpine Group Limited* [2022] NZDC 20040 at [84].

incidents or, put another way ... the standard is not to be judged by what others were doing but what they should have been doing [Emphasis added].

## The Evidence<sup>57</sup>

### Mr Michael Antonievich

[52] Mr Antonievich's actions and knowledge, regarding the guarding, were placed in issue during the investigation. Eatim considered Mr Antonievich "to have a high level of knowledge and competence around machine guarding.<sup>58</sup> Mr Antonievich's evidence was that he was a mechanic with 15 years' experience.<sup>59</sup> He worked on harvesters (including Hilder harvesters). He serviced machines in the field.<sup>60</sup> He was not an expert in guarding. He did not hold himself out as an expert.<sup>61</sup> He had not fitted guarding on a harvester like this before.<sup>62</sup> He did not personally fit the guarding on this Harvester.<sup>63</sup> His role was to "rebuild it" so it could be returned to use.<sup>64</sup> In his years working with Balle Brothers and Eatim he had not given advice on the type of guarding to put on harvesters.<sup>65</sup>

[53] His evidence concerned a discussion with Mr Eamon Balle in March 2017 about guarding the Harvester. He recalled that "we had no idea what to put on".<sup>66</sup> He suggested looking at a similar harvester in the Balle Brothers yard:<sup>67</sup> "This guarding looks like it can do the job … we felt this was a good type of guarding because we had nothing else that we could work from, as in from anywhere else".<sup>68</sup> He went on to say: "We couldn't get enough information from other ways of how the best way is to

<sup>&</sup>lt;sup>57</sup> WorkSafe called three witnesses at trial: Mr Michael Antonievich, Mr Jack Mains (Expert) and Mr Andrew Bunyan. Eatim called four witnesses at trial: Mr Eamon Balle, Mr Nicholas Frame (Expert), Mr Jyatt Master (Mr Master) and Mr Brendan Balle (Mr Brendan Balle).

<sup>&</sup>lt;sup>58</sup> Mr Eamon Balle. Exhibit 22. Page 9 during questions regarding the risk assessment that Eatim conducted for the harvester.

<sup>&</sup>lt;sup>59</sup> Working for Balle Brothers.

<sup>&</sup>lt;sup>60</sup> Including the harvester on site the day before the incident. This was a mechanical roller issue: "The second web wasn't running on its rollers": Page 22 NOE.

<sup>&</sup>lt;sup>61</sup> To either Balle Brothers or Eatim.

<sup>&</sup>lt;sup>62</sup> Page 43 NOE.

<sup>&</sup>lt;sup>63</sup> Page 43 NOE.

<sup>&</sup>lt;sup>64</sup> Page 39 NOE.

<sup>&</sup>lt;sup>65</sup> Page 59 NOE.

<sup>&</sup>lt;sup>66</sup> Page 41 NOE.

<sup>&</sup>lt;sup>67</sup> Pages 41 and 42 NOE.

<sup>&</sup>lt;sup>68</sup> Page 42 NOE.

make that particular guarding"<sup>69</sup>. The conversation about guarding took about 10 minutes.<sup>70</sup> There was no discussion about AS/NZS 4024. He was not aware of the Best Practice Guidelines.<sup>71</sup> When he was asked if he might have given Mr Eamon Balle the impression that he "knew a lot about guarding", he responded:

Well, I don't make guarding. That's not -I repair guarding, and I might change things a bit or whatever to make it more fit for purpose, but I don't go out and make complete guarding ... I don't think it came up. I mean, when he talked about the guarding, he was quite insistent that we have as much guarding on as we can get, and I said to him: "Let's go up the top yard and look at a Hilder that's already guarded in that respect." We went up there, we looked at it and we both agreed that it looks like a fairly good setup, let's go with that.

## Mr Jack Mains

[54] Mr Mains was instructed by WorkSafe on 19 February 2018. He has over 30 years of experience in engineering practice. He has consulted on a wide variety of industrial plant, particularly for WorkSafe and Maritime New Zealand. He had previously investigated two<sup>72</sup> fatal harvester incidents for WorkSafe and had been engaged by Potatoes New Zealand to provide engineering advice (with reference to legislation current practice) to growers at a series of 'Roadshows' throughout New Zealand after this incident.<sup>73</sup>

[55] Mr Mains inspected the Harvester with Mr Bunyan on 23 February 2018.<sup>74</sup> He did not consider the guards<sup>75</sup> were "appropriate". The level of risk to workers, with the quick release fasteners, was: "Well very high, plainly".<sup>76</sup> Mr Mains considered that copying Balle Brothers was something that should have been done with "great

<sup>&</sup>lt;sup>69</sup> Page 53 NOE.

<sup>&</sup>lt;sup>70</sup> Pages 42 and 51.

<sup>&</sup>lt;sup>71</sup> Page 59 NOE.

<sup>&</sup>lt;sup>72</sup> In August 2016 involving a fatality involving a potato harvester (where the operator became entangled while attempting to clear a blockage) and April 2013 (where a worker had become entangled in an unguarded PTO shaft while potato harvesting).

<sup>&</sup>lt;sup>73</sup> Between 24 and 30 August 2018.

<sup>&</sup>lt;sup>74</sup> His final report was produced as Exhibit 26.

<sup>&</sup>lt;sup>75</sup> Pages 81 and 82 NOE.

<sup>&</sup>lt;sup>76</sup> Page 97 NOE.

caution": if you are in a position of not knowing what the guidance is<sup>77</sup> "you are in great danger of maybe copying another man's mistakes".<sup>78</sup>

[56] He considered that it was an "essential" step for any guarding modifications to be signed off by a competent person.<sup>79</sup> He considered failing to do so:

Well, the risk is ... something has been done with good intentions may in fact not be safe and people may be lulled into thinking that they have a safe machine when in fact they don't.

[57] In his opinion, there were a number of potential solutions. He rested on "one sound system",<sup>80</sup> the trapped key system. A key exchange box<sup>81</sup> could be used if multiple guards need to come off at once – meaning that each guard would have a dedicated trapped key.<sup>82</sup> In his opinion the trapped key solution was "absolutely consistent with"<sup>83</sup> the Best Practice Guidelines. He considered this was important and applicable industry documentation. Growers must do their utmost to comply with it and AS/NZS4024. He considered the Best Practice Guidelines, which contained much of the same content as AS/NZS4024, as the "go to" source for guidance on an issue such as guarding the Harvester. His evidence detailed the relevant provisions of the Best Practice Guidelines and AS/NZS4024 that should have informed guarding decisions by Eatim.

[58] Mr Mains considered that the trapped key solution was required for this harvester, because:

Well because we have to stop people doing what they shouldn't do. So, we have to stop people accessing – it would absolutely stop them accessing equipment that has to be stopped before they, before they get into it. So how do we do that? We can tell them not to do it, but we can't trust them, fundamentally. We can't torment any particular persons; you just can't trust people. When the pressure is on things happen. So, you've got to make it impossible for this to happen.

<sup>&</sup>lt;sup>77</sup>The Best Practice Guidelines and AS/NZS4024. Owners of these machines should be advised to check such equipment to ensure that they are appropriately guarded in accordance with the requirements of the Best Practice Guidelines and AS/NZS4024.

<sup>&</sup>lt;sup>78</sup> Page 107 NOE.

<sup>&</sup>lt;sup>79</sup> In accordance with AS/NZS4024.

<sup>&</sup>lt;sup>80</sup> Page 93 NOE.

<sup>&</sup>lt;sup>81</sup> Shown at 2 in diagram on page 8 of report.

<sup>&</sup>lt;sup>82</sup> Page 95 NOE.

<sup>&</sup>lt;sup>83</sup> Page 96 NOE.

[59] He dismissed the risk of the theoretical worker crawling under the machine (to circumvent the trapped key system).<sup>84</sup> The risk of entrapment through the top was high, but not so high for approaching underneath.<sup>85</sup> He disagreed that the trapped key system would lead to lost keys and halting of operations.<sup>86</sup> He rejected the suggestion that interlocking would make the Harvester less safe than it was.<sup>87</sup> He did not accept that the interlocking system should not be applied, because "inching needed to be performed with the guards off.<sup>88</sup> He did not accept that the guards needed to be taken off while "inching".<sup>89</sup> He disagreed that 'the only steps that can be practically taken to ensure that someone does not intentionally operate the Harvester with the guards off and therefore allow access to the dangerous area is to have the operation under control of the driver who has been trained not to allow this to occur. He said this was "demonstrably unreliable".<sup>90</sup>

[60] Mr Mains' preference (with the trapped key solution) and the "simplest thing" in terms of management responsibilities was a dedicated tractor/harvester combination. He did not consider that this additional layer of complexity (with the additional need for management oversight with the jumper system) meant that the system was not worth it compared to the status quo. He considered that the jumper system was still "vastly improved" over the status quo.<sup>91</sup> He still preferred the interlocked machine with the management responsibility because "done properly and with everyone playing their part, especially the management, they will – that's a very safe machine ...".

[61] He concluded that it <u>was</u> reasonably practicable for Eatim to have installed interlocking guards in place of quick release guards, with the use of the trapped key system. The cost was not prohibitive. He assessed the cost of the trapped key system as being under \$10,000.<sup>92</sup> He considered that to be "workable". Moreover, the trapped

<sup>&</sup>lt;sup>84</sup> Page 139 NOE.

<sup>&</sup>lt;sup>85</sup> Page 107 NOE. This evidence appeared to have been consistent with Mr Antonievich's evidence.

<sup>&</sup>lt;sup>86</sup> Page 126 NOE.

<sup>&</sup>lt;sup>87</sup> Page 147 NOE.

<sup>88</sup> Page 168 NOE.

<sup>&</sup>lt;sup>89</sup> Page 139 and 145 NOE.

<sup>&</sup>lt;sup>90</sup> Pages 140 and 141 NOE. Mr Frame agreed that situation was not "fail safe".

<sup>&</sup>lt;sup>91</sup> Page 172 NOE.

<sup>&</sup>lt;sup>92</sup> Appendix 5 (Page 19 of Mr Main' report). This figure did not appear to be disputed although Mr White cites this evidence (on Page 181) as evidence of a "concept only".

key system would not lead to a dramatic increase in time<sup>93</sup>: "I think it would be a slight increase in time".<sup>94</sup> It was necessary to be slightly inconvenienced to achieve safety.<sup>95</sup>

### Mr Andrew Bunyan

[62] Mr Bunyan regarded the guards on the Harvester as "inherently unsafe". It was too easy for workers to remove them while the machine was still running. Although he had obtained the operating instructions for the Harvester, these instructions provided limited assistance on guarding/safety.<sup>96</sup> AS/NZS4024 and the Best Practice Guidelines provided the applicable guidance for this Harvester.<sup>97</sup>

[63] He engaged in correspondence with Eatim and rejected its contention that the machine was "as safe as it can reasonably be made"<sup>98</sup>. He issued Eatim with a prohibition notice, having viewed the machine for "reasons including the absence of any interlocking guards".<sup>99</sup>

[64] He considered the trapped key system at any early stage.<sup>100</sup> The trapped key system should have been fitted to the Harvester. That conclusion mirrored his earlier suggestions to Eatim. He considered that the risk assessment conducted by Eatim was not done by a competent person. It was deficient in terms of the guidance relating to guarding.<sup>101</sup>

[65] Mr Bunyan was of the view, that the trapped key system (even with the jumper add-on<sup>102</sup>), provided a higher level of control than the ignition key [alone].<sup>103</sup> The difference in risk between quick release guards and the trapped key system, was that because any worker could access the moving parts of the Harvester at any time, under Eatim's system "constant supervision" was required. Management supervision for the

<sup>&</sup>lt;sup>93</sup> Page 167 NOE.

<sup>&</sup>lt;sup>94</sup> Page 167 NOE.

<sup>&</sup>lt;sup>95</sup> Page 167 NOE.

<sup>&</sup>lt;sup>96</sup> Page 197 NOE.

<sup>&</sup>lt;sup>97</sup> Page 198 NOE.

<sup>&</sup>lt;sup>98</sup> Page 201 and 224 NOE.

<sup>&</sup>lt;sup>99</sup> Page 198 to 199 NOE.

<sup>&</sup>lt;sup>100</sup> Exhibit 11 and Exhibit 12.

<sup>&</sup>lt;sup>101</sup> Page 225 NOE.

<sup>&</sup>lt;sup>102</sup> Which he conceded did involve some "*human factors*". Management would need to ensure that that jumpers were withheld from the harvest crew whilst the harvester was in operation.

<sup>&</sup>lt;sup>103</sup> Page 236 NOE.

latter related only to ensuring that the any jumpers were accounted for – and not in the hands of the harvest crew.

## Mr Eamon Balle

Mr Balle was a director of Eatim. His role is production manager. On any [66] given day it would not be uncommon to have to stop the Harvester "15, 20 times".<sup>104</sup>

Mr Antoneivich was the "foremost" person in the Balle Brothers workshop. [67] Balle Brothers had "six or seven" Hilder Mk III harvesters in their fleet.<sup>105</sup> He confirmed that the WorkSafe visit of Ohakune harvester was "a positive visit" which reconfirmed their thinking on the process they were going through to commission the work that was being done.<sup>106</sup> The Balle Brothers harvester had the same type of guarding as the Harvester.<sup>107</sup> None of the Balle Brothers harvesters operated a trapped key system.<sup>108</sup> Mr Balle was not aware of any of any other machines operating with a trapped key system in the Pukekohe area.<sup>109</sup>

The Harvester was a machine that had been regularly used up to the point of [68] purchase. It was deficient of many systems and mechanisms that Eatim believed were necessary to make it "compliant and safe".<sup>110</sup> A large part of the work was around safety. There was also more maintenance type work.<sup>111</sup> Eatim spent what it believed was necessary. There was no budget for the work.<sup>112</sup> Cost was not a consideration (or problem) for Eatim in terms of what they did.<sup>113</sup>

Eatim did not operate a dedicated tractor/harvester combination.<sup>114</sup> The [69] primary reason being tractors are designed generally for multiple operations. Jobs could not be scheduled so that there was a dedicated tractor/harvester combination.<sup>115</sup>

- <sup>104</sup> Page 307 NOE.
- <sup>105</sup> Page 297 NOE.
- <sup>106</sup> Page 298 NOE.
- <sup>107</sup> Page 391 NOE.
- <sup>108</sup> Page 391 NOE.
- <sup>109</sup> Page 391 NOE.
- <sup>110</sup> Page 348 NOE.
- <sup>111</sup> Page 349 NOE.
- <sup>112</sup> Page 350 NOE. <sup>113</sup> Page 389 NOE.
- <sup>114</sup> Page 298 NOE.
- <sup>115</sup> Page 299 NOE.

[70] He confirmed that Eatim had considered interlocking guards (as a result of the accident and the prohibition notice):<sup>116</sup> "We have been through that process, and we've firmly reached the conclusion that it's just not feasible, practical, possible to interlock the guards to that Harvester". The most obvious reason being the tractor-harvester relationship (the jumper cable system being an easy process to bypass).<sup>117</sup> Mr Balle regarded the system as an onerous,<sup>118</sup> excessive and cumbersome process to go through. It created additional steps which could mean someone going underneath the harvester to remove or unblock an issue.<sup>119</sup> Mr Balle considered that retrofitting of electrical equipment on harvesters was liable to create issues.<sup>120</sup>

[71] Mr Gill's training on the Harvester was "quite a rigorous process".<sup>121</sup> Mr Balle said:

We never anticipated a scenario where somebody could die in it. I mean we, we accept there was risk in the decision making around the guarding that was put in place and the procedures that we had in process for dealing with any issues, any foreign objects of blockages that we felt that that mitigated all those risks **but we never anticipated that it would have fatal – any fatal consequences ... Yes, there was risk of serious injury** [Emphasis added]. We never anticipated there was ever fatality – there are mechanisms in place within the harvester like shear bolts.

[72] If the 'Prohibition Notice' was lifted, Mr Balle would not change anything on the Harvester<sup>122</sup>. Mr Balle confirmed that he was not aware of AS/NZS4024 or the "specifics" the Best Practice Guidelines at time received Eatim received prohibition notice. Mr Balle confirmed Eatim's advice to WorkSafe that the Harvester was as "safe as it could reasonably be made, given the way it is constructed and the use it is put to"<sup>123</sup>. He maintained<sup>124</sup> that the "inching" process (the short abrupt engagement in a controlled manner of the machine to release or help remove the "foreign object, haulm or dirt") needed to take place with the guards off<sup>125</sup>. In terms of clearing the

<sup>123</sup> Page 324 NOE.

<sup>&</sup>lt;sup>116</sup> Page 304 NOE.

<sup>&</sup>lt;sup>117</sup> Page 304 NOE.

<sup>&</sup>lt;sup>118</sup> Page 304 NOE.

<sup>&</sup>lt;sup>119</sup> Page 305 NOE.

<sup>&</sup>lt;sup>120</sup> Page 308 NOE.

<sup>&</sup>lt;sup>121</sup> Page 306 NOE.

<sup>&</sup>lt;sup>122</sup> Page 318 NOE.

<sup>&</sup>lt;sup>124</sup> Page 329 NOE.

<sup>&</sup>lt;sup>125</sup> Page 325 NOE.

Harvester, he considered that there was an absolute need to remove the guards.<sup>126</sup> He considered that there was a difference between the machine running (with guards off) and being started and stopped in an inching process in a very controlled manner.<sup>127</sup> He believed Mr Gill to be very competent in the area of "inching".<sup>128</sup>

[73] Mr Balle disagreed that Mr Antoneivich was not a competent person with regards to guarding. He maintained that Mr Antoneivich was "very best person to undertake that work".<sup>129</sup> He accepted that Eatim did not contact a specialist engineer or guarding expert.<sup>130</sup> Mr Balle felt very comfortable that the work done on the Balle Brothers harvester was applicable to Eatim's situation<sup>131</sup>. The standard the Harvester was brought up to was identical to Balle Brothers. This was "compliant and to the best standard".<sup>132</sup>

[74] Mr Balle did not agree that a trapped key system would only create "slight increase' in time.<sup>133</sup> He confirmed that when Eatim did consult a guarding expert, Mr Frame provided similar views about compliance with the guarding standard. Mr Frame agreed that AS/NZS4024 and the Best Practice Guidelines applied to the harvester "at that point in time".<sup>134</sup>

## Mr Jyatt Master

[75] Mr Master was the managing director of Master & Sons Limited. His operation was a competitor to Eatim. He knew Tim and Eamon Balle as "established growers in the Pukekohe/Bombay region".<sup>135</sup> He operated Hilder harvesters very similar, if not identical to the Harvester. Mr Master said that there was significant co-operation amongst growers in New Zealand. This co-operation commonly occurred in the areas of safety initiatives and bio-security risks. If there are safety initiatives that arise and are found to be practical, this tends to be widely adopted in rapid

<sup>130</sup> Page 360 NOE.

<sup>&</sup>lt;sup>126</sup> Page 340 NOE.

<sup>&</sup>lt;sup>127</sup> Page 337 NOE.

<sup>&</sup>lt;sup>128</sup> Page 338 NOE.

<sup>&</sup>lt;sup>129</sup> Page 359 NOE.

<sup>&</sup>lt;sup>131</sup> Page 360 NOE.

<sup>&</sup>lt;sup>132</sup> Page 362 NOE.

<sup>&</sup>lt;sup>133</sup> Page 364 NOE.

<sup>&</sup>lt;sup>134</sup> Page 374 NOE.

<sup>&</sup>lt;sup>135</sup> Page 396 NOE.

fashion.<sup>136</sup> Mr Master was not an expert in guarding, <sup>137</sup> although he had experience with interlocked guards in his operations "when it was practical to ensure safety". He did not consider that it was practical to secure the side guarding of the Hilder Harvester. Mr Mains' view "could not be practically implemented in a way that the harvesters could still function as required in order harvest potatoes effectively".<sup>138</sup> If it was practical to fit interlocking guards, his operation would do so. Self-propelled harvesters could be interlocked and made a lot safer than towed harvesters.<sup>139</sup>

[76] Mr Master said the towed harvesters that he operated have "exactly the same guarding" as Eatim's harvester. New harvesters he had purchased in the last few years came with "side guards and anti-luce fasteners".<sup>140</sup> It represented the "best possible means to ensure safety on harvesters when combined with rules and policies".<sup>141</sup> He said that the key to ensure safe potato harvesting was to have a competent person in control.<sup>142</sup>

[77] He was not aware of any operation that had a dedicated tractor harvester combination. It was not practical to have a dedicated tractor for potato harvesting.<sup>143</sup> He was concerned about lost keys<sup>144</sup> if the trapped key system was adopted. Frequently more than one guard needed to be removed at once. A system where only one guard can be removed at a time was not practical.<sup>145</sup> An exchange box would require at least 10 different keys.<sup>146</sup> Because constant access was required when setting up, adjusting, and clearing" the Harvester, an interlocking guard using the trapped key system would not allow this to occur.<sup>147</sup> Because the machine needed to be "inched", if the exchange box was added he said that "what is already a slow process would add another cumbersome step".<sup>148</sup> There would be a strong incentive for workers to go under the machine to check the roller areas while the machine was

<sup>&</sup>lt;sup>136</sup> Page 397 NOE.

<sup>&</sup>lt;sup>137</sup> Page 397 NOE.

<sup>&</sup>lt;sup>138</sup> Page 398 NOE.

<sup>&</sup>lt;sup>139</sup> Page 398 NOE.

<sup>&</sup>lt;sup>140</sup> Page 400 NOE.

 <sup>&</sup>lt;sup>141</sup> Page 399 NOE.
<sup>142</sup> Page 399 NOE.

<sup>&</sup>lt;sup>143</sup> Page 400 NOE.

<sup>&</sup>lt;sup>144</sup> Page 403 NOE.

<sup>&</sup>lt;sup>145</sup> Page 404 NOE.

<sup>146</sup> D 404 NOE

<sup>&</sup>lt;sup>146</sup> Page 404 NOE.

<sup>&</sup>lt;sup>147</sup> Page 405 NOE.

<sup>&</sup>lt;sup>148</sup> Page 405 NOE.

still running, which would expose workers to an even greater risk of harm.<sup>149</sup> He was fully aware of the short cuts that people can take on these harvesters if they were allowed to: If workers are able to take shortcuts and taking the correct way to do the task is too cumbersome, they would inevitably take the short cut.<sup>150</sup> Retrofitting wiring onto harvesting implements does not work reliably and only remains functional for a limited time, and its failure was unpredictable.<sup>151</sup> The jumper system (if a second tractor was used) was no safer and more complicated.<sup>152</sup> It would add difficulty to harvesting which would prompt staff to bypass the safety system.<sup>153</sup> Even if the trapped key system could be added to the Harvester, it would create a burdensome task for the operator each time they needed access to the haulm rollers and draper web, and likely need many different keys to unlock the various guards.<sup>154</sup> The shortest solution to access the haulm rollers was going to be underneath the machine to reach up in to it.<sup>155</sup> It was commonly the case that the machine needed to be running with the guards off to perform observations of what is going on with the machine.<sup>156</sup>

[78] The interlocking solution offered by Mr Mains, had "not been implemented within the potato industry that he was aware of".<sup>157</sup> In his opinion, the established and safest way to operate towed harvesters is to have guards exactly like Eatim ("consistent with what is regarded as best practice in the potato industry")<sup>158</sup> and an established system where a trained driver has sole control over the power to the Tractor.<sup>159</sup> He considered the only steps that can be practically taken to ensure that someone does not intentionally operate the Harvester with the guards off, and therefore allow access to the dangerous areas, is to have the operation under the control of the driver who has been trained not to allow this to occur.<sup>160</sup> The guards installed by Eatim were the

- <sup>149</sup> Page 406 NOE.
- <sup>150</sup> Page 407 NOE.
- <sup>151</sup> Page 407 NOE.
- <sup>152</sup> Page 408 NOE.
- <sup>153</sup> Page 408 NOE.
- <sup>154</sup> Page 409 NOE.
- <sup>155</sup> Page 409 NOE.
- <sup>156</sup> Page 409 NOE.
- <sup>157</sup> Page 409 NOE.
- <sup>158</sup> Page 409 NOE.
- <sup>159</sup> Page 410 NOE.
- <sup>160</sup> Page 410 NOE.

"safest practical option for harvesting operations". Mr Master said that the trapped key system was not a practical option.<sup>161</sup>

[79] Mr Master was not able to say whether a trapped key system could be put on a harvester of not. He accepted that safe operation procedures and a safe system of work<sup>162</sup>, was at the bottom of the hierarchy: the last resort (after both elimination and isolation)<sup>163</sup>. He considered the best safety system was "training, training, training":<sup>164</sup> There's always an idea and we are always exploring, but if you can't eliminate, if you can't isolate, you minimise it by the best practices and that's done through training, tr

[80] Mr Master said if there was a practical way of doing it to achieve what we need to achieve his operation would look very closely at it. He accepted that the idea of just copying what everyone else is doing was potentially flawed: There's flaws in everything.<sup>166</sup> He accepted, that if everyone in the industry has copied everyone else, they could be making the same mistakes.<sup>167</sup>

[81] Mr Master agreed that harvesters are extremely dangerous machinery which need to be managed well to protect workers.<sup>168</sup> He agreed that making machinery safe didn't mean relying on worker common sense. It meant making sure its physically impossible for harm to occur through guarding.<sup>169</sup> He confirmed that although Mr Mains had made a recommendation to Potatoes New Zealand in November 2018 that machines should use guarding which prevents the machine from being run with the guards off,<sup>170</sup> his operation continued to use the same guarding on its harvesters.<sup>171</sup>

- <sup>167</sup> Page 439 NOE.
- <sup>168</sup> Page 441 NOE.
- <sup>169</sup> Page 442 NOE.

<sup>&</sup>lt;sup>161</sup> Page 410 NOE.

<sup>&</sup>lt;sup>162</sup> Minimisation.

<sup>&</sup>lt;sup>163</sup> Page 418 NOE.

<sup>&</sup>lt;sup>164</sup> Page 433 NOE.

<sup>&</sup>lt;sup>165</sup> Page 438 NOE.

<sup>&</sup>lt;sup>166</sup> Page 438 NOE.

<sup>&</sup>lt;sup>170</sup> Page 443 NOE.

<sup>&</sup>lt;sup>171</sup> Page 445 NOE.

Mr Master candidly admitted that he had a "vested interest"<sup>172</sup> in these proceedings. Cost was not an issue, however, if there was a "good practical way of doing it".<sup>173</sup>

[82] Mr Master accepted it was possible to "inch" without having the guards off, although you would not have "clear vision".<sup>174</sup> He accepted that if making workers safe, one tractor <u>could</u> be paired to one harvester.<sup>175</sup> It was also possible to have a reserve tractor fitted with the trapped key system.<sup>176</sup> It was also manageable for his organization to supervise the location and security of the jumper leads.<sup>177</sup> Mr Master agreed that it wasn't hard for a worker to take off the quick release guards at any time while the machine was running and expose themselves to the significant hazards of the moving parts inside the machine.<sup>178</sup> He agreed this should not happen.<sup>179</sup> He agreed that with the trapped key system a worker would not be able to access the guards while the machine was running.<sup>180</sup>

### Mr Nicholas Frame

[83] Mr Frame<sup>181</sup> inspected the Harvester, with the prohibition notice attached in March 2018. In July 2019 he observed a similar Hilder harvester operating at Pukekawa.<sup>182</sup> Despite his initial advice to Eatim in March 2018, his opinion was that it was not reasonably practicable to guard the Harvester in accordance with AS/NZS4024 using guards interlocked to the harvester's energy source, to ensure that the guarding was incapable of removal until the harvester's energy source was isolated and locked in a safe condition.<sup>183</sup> Moreover, despite his advice to Eatim in March 2018, that AS/NZS4024 was the applicable standard, and that the general approach to machinery guarding in New Zealand was to use the Best Practice Guidelines and

<sup>183</sup> Page 463 NOE.

<sup>&</sup>lt;sup>172</sup> Page 448 NOE. Mr Brookie submitted that Mr Master was not an impartial expert witness in accordance with the Code of conduct for expert witnesses.

<sup>&</sup>lt;sup>173</sup> Page 448 NOE.

<sup>&</sup>lt;sup>174</sup> Page 425 NOE.

<sup>&</sup>lt;sup>175</sup> Page 449 NOE

<sup>&</sup>lt;sup>176</sup> Page 449 NOE.

<sup>&</sup>lt;sup>177</sup> Page 451 NOE.

<sup>&</sup>lt;sup>178</sup> Page 452 NOE.

<sup>&</sup>lt;sup>179</sup> Page 452 NOE.

<sup>&</sup>lt;sup>180</sup> Page 453 NOE.

<sup>&</sup>lt;sup>181</sup> Mr Frame is a mechanical engineer specialising in machinery and plant safety consulting engineering, site safety audits, machinery guarding design and management of guarding fabrication, supply and installation. He provides those services through his company Framework Design Limited. <sup>182</sup> Part of Mr Masters' operation.

AS/NZ4024, Mr Frame considered that it was not the applicable standard for this harvester. He considered that the applicable standard "at the time" was AS/NZS2153.<sup>184</sup>

[84] Mr Frame considered that a fundamental consideration when designing effective guarding was whether any guarding could be circumvented, which did not ensure safety or could even make a machine less safe:<sup>185</sup> Human behaviour means workers will frequently take the easiest strategy to complete their tasks.<sup>186</sup> The reason interlocking guarding was used is to prevent workers taking guards off and leaving them off to make their task easier. Mr Frame considered that having interlocking guards on the Harvester would mean that workers would take "an easier path" to clean the machine (through a route not hindered by a guard) by reaching or going under the machine, which would be inherently dangerous.<sup>187</sup>

[85] Mr Frame considered that there were also other problems with the trapped key system. This included not providing suitable failsafe methods to isolate all energy sources in the harvester.<sup>188</sup> He considered that because cleaning and "inching" needed to take place so frequently, the time involved with every "inching" using a trapped key system would dramatically increase. It would mean that it was not possible to harvest in an economically viable way.<sup>189</sup>

[86] Mr Frame considered that adopting a safe system of work was the most appropriate safety step in accordance with the Best Practice Guidelines. Having viewed a harvester being cleaned at the Pukekawa site (with the guards off), he considered that this could still be done safely with the guards removed, provided all personnel were clear and the tractor was turned off and the tractor key removed. It would be the tractor driver's responsibility to ensure that all personnel were clear during the inching process and that all guards were back in position before resuming harvesting operations. He considered this to be a safe system of work.<sup>190</sup>

<sup>&</sup>lt;sup>184</sup> AS/NZS 2153:1:1997: Tractors and machinery for agricultural and forestry.

<sup>&</sup>lt;sup>185</sup> Page 464 NOE.

<sup>&</sup>lt;sup>186</sup> Page 464 NOE.

<sup>&</sup>lt;sup>187</sup> Page 464 NOE.

<sup>&</sup>lt;sup>188</sup> Page 465 NOE.

<sup>&</sup>lt;sup>189</sup> Page 466 NOE.

<sup>&</sup>lt;sup>190</sup> Section 10 of the Best Practice Guidelines.

[87] Mr Frame concluded that while it would be <u>ideal</u> to have the Harvester guarded using interlocked guarding<sup>191</sup> it was not able to be done in a practical way which was effective and still allowed their intended use given the technology available. He considered that the implementation of a safe system of work was the <u>best</u> way to ensure safety.<sup>192</sup> Ultimately, he considered that it was not reasonably practicable to use guarding interlocked the Harvester's energy source.<sup>193</sup>

[88] He accepted this position had changed from his initial advice to Eatim. The reasons for this included him not being aware that there was not a dedicated tractor harvester combination.<sup>194</sup> If several tractors were required, that would require a "complex system" involving "jumpers",<sup>195</sup> which would still involve oversight and would not be much different to the responsibility that the operator already had.<sup>196</sup> It also included the frequency that the guards were needed to be removed.<sup>197</sup> It could be "cumbersome, clumsy and time-consuming".<sup>198</sup> These were two of the main reasons that made Mr Frame think that the trapped key system would not be a practical way to guard the harvester. His knowledge of AS/NZS2153 came after he had already formed that view.<sup>199</sup>

[89] Mr Frame accepted that his evidence amounted to him saying "Yes in my opinion I am happy for this Harvester to be used with quick release fasteners, knowing that they are removed when this machine was in operation".<sup>200</sup> He was happy with no interlocking if there was a safe system of work.<sup>201</sup> He accepted that the trapped key system could be done more easily if there was a dedicated tractor harvester combination.<sup>202</sup> He agreed that safety mandates that it would be a "good option" to pair one tractor to a harvester.<sup>203</sup> He modified his position on AS/NZ4024 in that it was "still a good starting point, which still had information and concepts which should

<sup>199</sup> Page 470 NOE.

<sup>&</sup>lt;sup>191</sup> Mr Mains agrees.

<sup>&</sup>lt;sup>192</sup> Page 468 NOE. Mr Mains disagreed.

<sup>&</sup>lt;sup>193</sup> Page 463 NOE.

<sup>&</sup>lt;sup>194</sup> Page 470 NOE.

<sup>&</sup>lt;sup>195</sup> Page 470 NOE.

<sup>&</sup>lt;sup>196</sup> Page 473 NOE.

<sup>&</sup>lt;sup>197</sup> Page 470 NOE.

<sup>&</sup>lt;sup>198</sup> Page 470 NOE.

<sup>&</sup>lt;sup>200</sup> Page 476 NOE.

<sup>&</sup>lt;sup>201</sup> Page 491 NOE.

<sup>&</sup>lt;sup>202</sup> Page 477 NOE.

<sup>&</sup>lt;sup>203</sup> Page 477 NOE.

be used if they could be".<sup>204</sup> AS/NZ4024 was still the standard "which we would recognise as being the one to try and meet if possible".<sup>205</sup> Mr Frame conceded that despite his assertion that AS/NZS2153 was the applicable standard, he had never seen or heard of it before.<sup>206</sup>

[90] Mr Frame agreed "in principle" that the Best Practice Guidelines and AS/NZ4024 mandated interlocking to these machines.<sup>207</sup> He agreed that the trapped key system could be put on this machine, from an engineering point of view.

[91] Mr Frame agreed it was not good enough as a general proposition to rely on a rule saying don't touch where that sort of access is required<sup>208</sup> and that if you were *not* going to put interlocking on the Harvester, you would need a "really good reason". He considered the risk that workers might be forced to go underneath the machine to clean it, *one* such reason. He considered the need to constantly "*inch*" without guards on to be another. He agreed however, that inching can happen with the guards on "most of the time".<sup>209</sup> He also agreed that the best place to clean was from the top<sup>210</sup> through the side guards and that you could not get underneath and see up into the machine<sup>211</sup>. He had never seen anyone try and clean a machine from underneath.<sup>212</sup>

[92] Mr Frame agreed that if the trapped key system was in place, Mr Gill would not have been able to access the machine, with the guards off while the machine was running.<sup>213</sup> He agreed that in his role as a machinery safety engineer that AS/NZ4024 was the standard he used most often.<sup>214</sup> He agreed that, when he viewed the Harvester in March 2018, he "immediately had a concern with the fact that the workers could take the guards off while it was running"<sup>215</sup>. He agreed that ideally this machine

- <sup>204</sup> Page 478 NOE.
- <sup>205</sup> Page 478 NOE.
- <sup>206</sup> Page 482 NOE.
- <sup>207</sup> Page 523 NOE.
- <sup>208</sup> Page 485 NOE.
- <sup>209</sup> Page 527 NOE.
- <sup>210</sup> Page 528 NOE.
- <sup>211</sup> Page 528 NOE.
- <sup>212</sup> Page 532 NOE.
- <sup>213</sup> Page 530 NOE.
- <sup>214</sup> Page 539 NOE.
- <sup>215</sup> Page 539 NOE.

should have interlocking on it:<sup>216</sup> It would be ideal to have potato harvesters like the one at issue guarded using interlocked guarding.<sup>217</sup>

## Mr Brendan Balle

[93] Mr Balle gave evidence that Balle Brothers conducted a safety review in 2010 (which took several years) to identify ways in which it was possible to install guarding to try and make the harvesters safer.<sup>218</sup> The Harvester (and its guarding)<sup>219</sup> was for all intents and purposes "the same if not identical" to the ones operated by Balle Brothers. After the review, Balle Brothers considered it impractical to change the side guarding which had been installed earlier, in the late 1990s.

[94] Mr Balle referred to a visit to the Ohakune operation by WorkSafe Inspector Mr Nick Barclay in 2017. This was to look at a Hilder Harvester (and the guarding): He specifically wanted to look at the side guarding on the work platform. It was related to an accident on another property, with another grower and Mr Barclay wanted to see what practical steps Balle Brothers were taking for guarding.<sup>220</sup> This took place out in the field. Mr Barclay was said to be "impressed with the guarding".<sup>221</sup> There was no notice left for Balle Brothers to do anything. He advised Mr Eamon Balle that "everything was all good".<sup>222</sup> He considered the visit probably endorsed what they were doing as safe, practical, and reasonable.<sup>223</sup>

[95] Mr Balle considered that safe operating procedures, turning the tractor off and removing the key before removing guards on the harvester, to be the most practical way of operating the machine safely. He did <u>not</u> consider that it was a reasonably foreseeable risk that workers (for reasons such as fatigue, frustration, or time pressures) may be tempted to or would go in through the side guards when the machine was running.<sup>224</sup>

<sup>&</sup>lt;sup>216</sup> Page 541 NOE.

<sup>&</sup>lt;sup>217</sup> Page 542 NOE.

<sup>&</sup>lt;sup>218</sup> Page 3 NOE (31 October 2022).

<sup>&</sup>lt;sup>219</sup> Page 3 NOE (31 October 2022).

<sup>&</sup>lt;sup>220</sup> Page 9 NOE (31 October 2022).

<sup>&</sup>lt;sup>221</sup> Page 8 NOE (31 October 2022).

<sup>&</sup>lt;sup>222</sup> Page 9 NOE (31 October 2022). Notably this visit by WorkSafe in 2017 was not mentioned by Eatim in any part of its correspondence with WorkSafe in 2018.

<sup>&</sup>lt;sup>223</sup> Page 19 NOE (31 October 2022).

<sup>&</sup>lt;sup>224</sup> Page 17 NOE (31 October 2022).

### The Ohakune visit by WorkSafe

[96] I deal briefly with the Ohakune visit by WorkSafe in 2017 at this stage. I do not consider that Mr Barclay's visit to inspect the Balle Brothers harvester has any relevance to the issue of liability in this case. Mr Brendan Balle's evidence on this point was vague. He was unclear whether this was an "audit". He accepted that he may have been told that it wasn't.<sup>225</sup> He also accepted that the visit was informal and only lasted around 35 minutes. He received nothing in writing from WorkSafe following the visit. Mr Eamon Balle was also unaware if the visit was an audit.<sup>226</sup> Mr Brendan Balle's advice to him that "everything was all good"<sup>227</sup>, could hardly be regarded as grounds to suggest that everything that Eatim was contemplating in respect of the retro-fit of the Harvester was adequate. Notably, Eatim made no mention of WorkSafe's visit, influencing its decision-making processes, in any of its correspondence with WorkSafe during the investigation.

### Discussion

## Industry standards: What were others in the industry doing?

[97] At first blush, there appeared to be some force in Eatim's submission that no other potato harvesting operation in New Zealand, with perhaps the exception of the Grimme harvester observed by Mr Mains,<sup>228</sup> was using interlocking guarding on its towed harvesters. Was it reasonably practicable then, for Eatim to have employed something that no other New Zealand operation was using?

[98] I am of course reminded that industry norms and industry standards are not the same thing. The standard is not to be judged by what others were doing but what they should have been doing.<sup>229</sup> Notably, of the machines<sup>230</sup> observed by Mr Mains during the six seminars held by Potatoes New Zealand,<sup>231</sup> missing or incomplete guards were

<sup>&</sup>lt;sup>225</sup> Page 13 NOE.

<sup>&</sup>lt;sup>226</sup> Page 375 NOE.

<sup>&</sup>lt;sup>227</sup> Page 9 NOE (31 October 2022). Notably this visit by WorkSafe in 2017 was not mentioned by Eatim in any part of its correspondence with WorkSafe in 2018.

<sup>&</sup>lt;sup>228</sup> When he was working with Potatoes New Zealand.

<sup>&</sup>lt;sup>229</sup> Civil Aviation Authority v The Alpine Group Limited [2022] NZDC 20040 at [84].

<sup>&</sup>lt;sup>230</sup> All tractor towed and powered. Page 2 Exhibit C.

<sup>&</sup>lt;sup>231</sup> Exhibit C. Held between 24 and 30 August 2018.

found on every machine; fixed guards were generally not secured in the manner required (AS/NZS4024) and none of the guards that he assessed guaranteed the machinery was stopped before the guard could be opened or removed.

[99] Despite, acknowledgement that harvesters are extremely dangerous machinery which need to be managed well to protect workers,<sup>232</sup> and declarations that safety was taken seriously, there seemed to me to be an over reliance on safe operating procedures and a safe system of work: the last resort in the hierarchy of controls. Mr Master accepted this.<sup>233</sup> Mr Brendan Balle gave one such example of this phenomenon: [T]he instruction, safe operating procedure is to turn the tractor off and remove the key ... it's a rule which is the most practical way of operating the machine safely".<sup>234</sup> He appeared to be quite unwilling to accept that despite rules being in place, workers trained would still break them. Mr Master provided another example. He considered the best safety system was "training, training, training".<sup>235</sup> He considered that the established and safest way to operate towed harvesters<sup>236</sup> was to have an established system where a trained driver (like Mr Gill) had sole control over the power to the tractor.<sup>237</sup>

[100] I accept Mr Mains' reason for the trapped key system is to remove the human dimension from the equation:<sup>238 239</sup>

Well because we have to stop people doing what they shouldn't do. So, we have to stop people accessing – it would absolutely stop them accessing equipment that has to be stopped before they, before they get into it. So how do we do that? We can tell them not to do it, but we can't trust them, fundamentally ... you just can't trust people. When the pressure is on things happen. So, you've got to make it impossible for this to happen.

[101] Mr Frame agreed that duty holders can't just assume that workers are going to follow rules. They need to consider the chances that someone will breach those rules.

<sup>&</sup>lt;sup>232</sup> Page 441 NOE.

<sup>&</sup>lt;sup>233</sup> Page 418 NOE.

<sup>&</sup>lt;sup>234</sup> Page 16 NOE (31 October 2022).

<sup>&</sup>lt;sup>235</sup> Page 433 NOE.

<sup>&</sup>lt;sup>236</sup> As well as having guards exactly like Eatim ("consistent with what he regarded as best practice in the potato industry")

<sup>&</sup>lt;sup>237</sup> Page 410 NOE.

<sup>&</sup>lt;sup>238</sup> WorkSafe v Department of Corrections [2017] NZDC 819 at [17] and [18].

<sup>&</sup>lt;sup>239</sup> Waimea Sawmillers Limited v WorkSafe New Zealand [2016] NZHC 915.

It needed to be anticipated that a worker may cut corners.<sup>240</sup> The guidance in the Best Practice Guidelines was to try to anticipate unexpected or irresponsible behaviour.<sup>241</sup> Workers taking shortcuts and acting contrary to instructions was something that was well known in the industry. Mr Master was "fully aware" of the short cuts that people could take on harvesters if they were allowed to.<sup>242</sup> This, in my view, is obvious. That is so, notwithstanding Mr Brendan Balle's assertion, that because someone had been trained not to, it was not a reasonably foreseeable risk that workers may be tempted to access the machine (through the side guards) while it was running.

[102] A good health and safety system, addressing not only hazards and risks, but human factors and errors is required to ensure safety.<sup>243</sup> A PCBU's duty extends to guarding against risks that may arise, such as a worker acting contrary to instructions, so long as they are reasonably foreseeable. In assessing the risk of harm posed by inadequate guarding (guarding that could be removed while the machine was still running), Eatim needed to be mindful of the fact that even trusted, rigorously trained and experienced employees, like Mr Gill, could foreseeably take shortcuts and behave contrary to common sense when working on the Harvester.<sup>244</sup> Unfortunately, in this case, Eatim was not so mindful.

[103] There is some force in Mr Brookie's submission that there appeared to be a <u>"can't do"</u> attitude within the industry. Industry inertia may continue to prevent the adoption of the required safety measures. Mr Master was one such example. Despite declaring "if it was practical to fit interlocking guards, his operation would do so", he confirmed that, notwithstanding Mr Mains recommendation to Potatoes New Zealand <sup>245</sup> that machines should have guarding which prevents the machine from running with the guards off,<sup>246</sup> his operation still continued to use the same guarding on its harvesters.<sup>247</sup> Despite Mr Gills death, and Potatoes NZ urging growers to stop and look what can be done to ensure that the likes of this accident does not occur to another

<sup>&</sup>lt;sup>240</sup> Page 490 NOE.

<sup>&</sup>lt;sup>241</sup> Page 529 NOE.

<sup>&</sup>lt;sup>242</sup> Page 407 NOE.

<sup>&</sup>lt;sup>243</sup> WorkSafe v Department of Corrections [2017] NZDC 819 at [17] and [18].

<sup>&</sup>lt;sup>244</sup> Waimea Sawmillers Limited v WorkSafe New Zealand [2016] NZHC 915.

<sup>&</sup>lt;sup>245</sup> In November 2018.

<sup>&</sup>lt;sup>246</sup> Page 443 NOE.

<sup>&</sup>lt;sup>247</sup> Page 445 NOE.

worker, made no attempt to even try and install the trapped system key on one of its harvesters. The same can also be said of Eatim and Balle Brothers. It was particularly telling that Mr Brendan Balle, remained unaware of the trapped key system.<sup>248</sup>

[104] Moreover, there also appeared to be a complete lack of knowledge and understanding about the guidance in the Best Practice Guidelines and AS/NZS4024. Mr Antonievich was not aware of the Best Practice Guidelines and had not used it before.<sup>249</sup> Mr Eamon Balle had not become aware of AS/NZS4024 until after Eatim received the 'Probation Notice'.<sup>250</sup> Nor was he "entirely familiar" with the Best Practice Guidelines.<sup>251</sup> Mr Master was not aware of the Best Practice Guidelines prior to this case.<sup>252</sup>

[105] It is one thing to pay lip service to the importance of safety around dangerous machines. It appeared to be quite another thing to do anything meaningful to isolate the risks involved. The evidence demonstrated to me that the potato harvesting industry, despite utterances to the contrary, has not seriously addressed the problems which led to this prosecution.<sup>253</sup> I agree that industry standards are not to be judged by what others industry were doing, but what they should have been doing. Eatim's argument, that because no one else in the industry was doing it, it was not reasonably practicable for Eatim to do it, therefore falls away.

### No dedicated tractor harvester pairings

[106] The same must apply to the argument that the trapped key system will not work because harvesting operations do not have dedicated tractor harvester pairings. Mr Master gave evidence (contrary to his brief of evidence<sup>254</sup> and the evidence of Mr Eamon Balle)<sup>255</sup> that, to make workers safe his operation <u>could</u> pair one tractor with a harvester.<sup>256</sup> The trapped key system <u>can</u> accommodate multiple tractors. I accept Mr

<sup>&</sup>lt;sup>248</sup> Page 20 NOE (31 October 2022).

<sup>&</sup>lt;sup>249</sup> Page 21 NOE.

<sup>&</sup>lt;sup>250</sup> Page 320 NOE.

<sup>&</sup>lt;sup>251</sup> Page 359 NOE.

<sup>&</sup>lt;sup>252</sup> Page 418 NOE.

<sup>&</sup>lt;sup>253</sup> Department of Labour v Wastecare Ltd, District Court Palmerston North, 23 October 1996.

<sup>&</sup>lt;sup>254</sup> At paragraph [35].

<sup>&</sup>lt;sup>255</sup> Page 371 NOE.

<sup>&</sup>lt;sup>256</sup> Page 449 NOE

Mains' evidence that even with the additional layer of complexity the jumper system (involving two or more tractors) was still workable and "vastly improved" over the status quo.<sup>257</sup> Notably, Mr Master accepted that it was "perfectly manageable" for his organization to supervise the jumper leads.<sup>258</sup> I agree that a jumper system, if required, can work on these machines, but with an element of management oversight. Even to the extent that the system could be abused, and lead to the removal of the guards during operation, I agree that the scope for abuse is far more limited than what is currently possible.

### The applicable guidance and knowledge available at the time?

[107] There was no specific guidance on which Eatim could rely to retrofit guards on the Harvester. However, I accept Mr Mains' evidence that given the hazard in this case related to the inner conveyers and rollers within the machine, that general principles regarding machine guarding were apposite.

[108] I accept Mr Mains' evidence that the applicable guidance for guarding of machinery in New Zealand at the relevant time was contained in the Best Practice Guidelines ("important applicable industry documentation which growers must do their utmost to comply with" and the "go to" source for guidance<sup>259</sup> on issues such as guarding the harvester) and AS/NZS4024. Notably the Best Practice Guidelines recommend that duty holders refer to AS/NZS4024 as the current state of knowledge for safeguarding machinery;<sup>260</sup> for providing "key guidance" for what "safety looks like when using machinery"<sup>261</sup> and that any modifications should only be done by a person with knowledge of AS/NZS4024.<sup>262</sup> Notwithstanding, that a failure to comply with AS/NZS4024 does not per se constitute a failure to comply with the provisions of the Act, it may nevertheless be considered in the context of an allegation that the defendant was in breach.<sup>263</sup>

<sup>&</sup>lt;sup>257</sup> Page 172 NOE.

<sup>&</sup>lt;sup>258</sup> Page 451 NOE.

<sup>&</sup>lt;sup>259</sup> Page 74 NOE.

<sup>&</sup>lt;sup>260</sup> Page 8 of Exhibit 24.

<sup>&</sup>lt;sup>261</sup> Page 8 of Exhibit 24.

<sup>&</sup>lt;sup>262</sup> Page 85 NOE.

<sup>&</sup>lt;sup>263</sup>WorkCover Authority of NSW v Arbor Products International (Australia) Pty Ltd [2000] NSWIRComm 12.

[109] Mr Mains' view on the applicable guidance at the time is also consistent with Mr Bunyan's evidence<sup>264</sup> and Mr Frame's initial report to Eatim.<sup>265</sup> Having viewed the machine, Mr Frame was in little doubt that AS/NZS4024 applied, and that interlocking should be adopted. He also confirmed that in his role as a machinery safety engineer, AS/NZS4024 was the document and the standard he used most often.<sup>266</sup>

[110] Certainly, if the applicable standard was AS/NZS2153 (which addressed safety in agricultural machinery;<sup>267</sup> which did not mandate interlocking ... guards<sup>268</sup>, and did not apply to machinery manufactured before 2013)<sup>269</sup> rather than AS/NZS4024<sup>270</sup> Mr Frame, was not aware of AS/NZS2153: He had never seen or heard of it before.<sup>271</sup> I record that I found this aspect of the Mr Frame's evidence to be quite detrimental to Eatim's case and his own expert opinion. Moreover, Mr Mains did not consider that AS/NZS2153 were relevant, because they did not deviate from AS/NZS4024 in any meaningful way that was material to his trapped key system recommendation.<sup>272</sup> I do not consider that AS/NZS2153 was the applicable standard at the time. I am satisfied that the appropriate guidance was in the Best Practice Guidelines and AS/NZS4024. I am also satisfied that this was knowledge available to Eatim at the time.<sup>273</sup>

## The trapped key system as a means of isolating the risk

[111] I also accept Mr Mains' evidence that the trapped key system<sup>274</sup> was "absolutely consistent with"<sup>275</sup> the guidance in the Best Practice Guidelines and the Best Practice Guidelines flowchart.<sup>276</sup> It was most appropriate means of isolating<sup>277</sup>

<sup>&</sup>lt;sup>264</sup> Page 198 NOE.

<sup>&</sup>lt;sup>265</sup> Exhibit 31.

<sup>&</sup>lt;sup>266</sup> Page 539 NOE.

<sup>&</sup>lt;sup>267</sup> Page 463 NOE.

<sup>&</sup>lt;sup>268</sup> Page 465 NOE.

<sup>&</sup>lt;sup>269</sup> Page 511 NOE.

<sup>&</sup>lt;sup>270</sup> Page 463 NOE.

<sup>&</sup>lt;sup>271</sup> Page 482 NOE until he was referred to it by Mr White.

<sup>&</sup>lt;sup>272</sup> Page 152 NOE.

<sup>&</sup>lt;sup>273</sup> Section 22(c)(ii) and (d) of the Act.

<sup>&</sup>lt;sup>274</sup> And which was supported by Mr Bunyan.

<sup>&</sup>lt;sup>275</sup> Page 96 NOE.

<sup>&</sup>lt;sup>276</sup> Page 63 of Exhibit 24.

<sup>&</sup>lt;sup>277</sup> Section 22(c)(ii) of the Act.

the risk. Mr Frame accepted as correct, Mr Mains' contention that the flowchart required interlocking.<sup>278</sup>

[112] There was little dispute that the trapped key system <u>could</u> be fitted to the harvester. It would be effective in preventing access to the machine while it was still running. The cost would not be high. It would not prevent the machine from functioning as it should. Importantly, it would not create a dramatic increase in harvesting time<sup>279</sup>: Its necessary to be slightly inconvenienced to achieve safety.<sup>280</sup> I agree. I also agree that it is highly unlikely that the trapped key system would force workers underneath the machine to circumvent the interlocked guards. I consider this concern to be wholly overstated and unrealistic.

[113] Mr Frame agreed that the Best Practice Guidelines and AS/NZS4024 mandated interlocking "in principle".<sup>281</sup> He agreed that a trapped key system "done properly" can be put on this machine.<sup>282</sup> He agreed there would not be a dramatic increase in harvesting time (even with the "inching process").<sup>283</sup> Mr Master also accepted that it was possible to "inch" without the guards off, the majority of the time<sup>284</sup>. Mr Frame agreed that if a trapped key system had been in place, it would not have possible for Mr Gill to have been drawn into the machine's counter-rotating rollers.<sup>285</sup> Mr Frame, confirming the position of both guarding experts, agreed that it would be <u>ideal</u> to have potato harvesters like the one in issue guarded using interlocked guarding.<sup>286</sup>

[114] As matters transpired, there did not appear to be any real dispute that the trapped key system could be fitted to the harvester (by a suitably qualified person) and relatively cost effectively. I therefore do not accept Eatim's submission that a trapped key system was simply an invention.<sup>287</sup> Mr Frame, himself provided Eatim with information and diagrams on trapped key systems in March 2018. This included the

<sup>&</sup>lt;sup>278</sup> Page 520 NOE.

<sup>&</sup>lt;sup>279</sup> Page 523 NOE.

<sup>&</sup>lt;sup>280</sup> Page 167 NOE.

<sup>&</sup>lt;sup>281</sup> Page 523 NOE.

<sup>&</sup>lt;sup>282</sup> Page 484 NOE.

<sup>&</sup>lt;sup>283</sup> Page 523 NOE.

<sup>&</sup>lt;sup>284</sup> Page 425 NOE.

<sup>&</sup>lt;sup>285</sup> Page 530 NOE.

<sup>&</sup>lt;sup>286</sup> Page 542 NOE.

<sup>&</sup>lt;sup>287</sup> Which does not satisfy the definition of s 22 of HASWA of what is available and suitable.

"Rockwell Guardmaster", "Fortress", "Haake" and "Castell"<sup>288</sup> brands which were available in New Zealand.

## Copying another duty holder

[115] Despite, Eatim's confidence that he was the "very best person to undertake that work"<sup>289</sup> and his "high level of knowledge and competence around machine guarding"<sup>290</sup> Mr Antoneivich was <u>not</u> a guarding expert. Eatim did not contact a specialist engineer or guarding expert.<sup>291</sup> It chose to copy another duty holder, without discussion or reference to AS/NZS4024.<sup>292</sup> This followed a 10-minute conversation.<sup>293</sup> It involved copying guarding, that "looked like it could do the job".<sup>294</sup> As Mr Mains stated: The danger in copying another duty holder is that you copy their mistakes.<sup>295</sup> Mr Master also accepted that just copying what everyone else was doing was potentially flawed.<sup>296</sup> He also accepted, that if everyone in the industry has copied everyone else, they could well be making the same mistakes.<sup>297</sup>

[116] Clearly the modifications on the Harvester were not made by a competent person with knowledge of AS/NZS4024.<sup>298</sup> As Mr Mains stated:

The risk is ... something has been done with good intentions may in fact not be safe and people may be lulled into thinking that they have a safe machine when in fact they don't.

[117] Although well intentioned, I agree with Mr Mains that this is where Eatim have fallen into error. Notably, when Eatim did contact a guarding expert, the immediate advice received was that AS/NZS4024 applied and that the trapped key system was appropriate.

<sup>&</sup>lt;sup>288</sup> Page 7 Exhibit 31.

<sup>&</sup>lt;sup>289</sup> Page 359 NOE.

<sup>&</sup>lt;sup>290</sup> Page 9 Exhibit 22.

<sup>&</sup>lt;sup>291</sup> Page 360 NOE.

<sup>&</sup>lt;sup>292</sup> Page 60 NOE.

<sup>&</sup>lt;sup>293</sup> Page 42 NOE.

<sup>&</sup>lt;sup>294</sup> Page 42 NOE.

<sup>&</sup>lt;sup>295</sup> Page 107 NOE.

<sup>&</sup>lt;sup>296</sup> Page 438 NOE.

<sup>&</sup>lt;sup>297</sup> Page 439 NOE.

<sup>&</sup>lt;sup>298</sup> Page 85 NOE.

## Result

## The third element

[118] The need to adequately guard machinery is fundamental and long recognised.<sup>299</sup> The risks associated with the moving parts of the harvester are well known. They are not in dispute.<sup>300</sup> I am satisfied that Eatim failed to adequately guard the harvester in which Mr Gill died. As a result, the foreseeable, if not obvious risk, of death or serious harm as a result of becoming entangled in the moving parts of the Harvester was realised.<sup>301</sup> Like any other worker, he could access the Harvester while it was still running. When assessing the risk of harm posed by the installation of quick release guarding, Eatim failed to recognise<sup>302</sup> that even its most trusted and well-trained employees could foreseeably take shortcuts and behave contrary to common sense.<sup>303</sup>

[119] I am in no doubt that the trapped key system was a cost effective, available and suitable means to isolate the risk involved.<sup>304</sup> It would not prevent the machine from performing its intended functions. Nor would it drastically increase harvesting time.<sup>305</sup>

[120] Eatim failed to consider interlocking options, like the trapped key system because it did not obtain advice from a competent person. Mr Antoneivich was <u>not</u> a guarding expert. When it did seek advice from a competent person, the advice was that AS/NZS4024 applied and that the trapped key system was appropriate. This was knowledge that Eatim ought reasonably to have known.

[121] The critical issue is whether WorkSafe has been able to satisfy the Court that at the time of the offence, there was an available and suitable means to effectively interlock guards to the Harvester's energy source, that would still enable it to perform

<sup>&</sup>lt;sup>299</sup> Niagra Sawmilling Company Limited v WorkSafe CRI 2018-425-7 at [94].

<sup>&</sup>lt;sup>300</sup> Section 22(a) and (c)(i) of HASWA.

<sup>&</sup>lt;sup>301</sup> Section 22(b) of HASWA.

<sup>&</sup>lt;sup>302</sup> Section 22(a) of of HASWA.

<sup>&</sup>lt;sup>303</sup> Waimea Sawmillers Limited v WorkSafe New Zealand [2016] NZHC 915.

<sup>&</sup>lt;sup>304</sup> Section 22(d) of the Act.

<sup>&</sup>lt;sup>305</sup> Page 523 NOE.

its intended operations. For the reasons outlined (above) I am satisfied beyond reasonable doubt that WorkSafe has been able to do so. I am satisfied beyond reasonable doubt that WorkSafe has proved that Eatim failed to comply with its duty, by not installing interlocked guarding on the harvester, in accordance with the definition of reasonably practicable.

[122] Given my findings at [27], [28] and [32] (above) I am therefore satisfied beyond reasonable doubt that WorkSafe has proved the charge.

Judge NR Webby District Court Judge | Kaiwhakawā o te Kōti ā-Rohe Date of authentication | Rā motuhēhēnga: 10/05/2023