

**IN THE DISTRICT COURT
AT AUCKLAND**

**CRI-2015-004-001971
[2015] NZDC 21518**

WORKSAFE NZ
Prosecutor

v

VAN TIEL PYROTECHNICS LIMITED
Defendant

Hearing: 15 October 2015
Appearances: I Brookie for the Prosecutor
N Beadle for the Defendant
Judgment: 15 October 2015

NOTES OF JUDGE G A FRASER ON SENTENCING

[1] Van Tiel Pyrotechnics Limited has pleaded guilty to one charge under the Health and Safety in Employment Act 1992 and six charges, which are all representative, under the Hazardous Substances and New Organisms Act 1996 and regulations.

[2] For this sentencing it is accepted that the lead charge is the Health and Safety charge. It carries with it a maximum fine of \$250,000. The Hazardous Substances charges carry a maximum fine of \$500,000 with a per diem rate for continuing offending.

[3] A summary of the facts records that this case, as we know, relates to an unplanned fireworks explosion that occurred at Eden Park at a rugby union fixture

between the All Blacks and Australia on 23 August 2014. Three spectators at the event were injured as a result of the incident.

[4] The Auckland Rugby Union engaged the defendant, an expert pyrotechnics company, to provide pyrotechnics entertainment at the fixture. The defendant had provided the services to the Auckland Rugby Union for over 10 years, having undertaken over 100 pyrotechnic displays at Eden Park.

[5] The defendant's brief, among other things, was to deploy on-field pyrotechnics, including fireballs, at the conclusion of the All Blacks haka at 1933 hours.

[6] The evidence establishes that two of the fireball devices at the western end of the ground malfunctioned when activated. The pyrotechnic mix inside those two fireball devices exploded inside the mortars rather than rising out of the mortar as intended by the defendant. The pyrotechnic mix in a third malfunctioning mortar at the eastern end of the ground was propelled out of the mortar and, therefore, did not explode. The force of the explosion in the two malfunctioning fireball devices at the western end of the ground shattered the mortars and threw fragments out of the exclusion zone and into the crowd in the south-western corner of the ground.

[7] Three spectators were hit by flying fragments. The injuries sustained were, for one victim, smashed glasses and a cut to the forehead. That victim blacked out for a short time after being hit. She was taken to hospital and received four stitches and was discharged at around midnight that night.

[8] The second victim was struck on the head by a metal peg used to anchor the fireball device to the playing field. The victim's glasses took the brunt of the impact and were destroyed. The impact caused bruising to the right eye area and a small laceration below the eye. A dressing was applied by St John staff at the ground.

[9] The third victim was treated at a hospital for a five-centimetre laceration to the forehead.

[10] There are victim impact statements on file which I have read and they clearly identify the impact for all three victims and I will address that at a later point.

[11] It was determined that the two fireball devices that malfunctioned were two of three fireball devices that had been filled with an incorrect, and partially complete, pyrotechnic composition instead of the correct fireball mix.

[12] It is accepted that Van Tiel has no previous convictions or appearances before the Court.

[13] The Court, in terms of sentencing, is assisted by the leading authority in Health and Safety prosecutions. That is an authority of *Department of Labour v Hanham & Philp Contractors Ltd* (2009) 9 NZELC 93,095; (2008) 6 NZELR 79 (HC). That case defined the manner of sentencing and the approach to be taken in regards to such prosecutions. That case identified that sentencing in prosecutions such as this involves a three-step process; firstly, assessing the amount of reparation, secondly, fixing the amount of the fine, and then thirdly, making an overall assessment of the proportionality and appropriateness of the total imposition of reparation and the fine.

[14] In this case, the Hazardous Substances charges complicate the sentence to some extent. The Court accepts they must attract a cumulative sentence but, in the end, obviously totality determines the overall outcome.

[15] Turning back to the lead charge, the Health and Safety charge, it is necessary to assess the reparation. In this case there are three victims. One victim has received a reparation package and both Worksafe and the defence acknowledge that no further reparation is required for that victim. The other two victims. No package has been concluded for them.

[16] It is noted that the Act is silent as to what is meant by emotional harm. This spans a range of phenomena as was identified in a case of *Sargeant v Police* (1997) 15 CRNZ 454.

[17] By way of mitigation, Dr Van Tiel met with the first victim. The second victim had a trip to Wellington paid for to watch another test match. That victim was unable to attend a restorative justice process but Dr Van Tiel apologised to him via email and offered to meet him personally to apologise. For the third victim there was a restorative justice conference. At that conference the third victim accepted the apology and Dr Van Tiel offered to pay his expenses but, in the end, it was agreed that there would be an abiding by the decision of the Court in relation to reparation.

[18] Some authorities have been quoted and in *Worksafe New Zealand v Advanced Automotive & Transmission Ltd* DC Tauranga CRI-2014-070-002103, 21 October 2014, it is recorded that an emotional harm payment of \$5000 by way of reparation was ordered where the victim was hospitalised after receiving injury to his hand including lacerations to the hand and fingers and the removal of fingernails. Time off work for some six to eight weeks was occasioned in that case.

[19] Without minimising the impact on the victims, there can be no doubt that the case before me today involved lesser consequences for both victims which is fortunate and the sum to be awarded is to be an appropriate recognition of the emotional harm suffered by both victims.

[20] Accordingly, a reparation payment for the other two victims who have not been compensated to this point is ordered in the sum of \$3000 for each. I note that that is also the amount that Worksafe concede is appropriate in this case.

[21] In addition to that, there is an award to the second victim in the sum of \$160 and to the third victim in the sum of \$2122 which represents an actual direct loss sustained by them as determined by the schedule that has been filed.

[22] In terms of assessing the quantum of fine in this case for the Health and Safety charge, *Department of Labour v Hanham & Philp Contractors Ltd* determined that there needs to be an identification of the operative acts or omissions and the practical steps taken in identification of the nature and seriousness of the risk of harm occurring, as well as the realised risk, the degree of departure from industry standards, the current state of knowledge about the nature and severity of the harm

and the means available to mitigate the risk of its occurrence and identification of the obviousness of the hazard and a determination of the availability, cost and the effectiveness of means to avoid the hazard and the financial capacity of the defendant.

[23] In the Worksafe submissions, in regards to the failure, Worksafe say that the defendant failed to establish and maintain clear, standard operating procedures and quality controls to ensure the safe manufacture and storage of explosive substances. In terms of the harm caused and the risk of harm, Worksafe submit that the injuries suffered here were moderately serious facial injuries with some lasting effects but were entirely foreseeable consequences of an unintended explosion of this type and that the class of person exposed to harm was wide indeed, recognising that the capacity of the Eden Park stadium is approximately 50,000.

[24] In terms of the degree of departure from industry standards, Worksafe submit that clear, documented standard operating procedures and quality control checks are a common sense requirement of the type of business enterprise being operated by the defendant and that further requirements relating to tracking and identification and labelling were also required by the tracking regulations.

[25] The obviousness of the hazard, Worksafe submit, is that the hazardous substances that the defendant dealt with carried an obvious risk of explosion including Class 1.1G substances that carry a mass explosion hazard.

[26] In terms of the availability, cost and effectiveness of the means necessary to avoid the hazard, Worksafe submit it was simple for the defendant to introduce proper measures to ensure sound practices and procedures and the current state of knowledge of the risks and nature of harm are implicit in the previous matters that I have referred to that Worksafe have submitted. Likewise, the current state of knowledge and means available to avoid the hazards are also dealt with in the previous submissions made by Worksafe.

[27] For Dr Van Tiel there are references to the submissions made by the prosecution. More particularly, the defendant submits this is a case of error in

manufacturing process that should have been avoided and falls squarely within the scheme of the Health and Safety prosecution and the requirements of that rather than the HSNO regulations. The defendant submits that the manufacture of the pyrotechnic and other compositions was undertaken by a worker in what was known as the powder room, adjacent to the storage area in which sealed plastic buckets of completed pyrotechnic compositions are stored. At that time, the worker was making both fireball mix and red star mix in the powder room; that the fireball mix contained no hazardous substances under HSNO and is not an explosive substance.

[28] The defendant submits that there was no requirement under HSNO regulations to label as explosive, or to track, either the fireball mix, because it was never explosive, nor the partial composition of red star mix during its manufacture.

[29] The defendant submits that in this case there was a miscommunication between two workers as to which bucket of material was to be used to complete the filling of the fireballs and, additionally, although the simple labelling on the buckets was understood by experienced staff and the buckets in question were marked "red" and "fireball mix", unfortunately, in this case, neither worker saw the red label on the bucket or partial composition of red star mix that they used to top up three of the contaminated fireball devices with what they understood to be fireball mix.

[30] The defendant submits that such a processing error can now no longer occur because of the remediating steps taken to prevent that harm and, in addition, they have adopted print labelling and batch numbering recording of each composition in the manufacture of pyrotechnics and product register.

[31] Finally, in relation to the Health and Safety charge, the defendant submits of importance an assessment of culpability for what occurred in this particular case. None of the steps prevent a miscommunication or human error of the kind that occurred in this case and which would have been prevented by the two steps which the company has now introduced to the composition process.

[32] The starting point as set out is seen in three grades; low culpability, which attracts a fine of up to \$50,000; medium culpability, a fine of between \$50,000 and

\$100,000 and high culpability, a fine of between \$100,000 and \$175,000. Worksafe, in terms of starting point submit that, in this case, culpability is on the cusp between medium and high culpability bands as set out in the *Department of Labour v Hanham & Philp Contractors Ltd* decision and that recognising all of the factors required to determine the fine, and applying the scale used in the *Department of Labour v Hanham & Philp Contractors Ltd* case, a starting point in the range of \$90,000 to \$110,000 would be appropriate. The defence submissions submit that the culpability in this case is also on the cusp between the medium and high culpability bands and that a fine in the region of \$100,000 is seen as appropriate.

[33] Taking all matters into account, I agree that the culpability of the defendant is on the cusp of the medium to high culpability and a fine of \$100,000 is imposed. If I did not say starting point, I am sorry; I should have said starting point.

[34] There are no aggravating factors that I can find for the defendant and the mitigating factors are clearly the co-operation with the authorities, the obvious remorse and the level to which the company, through Dr Van Tiel, has gone in order to engage in appropriate restorative justice processes and the favourable safety record which has been referred to and is acknowledged.

[35] The guilty plea is also acknowledged. The reparation that I have indicated that will be awarded by the Court, and also the package negotiated for the first victim, is acknowledged. And not necessarily relevant, but I do take into account the fact that the defendant has foregone the fee for the event.

[36] Ordinarily, a discount of 10 to 15 percent in the level of the fine is recognised for reparation in the case of an offender of adequate means and, ordinarily, that leads to an overall maximum discount of between 20 and 30 percent. In this instance, recognising the limited reparation which is not a significant sum of money, the discount is fixed at 20 percent. That is a sum of \$20,000 less the guilty plea discount of \$17,500 which ultimately concludes a fine under the Health and Safety Act in the sum of \$52,500. My overall assessment is that that reparation and the fine is proportionate to the circumstances of the offending under the Health and Safety legislation.

[37] Turning to the hazardous substances charges, the Act is designed to ensure that hazardous substances are managed in a way so as to prevent harm occurring. I record an acceptance by Worksafe, and an acknowledgement by them, that the offending under the Hazardous Substances Act was in no way causative, either directly or indirectly, of the incident and the fines to be imposed will acknowledge that. The fines are to be imposed in recognition of the breach of the Act in relation to tracking and identification and, in the case of the three charges relating to the fireball, those are conceded as technical breaches by Worksafe.

[38] There are various authorities cited by Worksafe. It is acknowledged that charges 1 and 2 relate to completed pyrotechnic compositions in containers marked with the name of the product but which omitted reference to the class of hazardous substance. Charges 3, 4 and 5 related to the completed fireball devices which, although marked as such, did not bear the class of hazardous substance, that they were explosive or the defendant's contact details. Class 6 related to the tracking of hazardous substances that, the summary records, have a Class 1 explosive hazard rating.

[39] Looking at the various authorities, which I will refer to in a moment, in terms of the HSNO charges, the prosecutor submits that the tracking and ID failures were fundamental requirements in this case; that there is inherent risk in the management of substances not properly IDd or tracked and there is reference to the duration of the breach.

[40] The prosecution submit that there is no guidance as to how to approach this offending, recognising that there are very few cases that have dealt with this to date. Worksafe submit that the intrinsic nature of the substances and their dangerousness is a significant factor. Also, there is reference made to the maximum fine and the per diem rate and that recognising that the lead charges are the identification and tracking charges, a fine of \$50,000 for each should be the start point on the basis that the lead charge fits somewhere between the decision of *Dunedin City Council v Duong* [2010] DCR 472 and *Manawatu-Wanganui Regional Council v Ruapehu Alpine Lifts Ltd* (2014) 18 ELRNZ 68, [2015] DCR 55 which is acknowledged sits at what is described as the higher end. The prosecution concede that those charges and

the substance of them did not lead to the incident occurring but submits that that is good luck rather than design.

[41] Defence, in dealing with the HSNO charges, submit that before the incident, staff did know what the substances were that they were dealing with and the fact that they had not been tracked at every substantial moment was of no moment and records the reality now that tracking does occur. It also submits that compliance with the letter of the regulations does not prevent the incident, recognising that this was an accident as a result of human error and that the HSNO regulations were breached but in a technical sense. On that basis, the incident is one far closer to the *Dunedin City Council v Duong* case than any remote identification to the *Manawatu-Wanganui Regional Council v Ruapehu Alpine Lifts Ltd* case where the defence submits that there is night and day between what happened here and the *Manawatu-Wanganui Regional Council v Ruapehu Alpine Lifts Ltd* case.

[42] I agree with the defence that the case here can be distinguished from *Dunedin City Council v Duong*. In this case there were no improper volumes. There is no allegation that they were stored in unsafe conditions such that the likelihood of combustion was relatively high. The factory is in a remote location where there is not the same level of risk to the public and the fireball charges are more in the character of a technical breach and that is conceded by Worksafe.

[43] The defendant's staff were properly authorised under the Hazardous Substances Act and trained in the handling of goods. The offences are all in the nature of identification of the class of hazard, and that they are explosive, and the requirements to track.

[44] Worksafe and *Manawatu-Wanganui Regional Council v Ruapehu Alpine Lifts Ltd* is completely distinguishable from the facts here. It is accepted that there is no causation from the HSNO charges to the incident itself, unlike the *Manawatu-Wanganui Regional Council v Ruapehu Alpine Lifts Ltd* case. In *Dunedin City Council v Duong* a starting point of \$35,000 was imposed for four breaches. It is accepted the case that I am dealing with here involved hazardous

substances carrying more risk, namely Class 1 explosive substances. There were systemic failings and there is a longer duration of offending.

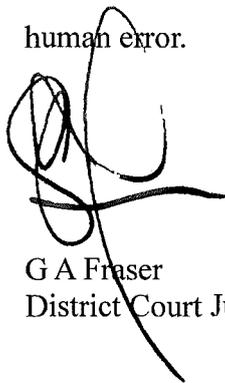
[45] Accordingly, I impose a start point fine in the sum of \$52,500 for all offences and all-up the fines recognise the totality for all charges which, in my view, are about right.

[46] I deduct from the HSNO charges, again, the similar factors that I did from the Health and Safety; a recognition of remorse, restorative justice, previous good character and recognition and from the HSNO start point, a \$10,500 deduction is made for those factors and a further \$10,500 recognising credit for the guilty plea.

[47] That results in a \$31,500 fine for the HSNO matters, made up of a \$9000 fine for each of the non-technical charges and, on the technical charges, a fine of \$1500 for each one of those three.

[48] What that results in is a total fine, across the board, imposed in the sum of \$84,000. Looking at all matters in the round, the reality of all of this is that for the defendant company a total amount of fines and reparation is in excess of \$100,000 for all of this offending.

[49] The Court acknowledges the steps now taken by Van Tiel to prevent anything like this happening again and it is accepted that Van Tiel is ordinarily a responsible manufacturer of pyrotechnics and that is recognised by the record of a 20 year duration where there has been one incident which resulted from human error.

A handwritten signature in black ink, appearing to be 'G A Fraser', written over a horizontal line. The signature is stylized and somewhat cursive.

G A Fraser
District Court Judge