

INVESTIGATION DETAILS

1. MATTER UNDER INVESTIGATION

On Saturday 13 January 2018 at approximately 19:55, Mr John Sprague, a 45 year old hobby photographer, was hit by a competition stock car vehicle while he was taking photographs from a position on the infield of the racetrack at Waikaraka Family Speedway.

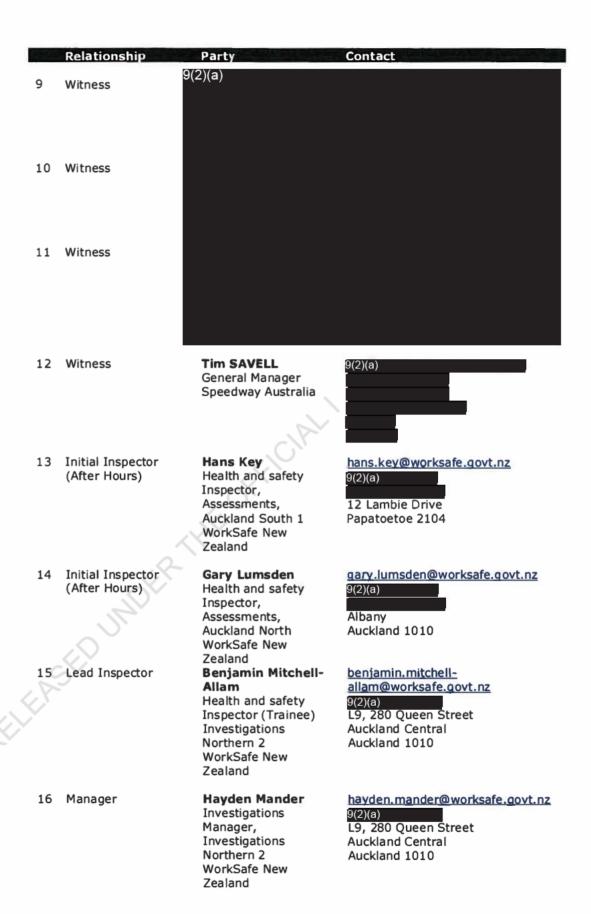
Mr Sprague sustained multiple injuries 9(2)(a)

At the time of writing this report, Mr Sprague 9(2)(a)

2. PARTIES' CONTACT DETAILS

	Relationship	Party	Contact
1	Victim	John SPRAGUE	9(2)(a)
2	Victim	9(2)(a) Wife of John SPRAGUE	
3	Volunteer Association	Auckland Stock and Saloon Car Club (The Club)9(2)(a) $9(2)(a)$	9(2)(a)
4	Legal Counsel	9(2)(a) Legal Counsel representing the Club	9(2)(a)
5	PCBU	Speedway New Zealand (SNZ) 9(2)(a) General Manager,	9(2)(a) Speedway New Zealand PO Box 39 236 Wellington Mail Centre LOWER HUTT 5045
6	Legal Counsel	9(2)(a) Legal Counsel representing SNZ	9(2)(a)
7	Witness	9(2)(a) Flag Marshall, Waikaraka Park Speedway.	9(2)(a)
8	Witness	9(2)(a) Hobby photographer, Waikaraka Park Speedway	







FACTS

3. CIRCUMSTANCES LEADING TO THE INCIDENT

(3.1) Contractual Relationships

(i) Work Activity

The work activity in relation to this matter is the holding of a speedway racing event

That being, the management and coordination of trained and experienced people acting in specific roles, at a specialised venue, so that drivers of speedway race vehicles and their teams may come together in competition with each other for the benefit of the many spectators and the speedway community in general.

(ii) Duty Holders

i. Speedway New Zealand Incorporated

Speedway New Zealand Incorporated was incorporated under the Incorporated Societies Act 1908 as The Speedway Control Board of New Zealand Incorporated on 10 August 1984.

(40001 P1)

The Speedway Control Board of New Zealand was established after it was decided that the racing of motor bikes and motor cars (stock cars) should be separated, thereby ending the single body which had, until that point, governed both sports.

(40020 P6 07:38)

The Speedway Control Board's name was changed on the Incorporated Societies Register to Speedway New Zealand Incorporated (SNZ) on 21 July 1994.

(40001 P1)

SNZ's constitution document states among the Societies objectives:

- (b) Encourage, control and develop speedway racing, safety and education within New Zealand.
- (d) Make and control rules and regulations for the conduct of speedway racing.

(40020 P7 08:20 and also 40050 P16 C3)

SNZ operates under a Board of Directors (The Board). The Board is comprised of a President and six elected members, all of whom volunteer in these roles. (40020 P7 09:41)

The Board is elected every second year, by a delegation of members representing the local clubs and tracks who are awarded voting rights at SNZ Annual or Special General Meetings.

(40050 P18 C7-F)

SNZ employs five people. One General Manager, and four others providing operational management of SNZ. (40020 P8 10:37)

SNZ has (approximately) four hundred and fifty volunteers around New Zealand. (40020 P9 10:58)

SNZ membership is awarded upon payment of an annual membership fee, by any person eligible for membership.

(40050 P17 C5-1)

SNZ is a PCBU for the purposes of HSWA.1

¹ Although the people carrying out work for SNZ at tracks are not workers (see 3(1)(iii)(a) of this report), the organisation is not a volunteer association because it employs five people.



ii. The Auckland Stock and Saloon Car Club Incorporated

The Auckland Stock and Saloon Car Club Incorporated (The Club) was incorporated under the Incorporated Societies Act 1908 as Auckland Stock and Saloon Car Club Incorporated on 13 December 1976.

(40501 P1)

The name was changed with the Incorporated Societies Register to The Auckland Stock and Saloon Car Club Incorporated on 11 January 2002.

(40501 P1)

The Club operates the venue known as Waikaraka Family Speedway. (40531 P1)

In relation to this incident, the Club is also what the SNZ rule book refers to as the "Promotor", in that it is the body to which SNZ issues authority to hold speedway events.

This report accepts that The Club is a Volunteer Association, and therefore is not a PCBU. The Club is not a duty holder for the purposes of HSWA.²

iii. Volunteers - Speedway New Zealand Incorporated

SNZ has (approximately) four hundred and fifty volunteers around New Zealand. (40020 P9 10:58)

These volunteers carry out work at SNZ licenced speedway competition events. (40020 P9 11:46)

They are responsible for ensuring that events are carried out in compliance with the SNZ rules and regulations.

(40050 P68 M5-1)

(http://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976849.html)

The meaning of PCBU given in the Health and Safety at Work Act 2015 (HSWA) excludes under S17 (2) any Volunteer Association from that meaning.

Volunteers:

No person carrying out work for the Club was paid by the Club at the time the incident occurred. Therefore, they are a group of volunteers
(40501 P6, P8 and also 20500 P3)

Community Purpose:

The HSWA does not provide a definition of the word 'community', which is specific to the use of that word in the Act.

Therefore, this report assumes that for the purposes of HSWA, the word 'community' has the same meaning given in the Oxford English Dictionary.
(20500 P8)

The Club's constitution includes in its objectives:

- (d) To assist and promote any movement, idea, suggestion or enterprise which is in the opinion of the Members of the Club for the benefit of Stock & Saloon Car Racing and allied forms of motor sport.
- (n) To promote the sport of Stockcar Racing, other forms of motor sport, other sports, recreation and entertainment for the recreation and entertainment of the members and General Public.
 (40560 P4)

Employ and person:

HSWA does not provide a meaning for the word 'employ' which is specific to the use of the word in the Act.

For the purposes of this report, it is accepted that the separate meanings between the word 'employ' and the word 'engage', and the contexts in which they are used in HSWA.

(60001 P2 items 6 and 7)

² In summary, HSWA defines a volunteer association as a group of *volunteers* working for a *community purpose* that does not *employ any person* to carry out work.



SNZ Volunteers work over the duration of each race season as required by SNZ rules and regulations.

(40050 P38 M3-2-1)

These SNZ volunteers are referred to in the SNZ General Rules and Regulations (rule book) as SNZ Officials. There are three types of SNZ Official role listed. (40050 P68 M5-1-1)

All SNZ Officials are appointed by the Board, and are also members of local clubs. (40050 P68 M5-2-1)

At the time the incident occurred, there were sixteen SNZ volunteers in attendance in at Waikaraka Family Speedway, carrying out duties in SNZ Official roles that related to the work activity.

(40060 P1)

The Steward is "appointed by the SNZ Board to see that the rules and regulations of SNZ are carried out at their appointed track."

(40050 P73 M5-3-4)

The Steward has the responsibility for deciding whether or not racing will commence, and whether or not racing will continue once it is underway.

(40050 P73 M5-3-6 and also M5-3-7)

The Steward has responsibility to take steps to ensure public safety. (40050 P73 M5-3-6 (b))

Permits for racing to commence are issued by the SNZ Steward. (40050 P69 M5-3-6)

SNZ Officials are reimbursed for any expenses incurred by them which may result from them carrying out their duties but are not paid for carrying out those duties. (20500 P1)

Individuals acting in all types of SNZ Official roles as described in the rule book are Other Persons in the workplace.³

iv. Volunteers - The Auckland Stock and Saloon Car Club Incorporated

At the time the incident occurred, there were twenty four club members acting in one of the nine types of role referred to by the SNZ rule book as 'Promotion Official' (40562 P3 9)

Promotion Officials are also referred to in the rule book as 'Track Officials' and 'Non-SNZ Officials'. This report will use the term Track Official.

Track Officials undertake the operational tasks relating to the work activity (for example, lap scoring, flag signalling, crash crew, etc.).
(40050 P73 M5-6)

The Clerk of the Course is the most senior Track Official. All other Track Officials are appointed by the Clerk of the Course. These appointments are then approved by the SNZ Board.

(40050 P68 M5-2-5)

The Clerk of the Course is responsible to the SNZ Steward. (40050 P68 M5-6-2)

The Clerk of the Course controls competitors, crews and the other Track Officials. (40050 P68 M5-6-6)

³ These volunteers are not regarded by HSWA a Volunteer Workers, in that they are assisting with sports or recreation for a sports or recreation club. HSWA S19 (3)(b)(ii)



Access to the infield is prohibited to anyone not authorised by the Clerk of the Course (40050 P68 M3-4-1)

v. Mr Sprague (the victim)

At the time of the incident Mr John Dennis Sprague was taking photographs as a hobby photographer.

Speedway photography was not Mr Sprague's paid occupation.

Mr Sprague enjoyed speedway racing, and taking photographs at speedway racing events was a part of this enjoyment. (20001 P10)

Speedway photography is not a paid occupation. (31000 P2)

Mr Sprague is currently listed with the New Zealand Companies office as a Director and Shareholder in two Auckland based companies, Wirotx Ltd and Lamatex Ltd. (30001 P1, P5)

An internet search shows these companies operating under the name Lamatex.

The Lamatex website lists a team of three, one of which is Mr Sprague as General Manager, based at the factory's Keeling Street address in West Auckland. (30002 P1)

The website lists laminating, liquid coating and binding services among those provided to the print industry for over a decade.

(https://www.lamatex.co.nz/)

At the time the incident occurred, Mr Sprague is an 'other person' in the workplace.4

vi. Other persons present or who may at times be present in the workplace

The Club allows up to four photographers to take positions on the infield at Waikaraka Family Speedway, two at each end of the track.

At times, images that have been taken by a photographer from the infield of a speedway track have been sold to media outlets.
(70006 P1)

The club has also allowed access onto the infield to a photographer from whom images can be purchased via that photographer's website.

(http://www.squarephotography.co.nz/)

The Club also allows a videographer onto the infield to video the racing. The videographer is employed by Event-Tech (NZ) Limited, and videos speedway at multiple venues around New Zealand. Content is streamed live to the website, 'Videohub'. Content is also available 'On Demand' from the website, either for rent (viewed via the website only), or by purchasing a DVD.

(http://www.videohub.co.nz/Default.aspx)

Members of the public are given admission to the venue upon purchase of a ticket, and are spectators to racing events.

(http://www.walkarakafamilyspeedway.co.nz/tickets.ht)

Money collected from the sales of admission to Waikaraka Family Speedway is income for the Club. SNZ do not have claim to a share in admission sales. (40020 P5 06:26)

⁴ While he was voluntarily taking photographs at speedway events, Mr Sprague was not engaged or employed by either the club or by SNZ, and was not carrying out work integral to either of those undertakings.

HSWA S19 (3)(a)



For the purposes of HSWA, spectators to racing events at Waikaraka Family Speedway owe and are owed a duty as 'other persons' in the place of work.

(http://www.legislation.govt.nz/act/public/2015/0070/latest/DLM5976915.html)

(3.2) Background Information

(i) Waikaraka Family Speedway

The Club leases part of the land at Waikaraka Park, 175-243 Neilson Street Te Papapa from Auckland Council.

(40530 P20-P25)

At that location, the Club operates the Waikaraka Family Speedway. (http://www.waikarakafamilyspeedway.co.nz/)

The buildings and improvements on the land (with one exception being the concrete grandstand) are owned by the Club.

(40530 P3)

The lap-scoring, referees' stand and club rooms are buildings and improvements.5

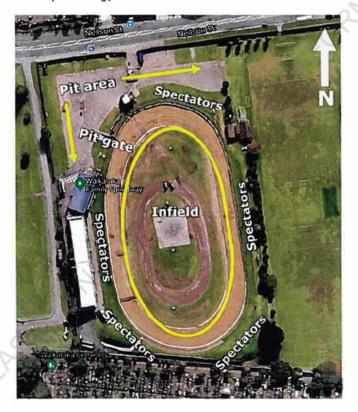


Fig. 1 Waikaraka Family Speedway venue. Image produced from Google maps.

The track circuit is advertised as 460 metres in length, 11 metres in width on the straights, and 14 metres wide on corners. 6

(http://www.speedwayracing.co.nz/speedway-tracks/walkaraka-park-speedway-auckland/#.W3xgyM4zY3E)

⁵ The SNZ rule book requires that these facilities be provided at each track and information regarding the location, size, and safety considerations of such is described there in. (40050 P37 M2-22, 2-23)

⁶ Police investigation of the scene found that the width of the track at the corners varied between approximately 11 and 17 metres. (70007/7 P1)



The track surface is crusher dust, which is maintained to racing-ready standard using a grader and water tanker before, between and after racing. 7

(ii) Speedway New Zealand Rule Book

The purpose of the rule book is to provide the rules which all parties involved in speedway activity at SNZ licenced tracks must follow. (40020 P12 16:27)

Proposals for changes or additions to the rules are taken every two years to an Annual General Meeting, or to a Special General Meeting called for that purpose as remits.

Changes or additions are carried or lost by a majority vote of those SNZ members present who are assigned voting rights. 8
(40050 P24)

The rule book details consequences if an individual or entity is found to be in breach of the SNZ rules. ⁹ (40050)

The rule book includes waivers or amendments to some rules at the discretion of certain SNZ officials in some circumstances, with regard to the safety of competitors, the safety of spectators, or better promotion of the event.

The Board has the ability to alter or add to the regulation and technical rules that relate to each class. 10

The Board is able to change or add any rule: "if a safety issue has been identified which requires prompt resolution to ensure the ongoing safety of the sport".

(40050 P21 C11 (k))

The board can approve activity to take place at a track which does not comply with SNZ Rules, at its discretion. Without that consent, non complying activity is not permitted. (40020 P13 19:03)

(iii) Track Licencing, Inspections and Permits to Race

All speedway tracks must have a current SNZ licence to conduct speedway racing. (40050 P30 M2-1-1)

Track licences are issued to a Promoter. A Promoter can be an entity or an individual. (40050 P30 M2-1-3/4)

SNZ rule M2-1-2 states, in discussing the issuing of a track licence to a Promoter, that: "A track licence is the authority granted by SNZ recording that the track to which it refers complies with SNZ rules."

(40050 P30 M2-1-2)

A Memorandum of Agreement exists between SNZ and each Promoter which sets out the terms of engagement and assigns responsibilities of the parties to it.

The Club is the Promoter for Waikaraka Family Speedway. (40030 P1)

⁷ An example of this can be seen in footage from the police file. (70007/6/1)

⁸ An example of this process in action can be found in the AGM minutes from 2015. (40051)

⁹ Examples of these consequences includes financial penalty, disqualification, the revocation of a racing permit, track licence, or competitors licence.

¹⁰ This requires consultation with technical committees, competitors and tracks of the class concerned.



The 23 tracks around New Zealand that are licenced by SNZ, collectively hold between four hundred and fifty and four hundred and eighty competition events over a season. (40020 P4 04:22)

Each speedway season is from October until around Easter (approximately six months). (40020 P4 04:36)

All speedway activity at licenced tracks must comply with the SNZ rules and regulations to maintain a current licence.

(40050 P31)

Unless approved by the board, track licences are current for no more than two years (40050 P31)

Compliance with SNZ rules and regulations is monitored through a system of inspections, which are carried out by an SNZ appointed track inspector.

(40050 P32)

SNZ inspects tracks:

- · as part of the licensing and the re-licensing application process, or
- at the beginning of each speedway season, before any meetings are held ¹¹, (Track Inspection) and
- at the beginning of each race meeting (Pre-meeting Checklist)

Track Inspections (40052) and Pre-meeting Checklists (40054) both measure a pass or fail on requirements in the SNZ rule book.¹²

An example of a requirement which is checked as part of a both the Track Inspection and the Pre meeting Checklist is safety fences.

The rule book includes specific detail on the requirements for safety fences under M2 9.13 (40050 P32)

At the Track Inspection, the SNZ appointed track inspector checks, for example, the dimensions of the safety fence. 14

Rule M2 9-2 says that the safety fence is comprised of four separate fence structures, and includes:

- (i) Concrete Wall (Section M2-10)
- (ii) Wire Rope Fence (Section M2-11)
- (iii) Safety Netting Fence (Section M2-12)
- (iv) Crowd Control Fence (Section M2-16)

The rule book section on each of these fence structures gives details on the types of materials, the measurements and dimensions, and the methods to be used in construction.

- (i) Height of the concrete wall (min 1m)
- (ii) Height of the railway irons (min 1500mm)
- (iii) Height of the safety netting fence (min 3.8m)
- (iv) Number of wire ropes (min 3)
- (v) Distance from front of wall to wire rope fence (max 2m)
- (vi) Distance from wire rope fence to netting fence (max 2.5m)
- (vii) Distance from crowd control to netting fence (min 600mm)

¹¹ Only if the track licence is for a two year period meaning that no re-licencing inspection will take place prior to the beginning of a season.

¹² The SNZ rules and regulations that govern speedway racing in New Zealand are organised in the SNZ rule book under technical and racing rules, (which give specific requirements relating to racing and race vehicles) and 'general rules' (which relate to the SNZ board and constitution, the physical set up at tracks venues, racing classes, licencing, officials, competitors, equipment, and safety).

¹³ This states that 'All tracks are to be enclosed by a wall and a safety fence that complies with the specifications below'. Those specifications are listed under rule M2-9-2.

¹⁴ Those components of the safety fence that are checked by the SNZ appointed track inspector includes:



(40052 P2)

Waikaraka Family Speedway had passed its Track Inspection and SNZ had issued a track licence allowing its programme to commence for the 2017/18 speedway season. (40052)

Upon passing a Pre meeting Checklist inspection on January 13 2018, the SNZ Steward issued Waikaraka Family Speedway with event permit number 20028.

(40054 P15)

Through the issuing of a permit by the SNZ Steward, SNZ confirmed that operations at the Waikaraka Family Speedway and the competitors registered to race there in were compliant with the rules of SNZ, and the racing was allowed to start.

(iv) Health and Safety

Section S of the rule book prescribes measures for safety compliance. 15 (40050 P4)

Rule S 1 in this section states that 'Rules in this section are managed by the directors in conjunction with the Personal Safety Committee'.

There is also a section called 'Health & Safety' at the end of the set of racing rules for each class. For example, as part of the racing rules for Superstock and Stockcar racing. 16 (40050 P306)

A Promoter (in this instance, the Club) is required to submit its 'health and safety manual and processes' as part of its application for a track licence.

(40053 P1)

Volunteers are asked to sign on a page headed "Employee/Volunteer Acknowledgement". In so doing, signatories are, by appearance, confirming that they have read and understood the health and safety manual. ¹⁷
(40540 P21)

It is worth noting that the rules for protecting people on the outside of the race track are detailed and extensive. The measures required by these rules recognise, and take steps to control the risk to any person on the outside of the race track arising from race vehicles engaged in racing on the track.

15 Information in this section is broken into categories with the following headings;

- S2 Track Safety Equipment
- S3 Protective Clothing and Safety Equipment
- S4 Seatbelts
- S5 Sound

S2 deals with safety equipment that SNZ require to be present and operable in order for a racing permit to be issued. This includes;

- S2-2-1 Infield Equipment (All motorcycle only events)
- S2 2-2 Pit Area Equipment (All events)
- S2-2-3 Infield Equipment (All four wheel events)
- S2-2-4 Pit Area Equipment (All four wheel meetings)

Included in this section are requirements for the type, number and location of fire extinguishers and other firefighting and other rescue equipment and personnel, first aid equipment and personnel.

There is nothing in this section that sets an expectation for the management of risk relating to people on the infield.

The remaining sections S3, S4 and S5 prescribe personal protective equipment of the driver safety equipment relating to the vehicle.

- ¹⁶ The racing rules that relate to health and safety are general instructions on the safe operation of the vehicle by the driver of the vehicle.
- Particular reference is made to the section of the manual that relates to Hazards and their controls, accident/incident reporting requirements, and emergency procedures.



(v) Competition

Through membership with the Club, owners, drivers and support teams of stock car vehicles gain access to the venue to compete against each other in racing events. Racing activity is organised into national, regional, local and novelty classes.

(40050 P27 M1)

Not all classes are raced at all tracks. A tracks licence indicates which classes are permitted to be raced at each track.

(40531 P1)

Competitors race in qualifying events at their local tracks, with competitors who are successful at those events going on to race in the Allocated Title events for their chosen class.

(40050 P44)

Competitors build stock car vehicles to the specifications of the class or classes in which they choose to compete. Their chosen class or classes must be selected on the application for a competition licence.

A competition licence must be issued by SNZ before any competitor can participate in any speedway activity. 18

(40050 P76 M6-1)

SNZ requires competitors to comply with the rules in the rule book in order to maintain a current competition licence, and can cancel a licence at any time, for any reason, without giving any reason.

(40050 P76 M6-3-7)

Vehicles are subject to inspections by an SNZ scrutineer using a SNZ checklist to ensure compliance.

A Comprehensive Vehicle Inspection (CVI) is undertaken by an SNZ scrutineer at the beginning of every race season, or after every 20 races (which ever comes sooner). ¹⁹ (40020 P13 18:30 and also 40056 P1)

The less comprehensive pre-race inspection is undertaken by SNZ scrutineers, in the pit area at the speedway venue, before racing starts.

(40056 P1)

A record of the outcome (pass or fail) of each inspection for each vehicle is made in the Competitor Participation and Penalty Record section of the SNZ Vehicle Log Book belonging to each vehicle.

(40563 P5)

SNZ have produced a guide for people who wish to compete in speedway which guides new competitors through the things they need to consider as part of their introduction to the sport. 20

(http://www.sporty.co.nz/speedwaynz/COMPETITORS-1/LICENCES-1)

¹⁸ SNZ has information and instructions about competitor licencing available on its website. People wishing to apply for or renew a competition licence can also do so online.

¹⁹ An example of a CVI is available at **40563 P9**. The last inspection of Superstock 42A by an SNZ scrutineer prior to that vehicle being involved in the incident in question was on 12/10/2017, three months prior to the incident.

²⁰ Speedway, Racing That's Out Of This World, 2015-16 Getting Started In Speedway, A Guide For New Competitors. Speedway New Zealand Incorporated, July 2015.



C1 1982

A drivers' briefing is held by the SNZ Steward prior to the start of racing. (400542 P1)

(vi) The Infield

The infield is the part of a speedway race track venue that is enclosed by the circuit.

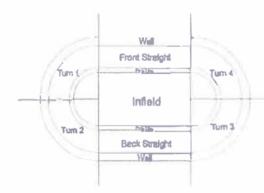


Fig. 2 Diagram of track layout Image from SNZ Rule Book ²¹



Fig. 3
Track layout
Walkaraka Family Speedway.
Image produced from Google maps

The image above shows that the infield at Waikaraka Family Speedway is grass. It contains a smaller dirt track, which is used for speedway motorbike bike racing, and a concrete 'skid' which is used as a staging area for emergency crew vehicles.

Access to the infield is prohibited to anyone not authorised by the Clerk of the Course. ²² (40050 P68 M3-4-1)

Persons usually present on the infield are flag marshals, rescue/safety crew, first aid crew, any drivers that have withdrawn, and any SNZ officials.

(30500 P1)

Photographers, videographers and any other person authorised by the Clerk of the Course may also be present.

This guide includes a section on safety, entitled 'Safety Comes First'. In this section, speedway is described as 'a highly spectacular and adrenalin-charged sport, which can be dangerous'. This passage goes on to refer to Speedway as 'a bunch of accidents waiting to happen that people come to watch'.

(40055 P11)

²¹ Retrieved from SNZ Rulebook R12-3-26.

²² This indicates that the Clerk of the Course controls who goes onto the infield. The SNZ training document for the Clerk of the Course does not offer any guidance on how the decision regarding access is to be made.



SNZ rules allow up to 38 people to be present on the infield at any one time. ²³ (40050 P39 M3-4-3)

The rules require that any person on the infield must wear a high visibility vest or jacket. (40050 P68 M3-4-1)

Any object located on the infield must be no closer to the track edge than twelve meters. (40050 P36 M2-19-5)

Racing rules for each class, and the Teams Racing Code of Ethics document all include rules regarding vehicle entry to the infield. ²⁴

(40056 P211, 315, 319, 340 and 341, 382 and 383)

The infield is identified as a safe zone for infield staff and officials. ²⁵ (40056 P319 R12-4-34)

The infield at Waikaraka Family Speedway has a tyre at each end.

At the northern end of the track, where the incident occurred, turns three and four form an approximate half circle at a radius from the tyre.

- "Deliberately moving to the infield to avoid an attacking vehicle will result in penalty..."
 (40056 P311 R12-3-29)
- When issuing exception to rules prohibiting entry to the infield: "Competitors can use the infield to avoid a
 complete blockage of the racing surface, giving way to passing vehicles already on the race surface".
 (40056 P311 R12-3-29)
- "At the referee's discretion, they may choose not to penalise a competitor who for safety reasons only, briefly drive infield i.e. to catch their breath, tighten their belts, etc."
 (40056 P340 R13-2-35 (b))
- "..Drivers can proceed over the pole line but must return to the track immediately once past the blockage by the shortest practical route..."
 (40056 P311 R15-2-1 (f))

The majority of rules relating to driving onto the infield appear to seek to discourage drivers from doing so. It is also true, that these same rules acknowledge that there exists the opportunity for drivers to drive into the infield.

This apparent aim to deter is at contrast with other rules which require drivers to not only drive on the infield, but as in the example below, require drivers to undertake a particular manoeuvre on the infield, in the interest of fair competition. The example selected to illustrate this observation is from the Teams Racing Code of Ethics document, and it reads:

 "If a competitor infringes, it is up to them to put it right i.e. accidentally or not, passed a car over the pole line, they must put it right e.g. do a "U" turn on the infield and return to the track behind the car just passed..." (40056 P315 R12-4-1 (h))

²³ This total number excludes any competitors present who may have withdrawn from racing.

²⁴ The following rules from the class rules section are of particular note:

 [&]quot;If a vehicle is forced, spun, or driven into the infield during the race, the competitor must wait until the track is clear to return to the circuit".
 (40056 P211 R10-5-25)

 [&]quot;Deliberate contact on the infield will result in penalty..." (40056 P311 R12-3-29)

²⁵ R12-4-34 goes on to prohibit racing across or through the infield.



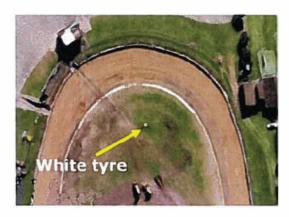


Fig. 4
Location of white tyre.
Waikaraka Family Speedway.
Image produced from Google maps

The Police investigation at the scene found that the white tyre was located approximately 17 metres from the closest edge of the track before the incident occurred.

(70007/7 P1)

Other than the tyre at each end of the track, there are no barriers to protect people standing on the infield from vehicles that leave the track for any reason.



Fig. 5
Infield at Waikaraka Family
Speedway.
Image created from Police file
footage recorded by an in-vehicle

The still image above shows the infield, where various people and vehicles can be seen from inside a racing vehicle with no separation in place.

At the point in the footage from which this still image was created, the vehicle from which it was recorded (which was not the car involved in the incident) was sliding sideways around turn two.

The vehicle was at approximately a ninety degree angle to the Pole Line (see Fig.2 for location of Pole Line). Its nose was facing the infield and the two front wheels were across the pole line.

(70007/6/2)

(vii) Superstock Class

The vehicle involved in the incident belongs to the class of speedway vehicle known as 'Superstock'.

Superstock falls into the contact grade of speedway racing, where-by drivers are encouraged to actively engage their vehicles in 'attack' sequences. 26

 $^{^{26}}$ The term attack is used through the SNZ rule book, to describe deliberate contact between two or more vehicles.



A Superstock is "a car designed for speedway racing where contact between vehicles is permitted".27

Superstock is described in the SNZ publication, 'Getting Started in Speedway, a guide for new competitors' as "a mix of raw power and deliberate contact...".

(40055 P6)

Contact between vehicles is frequent, and at times impact is with significant force. 28

The Waikaraka Family Speedway website describes the Superstock class as follows:

"The Mighty Superstocks are always a crowd pleaser at Waikaraka Park as the 400hp V8s & V6s often remind us of the circuit racing Muscle Cars with their Lion type roar. These 1500kg Gladiators can be seen flag racing for a title or when the teams racing comes to town they change their persona to hard hitting no nonsense extensions of their very brave drivers reaching speeds well over 100km/h. The steel tubular constructed chassis is as solid as a World War tank and when they make contact with another it is for keeps so this class is not for the faint hearted. Racing rules prohibit straight lining into the wall and coming off the grass infield to attack another car and hitting a stationary car is a no no, however contact is allowed and that is what makes the class such a popular attraction to the motorsport fan in New Zealand." ²⁹

(http://www.waikarakafamllyspeedway.co.nz/classes.htm)

Superstock vehicles are built to the specifications listed under section T12-1 Superstock Specifications in the SNZ rules book. ³⁰

Vehicles must be between 1400kg and 1500kg GVM. (40050...... P273 T12-1-2 (a),(b))

Vehicles have 4 cylinder engines (or greater), which may be up to 4072 cc. (40050....... P281 T12-1-38(c))

²⁷ This definition is the given by the SNZ rule book.

²⁸ An example of the competitive nature of the contact can be seen in one of the videos provided to this investigation by Police. (70007/6/2)

²⁹ The language used in this description, "Muscle Cars", "Lion type roar", "Gladiators", "hard hitting no nonsense", "very brave drivers", "when they make contact it's for keeps", "not for the faint hearted", "attack another car", is offered as a promise of what spectators and competitors alike can expect from the Superstock class.

All of this alludes to a level of risk that is inherent to the sport.

³⁰ `T' rules are those relating to the technical specification with which each class of speedway racing vehicle must comply.



(3.3) Sequence of events (timeline of factors leading to incident)

Sequence	Event	Ref.
03/2017	Photographer John Sprague signs an Employee / Volunteer Acknowledgement Form.	
08/2017	The Club submits an application to SNZ to renew its track for a 2017/18 speedway season programme at Waikaraka Family Speedway.	40053
10/2017	Track inspection of Waikaraka Family Speedway undertaken by SNZ appointed track inspector.	40052
10/2017	Track licence issued to the Club by SNZ.	40531 P1
10/2017	Waikaraka Family Speedway 2017/18 programme commences.	40054 P3
12/10/2017	Superstock 42A passes a CVI (green sheet K02711) by the SNZ steward with no issues or failures.	40563 P9
14/10/2017	Competition licence 8445 for the 2017/18 season is issued to 42A.	40563 P6
12/01/2018	NZ Superstock Championships - Practice meeting (first of 3 consecutive days of racing) at Waikaraka Family Speedway – completed.	40532 P4
13/01/2018	NZ Superstock Championships Night one - Waikaraka Family Speedway public admission from 17:00	40532 P4
13/01/2018	SNZ Steward issued the Club with a permit for racing to commence on the first day of racing.	40054 P15
13/01/2018 17:00 - 1800	SNZ scrutineers commence pre-race inspections of race vehicles using an SNZ checklist Superstock 42A is cleared to race.	70007/5 P10
13/01/2018 18:15	All vehicles at track ready for Grand Parade (lap of the track before the start)	40542 P1
13/01/2018 19:40	Superstock 42A is stationary in the pit.	70007/6/1
13/01/2018 19:45	Superstock 42A enters the track through the pit gate.	70007/6/1
13/01/2018 19:50	All vehicles move to grid (start) position.	70007/6/1
13/01/2018 19:52	Race one commences.	70007/6/1
13/01/2018 19:54:32	Driveshaft assembly fails in 42A during the race. Debris from driveshaft impacts rear brake calliper damaging bleed nipple	70007/6/
13/01/2018 19:54:34	42A departs from the track just before turn 3 entering the infield and crossing it to where Mr Sprague was standing nearer to turn 4.	70007/6/
13/01/2018 19:54:36	42A impacts with Mr Sprague	70007/6/



(3.4)	Outcome and consequences, extent of injury
(i)	Health Impact
i.	Injuries suffered 9(2)(a)
	9(2)(a)
	The time line of admissions and transfer between health care facilities is as follows:
Date	Facility
9(2)(a)	
	9(2)(a)





iii. Recovery

9(2)(a) (20001 P119)

What is known is that:

- 9(2)(a) (20001 P119)
- \sim A "Give a little" fundraiser page set up by the Club raised NZD10,410.50 31
- A Facebook page called "John Sprague Road to Recovery" provides infrequent anecdotal updates throughout the course of Mr Sprague's recovery.
- Mr Sprague 9(2)(a)

It is reasonable to conclude that the way in which Mr Sprague lives his life will have been permanently and significantly altered as a result of this incident.

^{31 &}lt;a href="https://givealittle.co.nz/cause/john-spragues recovery">https://givealittle.co.nz/cause/john-spragues recovery - retrieved from google search using keywords "John", "Sprague" and "Recovery".

^{32 &}lt;a href="https://www.facebook.com/JohnSpraqueRoadToRecovery/">https://www.facebook.com/JohnSpraqueRoadToRecovery/ - retrieved from google search using keywords "John", "Sprague" and "Recovery".

³³ Taken from a comment made by Mr Sprague "John Sprague Road To Recovery" Facebook page. (https://www.facebook.com/JohnSpragueRoadToRecovery/)



4. INVESTIGATION

(4.1) Investigative Process

The incident was recorded in full on the in vehicle camera of Superstock 42A. That recording was uplifted on the night that the incident occurred by Police, and was supplied to this investigation by them.

(70007/6/1)

This incident was reported via the 0800 number to WorkSafe New Zealand between 20:30 and 20:45 on Saturday 13 January 2018.

WorkSafe Inspectors Hans Key and Gary Lumsden attended the scene as part of their after hours duties.

At 21:17, Inspectors Lumsden and Key discussed holding the scene, and decided to allow racing to continue.

At 21:23, Inspector Lumsden advised police on site via phone that WorkSafe would attend, and he gave permission for racing to continue.

(23000 P1)

The Inspectors arrived at different times Inspector Key was initially refused entry to the speedway venue by gate staff.
(22000 P1)

The incident had occurred during the first race of the evening, so spectators were still gathered in the spectator areas waiting for the racing to re start.

Inspector Key took some photos of the scene, and of the vehicle involved in the incident, Superstock 42A.

(22000 P1)

Inspectors Key and Lumsden were refused access by security staff to Promotion officials, who were located in a corporate box.

(22000 P1)

Neither Inspector Lumsden nor Inspector Key took any statements.

No notices were issued by either Inspector.

This investigation was assigned to Trainee Inspector Ben Mitchell-Allam (this Inspector) on Tuesday 23 January 2018 at the request of Bruce Greathead, Acting Manager Investigations, Northern 2.

(10005 P3)

As this Inspector was a trainee and unable to take enforcement action or exercise power under HSWA, all work undertaken was supervised, and all powers were exercised by a qualified health and Safety Inspector holding a current HSWA Identity Card.

9(2)(a)

Contact was maintained with the victim's spouse, 9(2)(a) (30003)

9(2)(a)



9(2)(a

9(2)(a) said that she and her husband did not want to be involved with this investigation, and that they wanted to be left to get on with their lives.
(20001 P47)

Mr Sprague also refused to provide police with a statement, for the reasons mentioned above.

(70007/2 P3)

A witness statement was taken from a photographer who was standing a matter of metres away from the victim when the incident occurred.

(30500)

After giving this statement, that witness was unwilling to sign his statement.

The reason given for this was the considerable distress that the incident had caused him at the time, and the ongoing distress felt by him as a result (20001 P39)

A Police investigation was concluded on 03 August 2018. No charges were laid as a result of that investigation. (70007/1 P4)

WorkSafe and Police have co-operated on their respective investigations. (70007/1 P3)

(4.2) Scene

Mr John Sprague was standing in the infield taking photographs of racing Superstock vehicles on the first night of racing in the New Zealand Superstock Championship event at Waikaraka Family Speedway.

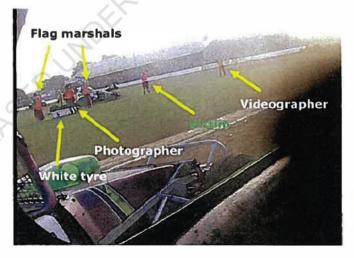


Fig. 6 Still image showing infield personnel Walkaraka Family Speedway at approx. 19:53 on 13/01/2018.

Image created from Police file footage recorded on an in-vehicle camera.

There were two other photographers and a videographer on the infield at the time the incident occurred. One of those is visible in the image above.



It is a common practice for photographers to take photographs from the infield while racing is underway. 34

Superstock 42A left the track and hit Mr Sprague. 35



Fig. 7
Superstock 42A travelling through the infield.
Image created from Police file footage recorded on an in-vehicle camera.

Fig. 7 shows the victim and a flag marshal standing next to the white tyre. Both people appear to be facing the oncoming vehicle.

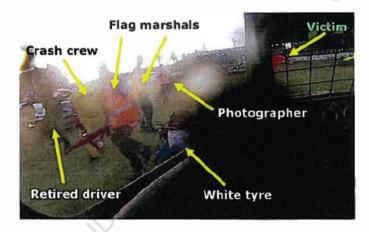


Fig. 8
Immediately prior to impact.
Image created from Police file
footage recorded on an in-vehicle
camera.

The image above shows the moment immediately prior to the vehicles' impact with the victim

What is of particular note in this image, is the proximity of five other people to the vehicle including two flag marshals.

The corner of the white tractor tyre, which is identified by the Club as the right place to stand, can be seen at the centre of the image.

(70006 P9)

For example: http://www.speedwayracing.co.nz/category/pictures-videos/#.W3xqS84zY3E

There are also images on the SNZ website, and the websites of Waikaraka Family Speedway, Palmerston North Speedway, Nelson Speedway and Huntly Speedway which appear to have been taken from the infield.

A Witness who is also a photographer talks in his statement (unsigned) about taking photographs at Whanganui Speedway.

³⁴ Numerous examples of this practice were found from a Google search using the keywords *Speedway*, *Photograph*, *Racing*, and *Stockcar*.

³⁵ Details of what took place in regards to the vehicle involved can be found at 4.3 of this report.



OHACT 1982 The images on page 23 (the following page only) show the impact between **Superstock 42A** and the victim, Mr John Sprague. RELEASEDUND







The footage of the incident shows that following its impact with Mr Sprague, Superstock 42A continued through the infield and re-joined the race track.

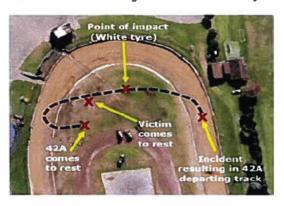


Fig. 12
Approximate map of incident.
Information used to construct
this image was taken from
footage and scene photographs.
Image created google maps.

The image above shows indicative positions only, as no formal scene mapping was undertaken as part of the scene investigation by either Police, or WorkSafe Inspectors.

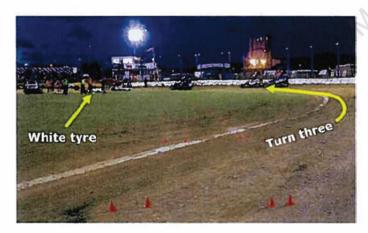


Fig. 13
Vehicle tracks leading onto the infield.
Trajectory marked by cones.
Scene photo from Police file.

Fig. 13 shows tyre tracks made by Superstock 42A as it left the track before turn three. These tracks were identified and marked out by Police as part of their scene investigation. (70007/7 P2)



Fig. 14
Vehicle tracks leading onto the track.
Trajectory marked by cones.
Scene photo from Police file.

The image above shows tire tracks that Police suggest is the point at which Superstock 42A re-entered the track after turn four.



The police file notes that gouging can be seen on the track surface. Police suggest that this is consistent with what the footage show of 42A with its two front wheels turned hard to the left as it re-entered the track, but the vehicle itself not turning.

(70007/7 P3)

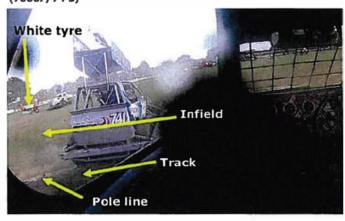


Fig. 15
View of impact between vehicles.
Image created from Police file
footage recorded on an in-vehicle
camera

The image above shows Superstock 42A impacting with Superstock 741A upon reentering the track in turn four, after the impact with Mr Sprague.

In this image, Superstock 741A provides an example of a vehicle being forced onto the infield after contact with another vehicle on the track.

Contact which is established in this report, is a key ingredient in Superstock racing.



Fig. 16
White tyre following incident.
Image created from Police file
footage recorded on an in-vehicle
camera.



Fig. 17
White tyre following incident.
Image created from Police file
footage recorded on an in-vehicle
camera.

Fig. 16 and 17 both show the position of the tyre following the incident. Its original position is known by the depression in the soil, the mounded debris, and the dead grass.



In his statement for the Police file, Senior Constable Colin Nuttall of the New Zealand Police estimates that due to impact by Superstock 42A, the tyre had been moved approximately 0.8 metres.

(70007/7 P2)



Fig. 18
View of scene immediately after
the incident.
Image created from Police file
footage recorded on an in-vehicle
camera

Fig. 16 is taken from the point in the recording where Superstock 42A has re-entered the infield for the second time before completing the loop pattern indicated in Fig. 12, and coming to a stop.

The angle at which the scene is captured shows the distance between where the impact occurred at the white tyre, and where the victim came to rest.

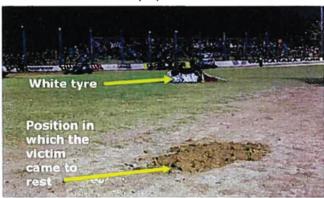


Fig. 19
Scene after removal of victim.
Image created from Police file
footage recorded on an in-vehicle
camera.

The image above shows the position in which the victim came to rest. Dirt had been piled by Promoter volunteers to cover the victim's blood which had pooled.

(70007/7 P2)

Footage of the incident shows the victim being thrown through the air, rolling across the ground, and coming to rest with no movement.

(70007/6/2)

Senior Constable Colin Nuttall recorded in his statement, that the area where the soil was piled was approximately four metres in from the edge of the track, and approximately seventeen metres from the tyre.

Witnesses spoken to by Police on the night of the incident estimate that the vehicle was traveling between 60 and 80 kilometres per hour when it hit Mr Sprague.

(70007/11 P2)

Notes entered in the Ambulance record at the time Mr Sprague was admitted to Auckland City Hospital estimate that the vehicle was traveling at 70KPH. (30005/3)

The speeds discussed in the two paragraphs above need to be considered estimates only. There is no way to qualify these estimates.



What is known, is that this rear wheel drive vehicle lost its energy transfer system, it made the journey across approximately grass surface of the infield, hit the white tire and Mr Sprague, continued across the grass and re-entered the track after turn four, collided left-side-on with a vehicle on the track, turned sharp left to the point where the wheels gouged the track, left the track and re-entered the infield again where it eventually rolled to a stop some 6 metres from the edge of the track.

All of the above was achieved under the motive power present at the time the drive shaft failed.

The actual speed the vehicle is travelling at is not known, and cannot now be calculated with any certainty, as no measurements of the tyre tracks or the distance and route of travel were recorded at the scene by either Police or WorkSafe Inspectors.

(4.3)Superstock 42A





Fig. 20 Superstock 42A. Front-left view. Image provided from Police file.

Superstock 42A. Rear-left view. Image provided from Police file.

(i) Post-incident inspection of Superstock 42A

A comprehensive inspection of Superstock 42A was undertaken by Neil Cuthbert of Automotive Consultancy Services Limited (ACS) on Monday 15 January 2018.

Mr Cuthbert is the one of two directors of ACS, which was incorporated under the New Zealand Companies office in December 2008.

Mr Cuthbert has worked in the automotive industry as an inspector since 1989, during which time he has provided independent expert evidence in court for the New Zealand Police.

(60002 P1A)



The inspection of 42A was carried out at the request of Senior Constable Colin Nuttall of the New Zealand Police.

(60002 P4)

The inspection was carried out at Ace Heavy Haulage, at 62 Luke Street in Otahuhu, Auckland.

Two SNZ officials were present at the time of the inspection. One of these was a head scrutineer. The scrutineer provided specialist knowledge relating to the mechanical and structural components of a Superstock vehicle.

Leading up to the incident, Superstock 42A had been passed all of the required checks and inspections. The vehicle was found to be compliant with the technical rules for its class (Superstock) and was considered fit to race.

(40563)

The inspection found that the drive shaft had shattered during the race. A possible cause of this was not identified in the examination report, and no conclusion was offered as to the cause.

Debris from the driveshaft assembly had broken a nipple on the rear left brake calliper, which caused the vehicles hydraulic brake system to bleed rapidly and become completely ineffective.

No pre existing faults which could have contributed to this were identified from the ACS inspection.

(ii) Driver of Superstock 42As' account of events

At the time the incident occurred, Superstock 42A was owned and driven by 9(2)(a)

9(2)(a) said in his statement to Police, that he has been racing Superstock for ten years. (70007/5 P3-4)

The following series of events happened over a four second period. The details are taken from 9(2)(a) statement to Police, and are supported by the footage of the incident supplied to police from Superstock 42A's in-vehicle camera. ³⁶

According to 9(2)(a), he heard a loud bang come from his vehicle as he was on the back straight, during lap four or five of a twelve-lap race.

Realising he had lost drive, 9(2)(a) turned off the track onto the infield to avoid collision with any other vehicle on the track.

9(2)(a) found he was unable to stop the vehicle, and so aimed the vehicle at the white tyre in order to force it to a stop.

9(2)(a) recalls seeing a part of the vehicles gear box at his feet, in the drivers foot-well.

9(2)(a) says that he tried to use the tyre to stop, but that he thinks he missed it. He saw people on the infield running, but that one person didn't notice him soon enough to move out of the way and he 9(2)(a) hit him.



No evidence has been found as part of this investigation that any rule or instruction exists which directs drivers of vehicles that are not able to be stopped by usual means, to drive at the tyres placed on the infield.

(iii) Police investigation into cause

Police concluded their investigation in to the cause of this incident saying that they had not found any evidence of a criminal element that would lead to police prosecution.

(70007/1 P3)

(4.4) Contributing Factors

(i) Decision making affecting risk

The rules and regulations in the SNZ rule book (other than technical rules) are changed or created if the majority of the membership who are present at an AGM and who have voting rights, vote in favour of the change or addition.

The reason for a voting member casting a vote will be influenced by factors which may or may not include due consideration to any risk which may or may not arise from whether a rule change passes or fails.

(40020 P17 24:07)

The structure around the way rules are changed allows for decisions to made, which are not based on the distinguishable assessment of risk.

Clubs operate under different operating models, are essentially independent from each other and are in competition with one another for revenue. Revenue that is generated by members, competitors and spectators.

(40020 P12 16:27)

When discussing making changes to improve safety during the duty holder interview, SNZ emphasised how much money the various clubs have at stake, saying that some clubs have "millions" at stake, while others have "ten thousand".

(40020 P24 32:49)

SNZ goes on to explain that with the introduction of a new safety rule that affects competitors, there is a ten percent drop off in competitors for that season.

(40020 P24 33:19)

SNZ adds that there is a perception that safety costs money, and that Promoters are resistant to safety changes as it's "always come at the cost of the show".

(40020 P25 33:38)

When discussing a suggestion made by SNZ that flag marshal might be moved from the infield to the outside of the safety fence, SNZ described the resistance to that suggestion as absolute.

(40020 P20 28:28)

SNZ stated that the suggestion had been made on the grounds that in their opinion, it was a better safer option. However, SNZ did not apply the SNZ rule which allows the board to implement changes to ensure ongoing safety. ³⁷
(40020 P21 28:48)

When explaining how the decision was reached that the maximum number allowed on an infield at any track should be 38, ³⁸ SNZ said:

 $^{^{37}}$ This refers to C11 (k) from the Constitution section of the SNZ rule book (40050 P39 M3-4-3)

³⁸ As is stated in the SNZ rule book. (40050 P39 M3-4-3)



"Ah because the 48 delegates in the room at the time, decided that that was the best thing.

Yeah, but I think it... it... it was done on Western Springs." 39

(40020 P21 28:48) (Copied from interview transcript)

When giving an example of SNZ implementing a change in response to risk that was highlighted by an incident. SNZ said:

"Yeah, so we've had Coronial Hearings and there's been outcomes of those Coronial Hearings that have been implemented, and...

Yeah, they've forced... we had a... we had an incident over in Napier four years... before my time, so I don't know the absolute intricacies of... of the issue. But, um... it resulted in us changing one of our forms and it ensured that two people signed off to say that the ambulance had arrived.

Because the meeting had started before an ambulance had arrived. So we changed our process to reflect that that couldn't happen and, you know. So, there was just, you know..."

(40020 P21 28:48) (Copied from Interview transcript)

(ii) Rules controlling hazard and risk

Through its rules and regulations, and its licencing and permitting processes, SNZ exercises significant influence and control over activity at the speedway venues it licences.

During the duty holder interview, two examples were given of occasions upon which SNZ changed its rules to improve safety:⁴⁰

 SNZ discussed in the duty holder interview, a change to the rules that relate to fences, describing the involvement of an engineer in designing the new requirements as they now stand in the SNZ rule book.

(40020 P28 38:13)

ii. SNZ also discuss a change to the rules relating to the use of a particular type of wheel disk. The action taken by SNZ in this instance, was to ban use of the particular type of disk until such time as certainty could be gained as to the safety of the disk (there was some level of concern at that time about the risk that this type of disk may fly off and "into the crowd or anything").

(40020 P20 27:48)

SNZ responded during the duty holder interview to a question about the rule relating to the SNZ Steward's control of the event as follows:

"But certainly our kind of, yeah. It would need... yeah you'd need that clarification from the Board on that. I know what happens in reality, so... yeah."

(40020 P57 01:16:44) (Copied from interview transcript)

³⁹ The phrase "done on Western Springs", refers to the number of people required on the infield at Western Springs Speedway. In fact, the conversation goes on to conclude that the decision was based on the number of people required on the infield at Palmerston North Speedway.

SNZ goes on to explain that Palmerston North Speedway is one of three tracks managed by the same person, and that this person was able to influence the decision.

A witness describes in his statement, that the speedway track at Whanganui is considerably smaller than that at Palmerston North, meaning what may be a suitable maximum number for one, may result in an increased risk to health and safety at another.

(31000)

⁴⁰ As has been established, SNZ is able (by way of its own constitution) to change its rules through a meeting of the board if safety is a factor requiring that change be considered.



In continuing to respond to the same question, SNZ went on to say:

"You've got to remember this book was written in 1982.

So, some of the wording that you're reading and some of the wording that was written, because it was a hobby, has not changed."

(40020 P57 01:16:57) (Copied from Interview transcript)

(iii) Psychological factors

A factor which could be considered to increase the risk to people standing on the infield is the psychological affect that racing competition has on participants.

A 2005 study into the acute neuromuscular responses to car racing, found that moderate levels psychological and high levels of neuromuscular loading result from competitive race driving. 41

Bakman discussed the compound effects of this psychological and physical loading, and found that car racing strains both the neuromuscular and the cardio-respiratory systems of the driver.

As well as the physical act of driving a race car around a circuit, the competition situation and the driver's ability to cope with stress were among those factors listed as possible causes of the strain.

Information published by the Harvard Medical School in 2011 (first edition), found that stress loading such as is described above generates a physiological reaction in humans enabling behaviours linked protection and self-preservation techniques. 42

This is commonly referred to as the 'fight or flight" response, and it signifies the activation of a person's sympathetic nervous system and the release of adrenalin.

SNZ goes some way to acknowledging this phenomenon by describing what drivers can experience as part of speedway racing, when it says:

- "It's not easy to come to grips with a strange vehicle on a slippery track, strapped in tight belts wearing a helmet."
 (40056 P22)
- ii. "It can be a nerve wracking time prior to a race meeting, and even the most experienced competitors get anxious before they race. Try and keep your intake of food and drink up, or at the very least stay hydrated by drinking water, if that's all your stomach can handle." 43 (40056 P23)

WorkSafe New Zealand's information on Work Related Health recognises the relationship between (work) activity that impacts on health, and health that impacts on (work) activity, and defines the factors that contribute to impairment.⁴⁴

⁴¹ VTE Pro Gradu. Acute neuromuscular Responses to Car Racing, Bakman, 2005.

⁴² https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response

⁴³ Speedway, Racing That's Out Of This World, 2015-16 Getting Started In Speedway, A Guide For New Competitors. Speedway New Zealand Incorporated, 2015

⁴⁴ https://worksafe.govt.nz/laws-and-regulations/operational-policy-framework/worksafe-positions/work-related-occupational-health/



WorkSafe goes on to demonstrate how impairment can alter judgment, affect decision making, and result in an increase in the risk to a person's health and safety.

(4.5) Changes/improvements made since the incident.

(i) White tyre repositioned

The Club has moved the two tires on the infield at Waikaraka Family Speedway which have been designated by them as the safe place to stand, further into the infield.

At the time the incident occurred, the distance of the tyre involved from the edge of the track was approximately 17 Meters. The club advised in an email that it had moved the tyre further towards the centre of the infield, and that it is now approximately 30 metres from the edge of the track at its nearest point.

(405 P)

An inspection of the site on 19 March 2018 confirmed this.

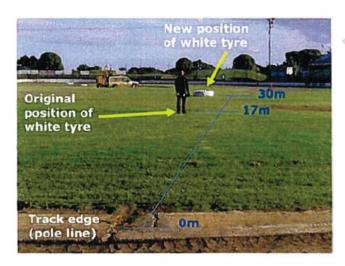


Fig. 22 Waikaraka Family Speedway infield. This image showing measurements is created using a scene photo.

(ii) Future changes indicated

i. Steps taken by club to recruit "Health and Safety Officer"

The Club has posted a notice on its website that it is seeking a "Health and Safety Officer (voluntary)" with experience. 45

At the time of finalising this report, the position of Health and Safety Officer had not been filled.

ii. SNZ to take steps to assess risk

During the duty holder interview, there was much discussion regarding the very detailed rules relating to the safety fence system.

This was raised, because the lengths to which the rules require a Promoter to go to in order to protect people on the outside of a race track from injury seemed to indicate acute awareness of the risk to their health and safety from racing vehicles.

⁴⁵ This is not a role that existed within the Club previously. This notice was posted in August of 2018. http://www.waikarakafamilyspeedway.co.nz/home.htm



What follows is an excerpt from that conversation.

(BM is this investigator, ZI is speaking for SNZ.)

BM "Is it fair to say that the people on the inside of the... the race track are vulnerable in the same way that the people on the outside are?"

"Is that something that could now be considered?"

ZI "I think it is time to think that, it is obviously being considered now, absolutely, yeah."

(40020 P96 02:07:54) (Copied from interview transcript)

iii. Motorsport health and safety working group

During the duty holder interview, SNZ discussed their involvement in a cooperative between themselves and other motorsport bodies in New Zealand.

One of the aims of this initiative is to improve safety in motorsport.

iv. Health and Safety Consultant engaged by SNZ

SNZ has engaged the consultancy services of a health and safety professional from Impac to assist in the review of SNZ responsibilities and duties regarding health and safety.

v. Steps taken by SNZ to change its rules

SNZ have issued "proposed temporary rules", which are in place for the 2018/19 season. These rules take the following steps:

- Recognise and define SNZ role in management of risk to people on the infield.
- Reduce the total number of people on an infield to 24 (from 38) essential-only
 personnel.
- Require all of those on the infield to receive an induction from the Clerk of the Course explaining safety rules.
- Defines the two acceptable solutions for optional use as "temporary barriers".
- · Defines installation of optional "temporary barriers".
- Up to two photographers are permitted if they are stationed behind a "temporary barrier" (if present, then included in maximum number of 24)
- Requires any person on the infield to be behind a "temporary barrier" or in a vehicle (in a vehicle includes seated on the tray of a utility or similar with no limbs exposed).
- Requires venues that are unable to comply with the temporary rules to provide an
 infield management plan which affords the same level of protection as the temporary
 rules. This plan must be verified by an independent, suitably qualified and competent
 person.

(40065 P1 and P2)

5. SAFE SYSTEMS OF WORK

5.1) Systems of work in general

Through the rule book, SNZ provides Promoters with safe systems of work for many of the activities associated with speedway racing.

The rule book states an event will not proceed without the issue of a permit by the SNZ Steward. Also, that the Steward is responsible for ensuring that the rules are complied with, and is must take steps to ensure public safety in general.

The SNZ briefing for drivers and SNZ Officials which is required by rules, is used to communicate specific requirements relating to each race meeting.



The SNZ Officials, the licencing and inspections systems and processes for tracks, competitors and vehicles ensures, as far as could be considered reasonably practicable, compliance with those safe systems of work.

(5.2) Safe system of work for people on the infield

Some Promoters hold a briefing for Track Officials. This is not a requirement of the rule book, and not all Promoters hold that briefing.

If that briefing is held, it is held by the Clerk of the Course. (40561 P19)

SNZ provides the training material for people undertaking the role of Clerk of the Course. (40561)

Volunteers may or may not be asked by the Promoter to sign a volunteers' register to confirm that they have attended the briefing.⁴⁶
(40541 P1)

This briefing does take place at Waikaraka Family Speedway. Instruction is given on staying safe on the infield, including not to turn and face away from the direction of oncoming vehicles.

(40542)

The Club has (informally, no evidence has been provided showing this in written instruction) identified the white tire placed at each end of the infield as a safe zone, around which people may gather as they undertake their various function relating to the race.

(40540 P16)

The video footage of the incident shows that when the Superstock 42A left the track and entered the infield, people gathered at the location of the tire were standing in positions spaced out in no definable position or reason, rather than close to it. (70007/6/1)

As established, a health and safety manual must exist as part of a track's licence.

Volunteers may or may not be asked by the Promoter to sign the health and safety manual to show that they agree to it and understand it.

(5.3) Safe System of Work for Photographers

SNZ does not provide a safe system of work for photographers or other media attending speedway events.

SNZ does not have an accreditation system of training for photographers and other media.

What is of note is that the Meeanee Speedway document includes in its list of positions, Photographers and a videographer. Neither of these positions are listed on the Waikaraka Family Speedway Document.

This difference highlights the inconsistency in the way that the same risks are managed throughout the speedway fraternity.

⁴⁶ Two examples of the volunteers register are located at 40541. One of these is from Waikaraka Family Speedway obtained from the Club for the purposes of this investigation, the other is from Meeanee Speedway in Hastings, and is part of the evidence relating to a WorkSafe New Zealand investigation into an incident there in 2014.



Photographers and other media are not required to and do not attend SNZ briefings.

Photographers and other media are not recognised by SNZ in either an SNZ or Track Official capacity.

Photographers and other media do not routinely attend the briefing for Track Officials.

This investigation has not found any evidence that any party is assigned responsibility or takes responsibility for ensuring the safety of photographers and other media who are given access by the Clerk of the Course in accordance with the SNZ rules to the infield

(5.4) Communication between duty holders

(i) Consultation, co-ordination, co-operation

For clarity, this investigation looks at consultation, co-ordination and co operation in the context of factors that have contributed to the risk.⁴⁷

(ii) In practice

SNZ states that the practice at a race meeting is that SNZ control the racing and the race track, while the Promoter controls all other aspects, including the infield.⁴⁸ (40020 P51 01:07:37)

When discussing photographers being present on the infield, SNZ's response included the following statement which is copied from the transcript of the duty holder interview;

"Um... again, that's kind of a question of track to track. Because we're not involved in that. Because that arrangement with a photographer, is with the Promotion and the Clerk of the Course.

We're not involved in that... that aspect. So we don't... we don't like... we don't accredit photographers or anything. We don't recognise them, because we only care about, not only care about, obviously.

But our concern is our Officials. And their concern is their Officials, from a Promotion point, I guess getting images and things to promote their event, I guess. Yeah."

(40020 P48 01:04:11) (Copied from interview transcript)

SNZ provide a health and safety manual template for Promoters to use. This template was used by the Club, and as previously discussed it includes a section on hazard identification and a hazard register.

SNZ requires clubs to submit to them, a copy of the health and safety manual and processes as part of the track licence application.

(40050 P69 M5-3-4 (a))

and that:

The Steward must take steps to ensure the safety of the public in general.

(40050 P69 M5-3-6 (c))

The rules and regulations that the Steward is responsible for overseeing include those which relate to other aspects including the infield, such as rules relating to infield personnel, driving on the infield, duties of Track (Promotion) Officials, safety fences, non-speedway activity, and track safety equipment.

⁴⁷ HSWA requires under section 34, that a PCBU must consult another PCBU who owes the same duty in respect of a matter.

As is already established, the Club is regarded by HSWA to be a Volunteer Association, and as such is not a PCBU and owes no duty under HSWA. Therefore, neither the Club nor SNZ owe a duty under section 34, as there is only one PCBU owing a duty in respect of this matter.

⁴⁸ This statement seems at odds with the rules which state that:

[[]a Steward is] An Official appointed by the board to see that the rules and regulations of SNZ are carried out at their appointed track.



No information provided to this investigation has shown a process whereby any hazards identified in the manual or any risk arising from those hazards is discussed between the parties.

The SNZ Steward holds a pre-race briefing for SNZ officials and drivers. This is attended by the Clerk of the Course.

The Clerk of the Course holds a briefing for Track Officials. This briefing is not attended by an SNZ Official.

The Track Official briefing includes a signing of the health and safety manual by those present.

When asked how SNZ can be sure that all track officials have attended the briefing and have been given the information about hazards, risks, and the controls required, SNZ replied:

"So, um, we've got different tracks doing different processes. Um, I... I went to a track the other day and I made a recommendation cause they were signing in down here, whereas if they had signed... the problem is that people were walking straight past there and getting on with the job.

So we said 'Why don't we move the sign in to the main gate and do it there? So they actually can't get past go and...'

So it's kind of... each track does it differently, because it's influenced by the Promoter."

(40020 P48 01:03:41) (Copied from interview transcript)

When asked how decisions are made as to who is given access to the infield, SNZ replied:

"The Clerk of the Course makes that decision. So they would normally, um and they traditionally have a briefing with the people that go on the infield.

As to how that's gonna happen and where they're gonna be and you have that... that process kind of occurs. So there's normally a briefing, involved."

(40020 P43 57:35) (Copied from interview transcript)

ANALYSIS

6. HAZARD AND RISK INVOLVED

(6.1) Hazard and risk identification

(i) Hazard

The hazard in this instance is the act of a person standing in the centre (infield) of a race track without any protection from vehicles racing on the track.

(ii) Risk

The risk arising from that hazard is that a pedestrian present in the location may be hit by a race vehicle that enters the infield.

The risk of this hazard being realised is affected by the fact that there is no barrier to prevent vehicles entering the infield due to mechanical failure, loss of control, being pushed into the infield during contact, or any other reason.

There is also no barrier or other protection that infield pedestrians are required to stand behind in order to prevent them being hit by such vehicles.

The risk may be increased for someone such as a photographer/videographer who is focussed on and could be distracted by taking footage of other vehicles at this time.



(iii) PCBU identification of hazards

The hazard of a vehicle entering the infield while racing is underway is not identified in any of the information supplied by SNZ.

Section 7 of the health and safety manual document which was supplied to this investigation by the Club, is titled 'Hazard Identification and Control Procedures'. (40540 P8)

There is no person or role in the health and safety manual that has been assigned with responsibility for identifying, recording, controlling, or reviewing hazards.

No person is identified as the person to whom hazards should be reported.

Section 7 discusses the need to Eliminate, Isolate, or Minimise hazards. 49 (40540 P8)

The document titled 'Hazard Register' which forms part of the manual has four entries.

One relates to a hazard identified⁵⁰, and three relate to incidents which have occurred. ⁵¹ Listed under controls for these hazards, are actions carried, or to be carried out. (40540 P9)

The SNZ rule book requires people on the infield to wear a high visibility vest or jacket.

There are rules that restrict race vehicles from driving on the infield.52

These rules seem to indicate that the risk vehicles pose to a person standing on the infield has been identified to some degree.

SNZ stated during the duty holder interview, that the infield is not theirs to control, as this falls to the Clerk of the Course.⁵³ (40020 P37 49:15)

No evidence has been provided which shows that the process to identify or control hazards as outlined within the health and safety manual that SNZ provide was followed in relation to people on the infield, prior to the incident taking place.

SNZ assert that the infield, and control of the infield was the responsibility of the Club,

Each time the Club applies for a new licence, SNZ require copies of the manual containing the list of hazard that ought to have been identified by the club.

As a PCBU in control of the workplace, SNZ owes a duty to anyone in that workplace to ensure that hazard is identified, and risk is managed appropriately.

⁴⁹ The Hierarchy of Controls includes elimination, substitution, engineering (isolating), administration, and PPE as components of effective hazard and risk management.

The terminology as it is used in Section 7, particularly the use of the words Isolate and Minimise together (to isolate a hazard is to attempt to minimise the risk of a person coming into contact with it), seems represent an understanding of the process to manage hazards and risk as prescribed by previous health and safety legislation.

⁵⁰ The hazard that has been identified is `cars cutting across the infield'. This item has been entered onto the register so that it is in fourth place when reading the document, indicating that it is the final entry to have been made. The entry immediately follows the entry relating to the incident that is the subject of this investigation.

⁵¹ One of the incidents is the subject of this investigation, the other relates to a 'wheel on the race track'.

⁵² It isn't clear whether these rules are in place to protect people on the infield from the hazard, or whether they are in place as a means of ensuring fair play by competitors.

⁵³ This statement seems to be at odds with the rule requiring people present on the infield to wear a hi-vis vest or jacket.



(iv) PCBU assessment of risk

In responding to the question has SNZ assessed the risk to people working on the infield, SNZ said:

"No, because that's always kind of been deemed Promoter territory. If... is that the right kind of... thing. It's always the infield, if you like, has always been kind of deemed the... Yes, we've assessed it from a, you know, we had a... we... well to be fair, we used to have a minimum number. "54"

(40020 P69 01:34:36) (Copied from Interview transcript)

SNZ says it did not assess the risk relating to people on the infield as it felt it was not responsible for doing so.

The following is an excerpt from the duty holder, during the discussion on how risk is assessed. (The initials of those speaking have not been omitted so that what is being said has context).

(BM is this investigator, ZI and WC are speaking for SNZ.)

BM	"So so when you've got vehicles that are involved in a contact sport,
	they're going around a circuit and there are people standing in the middle
	of that."

ZI "Mmm hmm."

BM "Um, is that risk considered? And is that communicated broadly? And is there a system to do that, a process to do that?"

ZI "So that..."

WC "I don't think we've actually ever considered that before."

(40020 P91 02:01:46) (Copied from interview transcript)

SNZ does not have a process to ensure that risk is assessed at the tracks it licences.

(6.2) Application of EDM

(i) Benchmark Risk (NIL/NEGLIGABLE - DEATH AND SEVERE)

i. Identifying the Benchmark

To establish a benchmark, comparisons were made between the physical circumstances between Waikaraka Family Speedway, and available examples where protection on the infield is provided.

In the absence of specific provisions within New Zealand's legislative framework for the work activity, and without Standards or Approved Codes of Practice by which to measure the performance of the racing industry, examples of guidance from other jurisdictions were also used to establish the benchmark of well managed risk. ⁵⁵

When working to establish the benchmark risk, consideration must be given to the intent behind 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."⁵⁶

⁵⁴ The minimum number referred to here is in fact, the number 38, which is the maximum (not minimum) number of people that the SNZ rule book permits to be on the infield at any one time.
(40050 P39 M3-4-3)

⁵⁵ Existing guidelines, templates or other such documents already in use in similar circumstances by established and recognised governance bodies within the racing community, such as Motorsport New Zealand, Confederation of Australian Motorsport, Motor Sports Association of Great Britain, Health and Safety Executive, and Speedway Australia. Specific examples of barrier systems at Huntly Speedway, Northline Speedway, Borderline Speedway.

⁵⁶ HSWA Section 3 (2)



In this instance, given the severity associated with this risk, the highest level of protection would be to remove all pedestrians from the infield of speedway tracks, thereby eliminating the hazard and the risk posed by it.

Were such measures not found to be reasonably practicable by a thorough analysis of the risk, as has been the case in other jurisdictions, steps must be taken to minimise the risk by designing and implementing the highest most reasonably practicable level of protection from it.

Again, considering the level of severity, and having decided it is not reasonably practicable to remove pedestrians from an area where they are exposed to a risk of severe injury or death, it should be considered reasonably practicable to introduce a barrier system to separate pedestrians on the infield from the risk of being struck by a vehicle to the point where they are entirely protected from it.

Using the definitions provided by EDM, the benchmark has been determined based on established standards.

Therefore, in the absence of defined guidance, it is reasonable to conclude as a benchmark, a physical barrier designed and constructed to protect the pedestrians behind it from death or serious injury is considered reasonably practicable separated and therefore the benchmark standard in minimising this risk to health and safety. ⁵⁷

The benchmark for control of this risk is adequate and appropriate Isolation (minimising the risk as far as is reasonably practicable).

ii. Likelihood

Where separation is provided in such a way so as to afford people the highest level of protection that is reasonably practicable from the risk of severe injury or death, the likelihood of injury occurring to a pedestrian on the infield from being hit by a vehicle is in the range of **Nil/Negligible**.

iii. Consequence

To establish the most credible consequence of a vehicle hitting a pedestrian, an internet search was conducted to identify sources of credible information to inform a reasonable conclusion. 58

The information retrieved relates to an incident between a pedestrian and a passenger sedan. It would be reasonable to conclude the severity of injuries is likely to be greater when the vehicle involved is a Superstock, without the smoothed aerodynamic surfaces to prevent entanglement in the structure of the vehicle.

Information published by the European Commission regarding road safety, finds that; "Pedestrians, cyclists and moped riders have a large risk of severe injury when colliding with a motor vehicle. The difference in mass is huge and the collision energy is mainly absorbed by the lighter 'object'. In addition, pedestrians, cyclists and moped riders are completely unprotected: no iron framework, no seatbelts, and no airbags to absorb part of the energy."⁵⁹

59

https://ec.europa.eu/transport/road safety/specialist/knowledge/speed is a central issue in road safety/speed and the injury risk for different speed levels en

⁵⁷ An infield with a solution in place to provide a level of separation between pedestrians and race vehicles would look like, for example, Huntly Speedway, Borderline Speedway SA, or Northline Speedway NT. Elimination was considered as a possible benchmark, whereby no people would be present on an infield. This investigation did not find any examples of Motorsport where no person is present infield during racing. Furthermore, access to the track for rescue crews and their vehicles (crash truck, ambulance) is best achieved from having those vehicles and crews on the infield where they can access all areas of the track to respond to an emergency situation in the fastest possible time.

⁵⁸ Key words used were vehicle, pedestrian, injury, death, speed, rate, severity, likelihood.

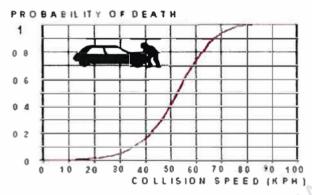


The following information shows the relationship between speed, and the severity of injury to pedestrian hit by a vehicle.

Car Speed		% fatally injured pedestrians	
	32 km/h	5	
	48 km/h	45	
	64 km/h	85	

(Ashton and Mackay, 1979)

FORMATION As a graph, the probability of fatal injury for a pedestrian if hit by a vehicle looks like this:



(Pasanen, 1991)

The most credible consequence to a persons' health and safety that would result from being hit by a vehicle traveling as the estimated speeds of between 60-80 kilometres per hour is considered to be in the range of Death and Severe.

Actual Risk (POSSIBLE - DEATH AND SEVERE) (ii)

Likelihood

No system of protection in the way of barriers to isolate pedestrians on the infield from racing vehicles exists.

This investigation has found that a similar consequence has been realised in these circumstances on more than one occasion, however those occasions have been infrequent.

Therefore, the likelihood of the incident occurring falls in the range of Possible.

ii. Consequence

The most credible consequence to a persons' health and safety that would result from being hit by a vehicle traveling as the estimated speeds of between 60 80 kilometres per hour is considered to be in the range of **Death and Severe**.

(iii) Risk Gap (EXTREME)



The risk gap analysis was conducted using Table 1.1 from WorkSafe New Zealand's Enforcement Decision-making Model (EDM).

The risk gap is calculated as Extreme.

(iv) EDM workflow

Based on the definitions provided by EDM, the risk of harm could have been considered by inspectors attending the scene as immediate or eminent.

As such, flow chart one from the EDM would have applied.

Had this been the case, a Prohibition Notice could have been considered to restrict people working on the infield without adequate protection from the risk.

An Improvement Notice could also have been issued instructing the duty holder to assess, and manage the risk to people working on the infield.

To date, no notices have been issued in relation to the incident that occurred, or to manage the ongoing exposure to the risk.

7. REASONABLE KNOWLEDGE

(7.1) Available guidance

The table below shows a summary of guidance available on the topic of managing risk that is specific to motor racing events.

Material	Details	Sections of Relevance
Safety at Motor Sport Events (50001) (Excerpts only)	 Published by the Health and Safety Executive (HSE) Second edition published 2016 Found by Google search with key words Speedway, Motorsport, Racing, Safety, Rules, UK. Retrieved from HSE Website free of charge. 	 Specific mention of safety provisions for media (which includes photographers) at; P8/45-provide relevant safety information. P11/57-barriers need to protect media. P12/61-protect from vehicles and parts of vehicles. P13/68-take reasonable steps to reduce risk. P14/70-Identifying prohibited areas. P28-media vantage points suitably protected.
Zealand Race Organisers Handbook	section of the MSNZ Website free of charge.	 Requirements for track safety including how to implement first, second and third lines of protection⁶⁰. Includes an accredited media system. Sets out accommodation requirements for media. "afford at least first line of protection" P40 Protection of media - photographers and film crew.
Motor Sport New Zealand Photographer Briefing Sheet (50003)	Retrieved free of charge from	 Conditions of permission consent to receive photographer's privileges. Site map showing areas of permitted access. "must at all times be behind at least one first line of protection".
Zealand Health and Safety Guidance	 Produced by NZ Safety Broker New Zealand Limited. Issued September 2016. Retrieved from the resources section of the MSNZ Website free of charge. 	 Model health and safety risk management plans for events at which motor racing takes place. Specific section on identifying hazards and assessing risk. Set of model policy statements and related procedures. Guidance on creating site specific

⁶⁰ The first, second and third lines of protection are terms recognised widely in the racing industry (MSNZ and CAMS) to describe the layers that make up the system of protection between pedestrians and race vehicles.



CAMS Safety First Strategy	Australian Motor Sport (CAMS).	Provides requirements for safety of spectators, competitors and officials. Details how to achieve compliance.
(50005)	Retrieved free of charge from the CAMS website.	States that first line of protection is the minimum that will be tolerated while race is underway.
CAMS Media Accreditation Policy		Details CAMS Media Accreditation Programme. Identifies specific safety concerns for media (which includes photographers).
(50006) CAMS Media Guidelines (50007)	Retrieved free of charge from	"remain behind first line of protection" P 6/2/C/iv "not stand in areas where vehicles may or are likely to run off their course in the event of an incident" P 6/2/C/vi
CAMS Track Operators Safety Guide (50008)	2012. • Produced by CAMS. • Retrieved free of charge from •	P15 - Defines photographers P17 - First line of protection P19 - Infield Protection P23 - Marshal zone - includes photographers P64 - openings in fences for photographers
MSA Yearbook 2018 (50009)	 Produced by the Motor Sports Association of Great Britain. Yearly publication. Found by Google search with key words Speedway, Motorsport, Racing, Rules, UK. Retrieved from MSA website free of charge. 	P 91/2.4 - Enclosures - protection for spectators and officials at race tracks
New Zealand Government (50010)		Requirements for meeting the duty to identify and manage risks to the health and safety of persons in a workplace affected by the work.
WorkSafe New Zealand (50011)	 https://worksafe.govt.nz/ma • naging-health-and- safety/managing-risks/ 	Provides resources and information on identification and management of risk.

(7.2) A Foreseeable Incident

It is reasonable to expect that SNZ should have had knowledge of the risk posed to pedestrians standing on the infield of a racetrack, and therefore have foreseen this incident, because:

(i) Previous recent incidents involving people on infield;

Waikaraka Park Incident 2017

In January of 2017, the victim injured in the incident which is the subject of this investigation, and a witness to that incident were undertaking the same activity in the same locations as they were when this incident occurred, on the infield at Waikaraka Family Speedway.

Following a mid-race event between vehicles on the track, one of the vehicles left the track and entered the infield.

The driver of that vehicle had become unconscious.

The vehicle passed between the two, missing them by around 3 metres.

This incident did not involve injury and no evidence has been found that it was reported as a near miss to either the Club, or to SNZ.

However this incident occurred mid race, and was witnessed by some of those present including SNZ Officials, Track Officials, spectators, and competitors. (30500 P2)

ii. Nelson Speedway incident 2017

On January 28 of 2017, a vehicle entered the infield and ran into a tow vehicle which was parked at the centre of the infield.



A marshal who was positioned on the rear of the tow vehicle (standing on the back of the truck) was thrown from the tow vehicle onto the ground by the impact. The marshal suffered a broken leg and other more minor injuries.

iii. Westline Speedway incident 2015

In 2015, in Whyalla, South Australia, a volunteer speedway official died after being hit by a race vehicle while standing on the infield. ⁶¹

iv. Meeanee Speedway incident 2014

Napier, New Zealand; A volunteer marshal was struck by a motorbike while undertaking work on the infield during warm up laps. This incident resulted in fractures to both legs. The impact of the injuries suffered by the victim is ongoing.

(ii) Previous incidents involving people behind safety fences in the spectator area;

Bay Park Speedway 2011

A spectator was hit with a piece of debris (metal) that had come from the track during racing. The woman, who was sitting in the top row of the stands received two broken arms.

ii. Te Marua Speedway incident 2001

A Mother and daughter were hit by a wheel from a race vehicle while behind the protection fence in the spectator area.

The tyre came off a vehicle during the race, and was hit by other vehicles which caused it to be thrown over the safety fence around the outside the track and into the spectator area.

Both mother and daughter were knocked unconscious and suffered injuries which required hospitalisation.

iii. Waikaraka Park Incident 1997

The death of an eight year old spectator after she was hit by debris from a race vehicle while standing behind the safety fence in the spectator area.

(iii) Previous incidents involving unconscious drivers in vehicles entering the infield

A witness statement recalls previous incidents (in addition to the specific one mentioned at (i) i. of this section) where vehicles with an unconscious driver have left the circuit and entered the infield under throttle.

(31000 P2)

(iv) Previous incidents involving vehicles entering the infield

Other previous incidents have highlighted the risk.

This system of protection was agreed to by Safe Work South Australia and Speedway Australia. All licensed speedways operating in South Australia now have infield protection as shown in the photograph of Borderline Speedway in Mt. Gambier SA. (20100 P1)

This requirement did not extend to speedway circuits outside of South Australia. Speedway circuits outside of South Australia operate with a range of solutions for infield protection, from a single tyre (such as at Waikaraka Family Speedway), to the type of enclosure built with barriers shown in the photograph of Northline Speedway in Darwin NT. (20100 P2)

In March of 2017, CEO of Speedway Australia Mr Tim Savell (previously General Manager of Speedway New Zealand), said that Speedway Australia's Speedway Safety Advisory Council is developing a national standard which will require speedway venues across Australia to provide a system of infield protection which is to be based on, but improve on the examples from SA and NT.

⁶¹ Following this incident, Safe Work South Australia issued a prohibition notice to Speedway Australia. This notice stopped any speedway racing in South Australia until such time as a system of protection was installed on the infield of all speedway circuits in South Australia.



A witness statement recalls previous occasions involving stock cars leaving the circuit and entering the infield in an uncontrolled manner.

These occasions are observed by people who attend a race and are recorded on the video camera mounted inside race vehicles.
(30500 P2)

(v) Risk is controlled for certain groups

Risk to certain groups (*spectators*, *lap scorers*, *pit crews*) arising from racing vehicles and debris off racing vehicles has been identified and considered. This is evident through he steps taken to manage the risk, for example certain engineering and administrative interventions to control the risk to these groups are required in order for a track licence and racing permit to be issued.

These controls are detailed in the SNZ rule book.

Included (by way of example) are the rules that relate to fencing for the outside of the track, to protect spectators.

The fencing rules provide a description on the type of construction materials required to build perimeter fencing around the outside of the track, the number of poles required, the height and circumference of those poles, and the centres (*distances*) at which those poles should be placed, etc.

The fencing rules have been reviewed and revised following incidents that have put the effectiveness of the control in question. ⁶²

(vi) Existing guidance, rules and practice within the racing industry

Guidance listed at 7.1 of this report that specifically relates to the safety of media, or to people on an infield area should have provided an indication that a hazard exists which gives rise to risk of serious injury.

When discussing the management of risk in motor sport generally, and what involvement SNZ have had with Motorsport New Zealand on this topic, (2)(a) states that she is aware of Motorsport New Zealand's template document for the management of risk. (40020 P64 01:27:02)

(7.3) Standard Practice

(i) Common Practice

What has been the standard practice at Waikaraka Park Speedway of allowing people to stand in the infield, for a mixture of purposes, without any separation from the hazard posed by racing vehicles, is repeated at multiple, but not all speedway venues throughout New Zealand.

(ii) Examples of Existing Solutions

i. Huntly Speedway

An example of how the risk arising from this practice can be controlled is provided by Huntly Speedway.



Fig. 5
Barrier system on the infield at Huntly
Speedway, viewed from outside
safety fence.
Photograph taken for this
investigation.

Guardian: 5696524 / SPEEDWAY NEW ZEALAND INCORPORATED / Report Ben Mitchell-Allam

⁶² During the duty holder interview, SNZ discussed at length the process of reviewing and changing the fencing rules following findings of a Coronial inquiry. This inquiry followed the death of a spectator who was struck by an object that had come off a vehicle as it was racing, while she was watching the race from behind the safety fence in the spectators' area.





Fig. 6
Close up of barrier system in place on the infield at Huntly Speedway.
Photograph taken for this investigation.

As is evident from the photograph above, Huntly Speedway has installed an enclosed area at each end of the circuit which is constructed of 8 tyres, placed in an interlocked pattern.

The president of Waikato Stock and Saloon Car Club which operates Huntly Speedway, says that these tyres weigh approximately 2 ton each (44 gallon drum for scale). (20001 P37)

Huntly Speedway also uses cherry pickers for photographic purposes at certain events which are placed outside the circuit in the spectator area.



Fig. 8 Grassed area where cherry picker is located at Huntly Speedway. Photograph taken for this investigation.

Huntly Speedway is licenced by SNZ and as such, is subject to the same programme of venue inspections and pre-racing checks as all other speedway venues.

ii. Borderline Speedway, Mt. Gambier, SA

An example of how the risk to people working on the infield can be controlled is provided by Borderline Speedway in South Australia.



Fig. 6
View of barrier system in place on
the infield at Borderline Speedway.
Image taken from original provided
by Tim Savell, CEO Speedway
Australia.



This system was required by SafeWork South Australia, in order for a prohibition notice on all speedway racing to be lifted.

During a Discussion with Mr Savell (CEO, Speedway Australia) regarding this protection system, he highlighted several issues with the way this design works in practice. One example given was the increase in the time it takes for emergency vehicles to respond to an incident on the track.

iii. Northline Speedway, Darwin, NT

An alternative example of how the risk can be controlled is provided by Northline Speedway in Australia's Northern Territory.



Fig. 7
View of barrier system in place on the infield at Northline Speedway. Image provided by Tim Savell, CEO Speedway Australia.

Northline Speedway implemented this system on their own initiative. Mr Savell acknowledged this proactive approach, but also discussed some issues with this system of protection.

The large blocks shown are constructed from concrete. While these do offer a very localised 'safe zone', as opposed to total enclosure of the infield, a vehicle hitting a solid concrete block will potentially project debris into the area where people are standing, and such an impact may also increase the risk of injury to a driver.

iv. Speedway Australia setting a standard

Following the experiences and learning gained from both Northline and Borderline Speedway venues, Speedway Australia is developing a standard which will set out the requirements for infield protection for all speedway tracks in Australia.

(7.4) Reasonable to seek knowledge

It is evident that both SNZ and the Club were aware of the risk to people in the vicinity of race vehicles.

Had SNZ and the Club not had sufficient ability or resources to develop satisfactory controls for the risk to people on the infield, it would have been a reasonable step for one or both of them to seek advice and guidance from a competent person or from another reputable racing industry body, such as Motor Sport New Zealand, Speedway Australia, CAMS, etc..

During the duty holder interview, SNZ discussed the previous engagement of a health and safety consultant. This was described by SNZ as unsuccessful, with the consultant being expelled from a meeting of the membership, by the membership.

SNZ goes on to assert that this consultant provided, in its opinion, poor advice.

Both SNZ and the Club are members of the FIA (an international motor racing authority), and state on their respective websites that they invite collaboration on motor sport safety.



8. LEGAL PROVISIONS

(8.1) Influence and control

This investigation has established that through its rule book, its licencing processes, the roles undertaken by SNZ representatives at speedway racing events, and the objects of its constitution, SNZ has and can reasonably be expected to have significant influence and control over the work activity at Waikaraka Family Speedway, as that is defined at 3.1 (i) of this report.

(8.2) Health and Safety at Work Act 2015 (HSWA)

(i) Section 30

SNZ had a duty to Mr Sprague under Section 30 of the Health and Safety at Work Act 2015 (HSWA) to:

- · Eliminate risks to his health and safety; and
- Minimise risks to his health and safety if elimination wasn't found to have been reasonably practicable.

(ii) Section 36

SNZ as a PCBU had a duty to Mr Sprague under Section 36(2) of HSWA to ensure, so far as is reasonably practicable, that his health and safety (as an other person) was not put at risk from work carried out as part of the conduct of the business or undertaking, including taking steps to ensure:

- safe systems of work; and
- the provision of information, training, instruction, or supervision to protect him from risks to his health and safety arising from the work; and
- the provision and maintenance of a work environment that is without risk to his health and safety.⁶³

(iii) Section 37

SNZ had a duty to Mr Sprague under Section 37 to ensure so far as reasonably practicable that the workplace, and anything arising from the workplace were without risks to his health and safety.⁶⁴

9. RELEVANT POTENTIAL FAILURES

(9.1) Failure to identify hazard

No evidence has been presented that shows the hazard to people working on the infield posed by race vehicles has been identified and recorded in a way which makes people on the infield or going to the infield aware of it.

(9.2) Failure to manage risk

SNZ failed to recognise that a risk existed to people on the infield, and therefore failed to assess and manage that risk, regardless of:

(i) Nelson Speedway incident notification

Notification of the above incident itself had already been made to SNZ twice, by way of two incident reports completed on the electronic incident reporting system by SNZ officials who were present when the incident occurred. One report was made on 29 January 2018, the other was made on 30 January 2018.

(40057 P1 and P3)

⁶³ HSWA S 36 (3) (a), (c) and (f)

⁶⁴ Section 37 defines a PCBU who manages or controls a workplace as a PCBU to the extent that the business or undertaking involves the management or control (in whole or in part) of the workplace.



(ii) WorkSafe New Zealand advice

SNZ provided as part of its response to a document request, a copy of an email conversation between a WorkSafe New Zealand Inspector, and the President of the Nelson Speedway Association.

This email was sent following that inspectors attendance at the scene of the incident at Nelson Speedway referred to at 7.2 (i) ii of this report, in which a person working on the infield was hit and injured when a stock car left the track during the race and collided with the vehicle he was standing on.

The email states:

"... it is considered best practice to look for root causes of an incident/ near miss and put steps in place to prevent re-occurrence going forwards (e.g. people in the infield within cabs of vehicles or behind crash barrier(s) to provide some isolation from the risk of vehicle vs. pedestrian collision). This is also part of the ID, assess, control and review process in risk management."

The inspector goes on to provide examples of specific resources, and where to find those resources

This email was sent to SNZ making them aware of the incident again, on Wednesday 1 February 2017 at 15:02.

(40057 P5)

(iii) Report to SNZ Board

The SNZ general managers' report that was submitted to the SNZ Board of Directors at board meeting number 258 on 15/02/2017, included under the heading of health and Safety, a summary of the incident at Nelson Speedway.

The report focusses mainly on:

- Whether or not the incident should have been notified to WorkSafe
- The lifting of the non-disturbance notice issued by the WorkSafe inspector
- The competence of medical personnel at venues in judging the extent of a persons' injuries, and thus notifying or not notifying WorkSafe.

The recommendation to the board from this information was that SNZ be the responsible party to report to WorkSafe in the future, to ensure that only incidents that must be reported, are reported.

(40064)

No recommendations were made to the board regarding the incident itself, and no discussion was recorded regarding any actions arising from the incident.

The only discussion recorded in the minutes of the board meeting regarding the above, was to move that the report be received, a movement which was carried.

(40063)

There was a move by SNZ to let Promoters know that SNZ did not require flag marshals to be on the infield. SNZ stated during the duty holder interview that an email was sent to all clubs and tracks to let them know this, and that they could move them off the infield and outside the safety fence system into the spectator are "if they wished".

SNZ goes on to add, that this suggestion was met with mass opposition. This was then changed to opposition from two clubs a short time later in the interview.

No suggestion was made at that time to remove anyone other than flag marshals from the infield, and no reasons was given as to why this suggestion was made.



10. REASONABLY PRACTICABLE ACTIONS

(10.1) Identification of the hazard.

It is reasonable to expect that SNZ would have identified the hazards involved in standing on an infield while racing is underway and communicated about that hazard to the speedway racing community it governs.

(10.2) Assessment of the risk.

It is reasonable to expect that SNZ would have assessed, or required to be assessed, the risk to health and safety of people present on an infield while racing is underway, and to ensure that the results of that assessment were communicated to the speedway racing community it governs.

- (10.3) Changes to the rules to exclude non-essential persons from the infield. It is a reasonably practicable step for SNZ to have provided the voting membership with the opportunity to consider a rule change to specify that non essential personnel (other than emergency crews inside their vehicles, be excluded from the infield to protect them from risk.
- (10.4) Changes to the rules to require protection for people on the infield.

 It is reasonably practicable for SNZ to have provided the voting membership with the opportunity to consider a rule to ensure that separation between vehicles and pedestrians on the infield is provided at each track (isolation control).

Had such an opportunity not been successful in improving protection for people on the infield, then it is reasonable to expect that SNZ would have considered use of their constitutional rule allowing changes to the rules by the board, in the interest of safety.

11. CONCLUSION

This investigation has found no evidence that Terms of Reference exists to guide voting members on what factors should be considered when deciding whether to vote for or against a change to the rule book.

No evidence has been provided that shows that the decision making process includes consideration of risk.

No information provided to this investigation shows that SNZ engages with Promoters to encourage the *reasonably practicable* approach to risk management. 9(2)(g)(j)

No evidence has been provided showing that SNZ have taken steps to educate voting members on the value of improving safety in the sport, as is stated as an objective of SNZ in its constitution.

In spite of previous incident which should have highlighted the risk, no evidence has been found that a change to the rule book has been considered which would have improved the safety of any person present on the infield, and may have resulted in a different outcome when Superstock 42A left the track.

By SNZ's own admission, the rule book used to govern the sport may not be fit for purpose in that parts of it are out of date and don't reflect what is actually practiced by those it aims to govern.

It is reasonable to conclude that the human reaction to physical and psychological loading (stress and fatigue) induced by competitive speedway racing, may contribute to the increase of risk in many of the hazards that exist within a speedway racing environment.



No evidence has been found to show that impairment has been considered either as a factor in other hazards and risk, or identified as a hazard in its own right and risk-assessed.

There is no evidence that the hazard was formally identified prior to the incident.

There is also no evidence that the risk arising from the hazard has been formally or informally identified or assessed by a competent person.

No evidence has been provided that shows reasonably practicable steps have been taken to eliminate risk.

No evidence has been found to show that the hierarchy of controls as prescribed by regulation has been applied to minimise the risk.

12. RECOMMENDATIONS

ELERSEDUND

That WorkSafe consider taking a prosecution against Speedway New Zealand under section 36 (2) of the Health and Safety at Work Act 2015, in that SNZ failed to manage risk arising from a work activity over which they exercise significant influence and control.

In doing so, SNZ failed to take reasonably practicable actions to ensure that the Health and Safety of Mr Sprague was not put at risk from work carried out as part of the conduct of their business or undertaking.



Approval

Signoff and approval

Inspector

Comments:

It is worth noting that several of the Reasonably Practicable steps identified by this report have been undertaken by the PCBU since this investigation commenced.

I do not believe that these steps would have been taken had this investigation not taken place.

Had these steps, and others identified by this report been taken at any stage since Speedway New Zealand commenced its work activity in 1984, it is extremely unlikely that the incident which occurred in January of 2018 would have resulted in the same extent and seriousness of injury to the victim, Mr John Sprague.

Signature

Name: Benjamin Mitchell-Allam

Date: 21/12/2018

Peer reviewer

Comments:

I agree that there is significant evidence of failures on behalf of SNZ. They have failed to assess and to manage a very obvious hazard (that they were well aware of) and that if realised, will inevitably result in serious injury or death.

This file appears to meet both the tests for evidential sufficiency and public interest.

Whilst this is not a priority area for WorkSafe, I believe that the evidence is such, that WorkSafe should still give serious consideration to prosecuting SNZ.

Signature:

Name: Susan C

Date:

Signoff and approval

Manager

Comments: Verstag cound

Signature:

Name:

ayden Mander Investigations Manager Auckland Central Worksale New Zealand

03/01/2019

Date:

Chief Inspector

Signature >

Name:

Ninad Ingulkar

From:

Hayden Mander

Sent:

Friday, 21 December 2018 10:11 a.m.

To:

Ben Mitchell-Allam

Subject:

Fwd: Speedway New Zealand Inc. File no 5696524 [UNCLASSIFIED]

Attachments:

image003.png

For discussion

Sent from my iPhone

Begin forwarded message:

From: Steve Kelly <<u>Steve.Kelly@worksafe.govt.nz</u>>
Date: 21 December 2018 at 8:21:16 AM NZDT

To: Hayden Mander < Hayden. Mander@worksafe.govt.nz >

Subject: Speedway New Zealand Inc. File no 5696524 [UNCLASSIFIED]

Good Morning Hayden,

Firstly please pass on me thanks to Ben for a very thorough and extensive investigation into this incident. Also for a very detailed and comprehensive investigation report. Excellent work. I suggest that he holds this up at his annual appraisal meeting as an example of his very good work.

Prior to making my decision regarding whether to agree with the recommendation to prosecute or not, I sought some advice from Chief Inspector Keith Stewart who has nearly 30 years' experience in investigating H&S matters.



Overall it paints a picture of dysfunctional system for managing safety at speedway events with the Club, Promotor and SNZ having different roles and imperatives. This will allow gaps with problems created. The overall system relies on members voting on "rules" as the main mechanism for

Factors that support prosecution are:

• The numerous previous incidents- the risk of striking spectator and others is an intrinsic hazard and risk associated with the sport.

- Speedway NZ appears to wait until something serious occurs (death/serious injury) then
 take action by putting in place a new rule. This is contrary to well established legal comment
 on safety laws which require a proactive approach of identifying the risks and then taking
 action.
- Persons were put at significant risk. The injury was serious and it was just luck it was not death.
- Prosecutions can be just the catalyst to get things moving. Threats can become hollow.

The factors against prosecution are:

- This is <u>not</u> a priority area for WorkSafe
- The victim does <u>not</u> want any further involvement in the case hence there is <u>not</u> an
 individual driver for accountability.
- The problem is related to how the sector is organised at a structural level and needs a lot of ongoing pressure from WorkSafe to get fixed.
- This is a recreation sector with mainly volunteers and is just captured by HSWA.

Decision:

- Like yourself I agree that the evidential sufficiency test has been met, but on balance and careful consideration of all the facts of this specific case that the test for public interest requires very careful scrutiny.
- Considering all these factors and in particular the wishes of the victim I would recommend on balance NO prosecution - subject to a meeting with Speedway NZ where we lay out we have a case and we expect them to make structural change such as an independent inquiry into their safety system and proactively manage the risks in the future.

I am happy to discuss further if required. Note that my decision is <u>not</u> based on the quality of Bens investigation or report and both are extremely thorough. I would describe this as one of those more difficult and complicated decisions <u>not</u> to prosecute but it has being done for the right reasons, supported by our own prosecution policy and the Solicitor General's guidelines. I hope Ben understands that.

ACTION REQUIRED: Please have the comment by Susan removed and re-submit. Due to time constraints and Susan's availability, yourself and Ben may like to notify the interested parties sooner and resubmit to me when you can. I am satisfied that this e-mail and the process meets the timeframes if the victim and PCBU are notified by the stat date being 13 January.

Thanks, Steve

Steve Kelly

Chief Inspector: Investigations Specialist Interventions

Level 2 - 351 Lincoln Road, Addington, Christchurch 8024 PB Box 13278, Armagh, Christchurch 8141

^P_M 9(2)(a)

steve.kelly@worksafe.govt.nz www.worksafe.govt.nz

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Please note I only clear my emails 2 or 3 times during the day (morning and afternoon). If your matter is urgent please contact me directly on my work cell phone 9(2)(a) - Thank you.
