



Transport Accident
Investigation
Commission

Final report

Tuhinga whakamutunga

Rail inquiry R0-2025-106
Train DT80
Near miss with track workers
Plimmerton
8 May 2025

September 2026



The Transport Accident Investigation Commission

Te Kōmihana Tirotiro Aituā Waka

No repeat accidents – ever!

“The principal purpose of the Commission shall be to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person.”

Transport Accident Investigation Commission Act 1990, s4 Purpose

The Transport Accident Investigation Commission is an independent Crown entity and standing commission of inquiry. We investigate selected maritime, aviation and rail accidents and incidents that occur in New Zealand or involve New Zealand-registered aircraft or vessels.

Our investigations are for the purpose of avoiding similar accidents and incidents in the future. We determine and analyse contributing factors, explain circumstances and causes, identify safety issues, and make recommendations to improve safety. Our findings cannot be used to pursue criminal, civil, or regulatory action.

At the end of every inquiry, we share all relevant knowledge in a final report. We use our information and insight to influence others in the transport sector to improve safety, nationally and internationally.

Commissioners

Chief Commissioner	David Clarke
Deputy Chief Commissioner	Stephen Davies Howard
Commissioner	Paula Rose, QSO
Commissioner	Bernadette Roka Arapere (until November 2025)
Commissioner	Aedeen Boadita-Cormican (from 19 June 2026)

Key Commission personnel

Chief Executive	Martin Sawyers
Chief Investigator of Accidents	Louise Cook
Investigator-in-Charge for this inquiry	Jason Lawn
Commission General Counsel	Sid Wellik

Notes about Commission reports

Kōrero tāpiri ki ngā pūrongo o te Kōmihana

Photographs, diagrams, pictures

The Commission owns the photographs, diagrams and pictures in this report unless otherwise specified.

Verbal probability expressions

For clarity, the Commission uses standardised terminology where possible.

One example of this standardisation is the terminology used to describe the degree of probability (or likelihood) that an event happened, or a condition existed in support of a hypothesis. The Commission has adopted this terminology from the Intergovernmental Panel on Climate Change and Australian Transport Safety Bureau models. The Commission chose these models because of their simplicity, usability, and international use. The Commission considers these models reflect its functions. These functions include making findings and issuing recommendations based on a wide range of evidence, whether or not that evidence would be admissible in a court of law.

Terminology	Likelihood	Equivalent terms
Virtually certain	> 99% probability of occurrence	Almost certain
Very likely	> 90% probability	Highly likely, very probable
Likely	> 66% probability	Probable
About as likely as not	33% to 66% probability	More or less likely
Unlikely	< 33% probability	Improbable
Very unlikely	< 10% probability	Highly unlikely
Exceptionally unlikely	< 1% probability	



Figure 1: Train similar to the incident train *DT80*



Figure 2: Location of incident
(Credit: Land Information New Zealand Toitū Te Whenua)

Contents

Rārangi take

1	Executive summary.....	1
	What happened.....	1
	Why it happened	1
	What we can learn.....	1
	Who may benefit	2
2	Factual information	3
	Background.....	3
	Track workers involved.....	4
	Repair work and protection.....	4
	Narrative.....	5
	After the incident.....	10
	Personnel information	10
	KiwiRail rail protection officer	10
	Subcontractor one.....	10
	Subcontractor two.....	10
	Trainee locomotive engineer.....	10
	Locomotive engineer supervisor.....	11
	Train information	11
	Recorded data.....	11
	Train data recorders.....	11
	Other data sources	11
	Previous occurrences.....	12
	Organisational information.....	12
3	Analysis.....	14
	Introduction.....	14
	Selecting worksite protection	14
	Planning and selecting worksite protection	14
	Why was a lower form of protection used on the day?	16
	Use of individual train detection.....	16
	Rule violations.....	18
	Contractor competencies	19
	Worksite protection and compliance-assurance processes.....	23

Automatic emergency alert	24
4 Findings	26
5 Safety issues and remedial action	27
General.....	27
6 Recommendations.....	29
General.....	29
New recommendations	29
7 Other safety lessons	30
8 Data summary.....	31
9 Conduct of the inquiry	32
Appendix 1 DIB on the day of the incident	37
Appendix 2 Permit to enter and special conditions.....	38
Appendix 3 Track Access Request (TAR)	40
Appendix 4 Planning application for work F1 Form.....	41

Figures

Figure 1: Train similar to the incident train DT80	iii
Figure 2: Location of incident.....	iv
Figure 3: Incident location and view line distance	3
Figure 4: Worksite and equipment	4
Figure 5: Worksite location re-enactment.....	6
Figure 6: ITD Mis 70R form.....	6
Figure 7: Recorded train movements past the worksite area	7
Figure 8: Trackside wheel sensor	8
Figure 9: Track worker locations and approaching train	8
Figure 10: Train forward-facing video footage of track workers on track.....	9
Figure 11: Train forward-facing video footage once stopped	9
Figure 12: Tranzlog data from train DT80.....	11
Figure 13: KiwiRail's protection request and approval process	15
Figure 14: Excerpt from the DIB.....	16
Figure 15: Wellington ITD guidance map.....	17
Figure 16: Why ITD was not allowed at the worksite.....	18
Figure 17: Permit to enter special conditions	21
Figure 18: TS90 competency extract.....	22
Figure 19: KiwiRail's required training certifications for contractors.....	22
Figure 20: Driver's in-cab equipment positions.....	24

1 Executive summary

Tuhinga whakarāpopoto

What happened

- 1.1. At about 0900¹ on 8 May 2025, a KiwiRail rail protection officer² (RPO) and two subcontractors met at Plimmerton Domain car park, north of Wellington. They travelled north for about one kilometre along the North Island Main Trunk (NIMT)³ access road to conduct planned maintenance work on a track grease applicator.⁴
- 1.2. At about 0920, they arrived at the worksite. The RPO established protection⁵ for the worksite and the subcontractors started work under the supervision of the RPO.
- 1.3. At 1014, an empty passenger train travelling north rounded the curve at 62 kilometres per hour on approach to the worksite. The trainee locomotive engineer observed two people on the track ahead and immediately applied the train's emergency brake.
- 1.4. The two workers cleared the track as the train came to a stop only metres from the workers location. No injuries to individuals or damage to rail vehicles or infrastructure occurred.

Why it happened

- 1.5. The RPO did not use the planned worksite-protection system as documented. This allowed rail traffic to continue running as normal.
- 1.6. The subcontractors were unaware of the type of worksite protection established and were working under the direction of the RPO.
- 1.7. KiwiRail did not regularly audit RPO worksite-protection documentation to ensure RPOs were applying the correct method of worksite protection.

What we can learn

- 1.8. Following prescribed safety rules and procedures is important. They apply risk-based safety control measures to prevent accidents and incidents and ensure a safe and secure working environment for everyone.
- 1.9. Implementing a just-culture working environment⁶ and strong safety leadership, with internal auditing and regulatory assessment oversight, ensures that safety-critical worker-protection systems are correctly applied and adequately managed.

¹ Times in this report are in New Zealand Standard Time (Universal Coordinated Time +12 hours) expressed in a 24-hour format.

² Certified person who establishes worksite protection within the rail corridor.

³ The main rail network between Auckland and Wellington.

⁴ Applies grease automatically to the inside of the rail head to reduce wear and noise.

⁵ To protect workers from moving rail traffic.

⁶ An organisational approach that balances accountability and learning when dealing with errors, incidents or near misses.

Who may benefit

- 1.10. Rail personnel and organisations that conduct safety-critical operations may benefit from the findings in this report.

2 Factual information

Pārongo pono

Background

- 2.1. The incident occurred on the NIMT, north of Plimmerton, Wellington, at the 25.65 kilometre (km) location. The track layout consisted of two tracks: the UP main for rail traffic travelling towards Auckland and the DOWN main for rail traffic travelling towards Wellington.
- 2.2. The track leading into the incident area featured a slight upward gradient and a right-hand curve rated for a maximum speed of 70 kilometres per hour (km/h). Visibility along this curve was restricted; line of sight was limited to approximately 223 metres (m) from the approach to the incident location on the UP main line (see Figure 3).

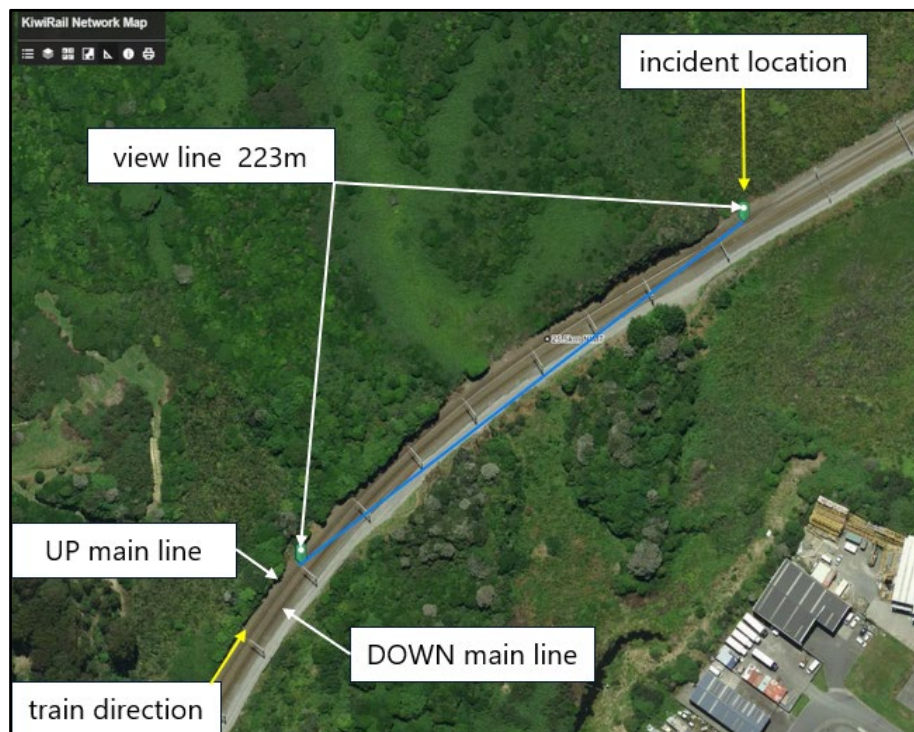


Figure 3: Incident location and view line distance

- 2.3. The worksite included an automatic grease-dispenser control box, a track grease applicator and a train wheel sensor. The wheel sensor was positioned 8 m south of the track grease applicator (see Figure 4).
- 2.4. The automatic grease-dispenser system was fitted in October 2014 by Industrial Lubricants and Services Limited (ILS).

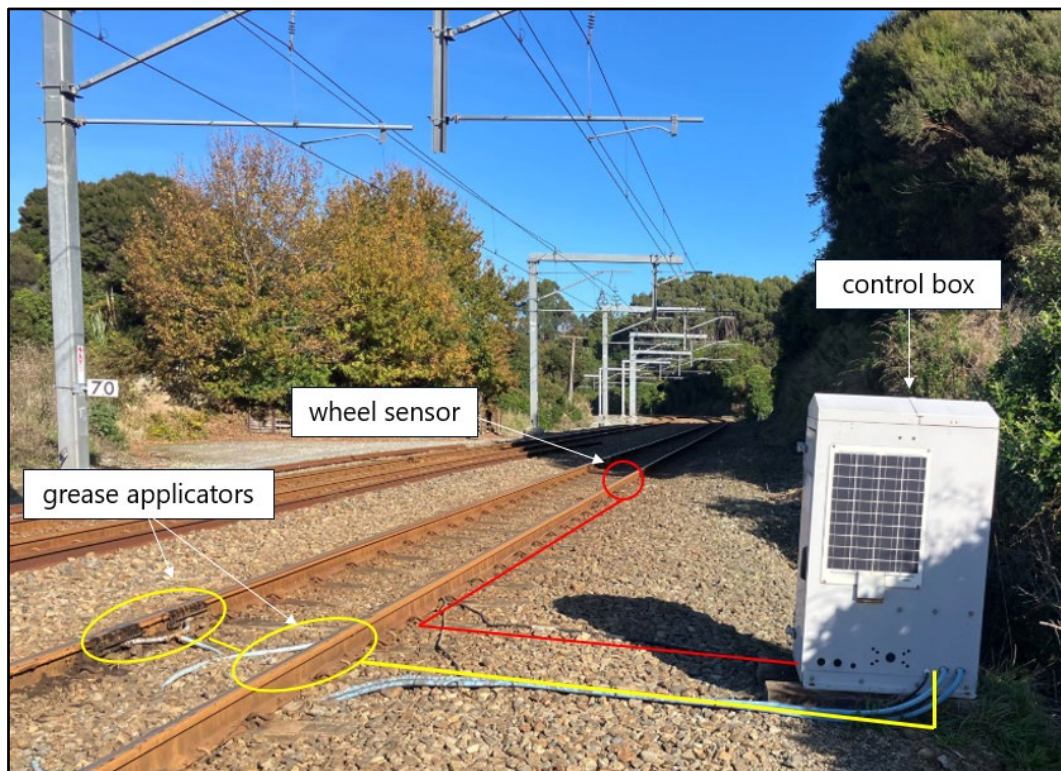


Figure 4: Worksite and equipment

Track workers involved

- 2.5. **KiwiRail rail protection officer** (the RPO) was assigned to the job to ensure the contractors had adequate protection from rail traffic.
- 2.6. **Subcontractor one** (SC1) was subcontracted by ILS to complete regular maintenance on the grease-dispenser equipment in the Wellington rail corridor.⁷
- 2.7. **Subcontractor two** (SC2) was subcontracted by ILS to fix the grease dispenser's missing wiring and electrical components and inspect the solar-panel system.

Repair work and protection

- 2.8. ILS had a contract with KiwiRail to fit and maintain grease dispensers and trackside friction applicators to assist with rail adhesion at locations identified throughout KiwiRail's rail network.
- 2.9. On 18 January 2025, approximately three months before the incident, routine maintenance at the site identified that the grease dispenser had possibly been vandalised and parts from the control box were missing.
- 2.10. ILS submitted a Track Access Request (TAR)⁸ form to KiwiRail's Wellington metro protection planning group. The form requested blocking protection at the worksite to prevent rail traffic entering the worksite area, allowing the contractors to maintain and fix the grease applicator.

⁷ The land between the legal boundaries of railway land, or land within 4 m of the centreline of any operational track where the land boundary is less than this distance.

⁸ A formal request made to KiwiRail to secure specific dates and times for access to the rail network so that work can be carried out safely on or near the tracks.

- 2.11. KiwiRail's Wellington metro protection planning group reviewed and approved the TAR request. The planner completed an F1 form⁹ to approve the protection method. This allowed the next stage of the request to be processed by KiwiRail's authority department and to be recorded and published in the Daily Information Bulletin (DIB).¹⁰
- 2.12. The work was classified as light maintenance and therefore did not require the protection group to undertake a train frequency assessment.
- 2.13. SC1 was subcontracted to ILS to complete the scheduled repairs and maintenance. SC2 was subcontracted to ILS to install the missing wiring loom and batteries, and to inspect the solar-panel system.

Narrative

- 2.14. At about 0830 on 8 May 2025, a KiwiRail RPO arrived at Plimmerton Domain car park. They were to meet SC1 and SC2, who were assigned to repair a trackside grease-dispenser control box located approximately 1 km north of the car park.
- 2.15. By about 0918, both subcontractors had arrived. The RPO opened the access gate so the contractors could follow them, in separate vehicles, to the worksite along an access road next to the rail corridor.
- 2.16. At 0921, they arrived at the worksite and parked their vehicles on the access road (see Figure 5). The RPO then realised they did not have their work-issued iPad or reading glasses. They attempted to use their iPhone to complete the Individual Train Detection (ITD)¹¹ protection arrangements.

⁹ The F1 form records the approval process followed by KiwiRail's planning protection and records the details of the TAR.

¹⁰ A document that contains information about worksites locations, protections to be used and train movements on the rail network.

¹¹ A safe working system that does not prevent rail vehicles from entering an occupied section of track. It is a safety check process that enables workers to access specific areas of the rail corridor as individuals, or as a group. An observer must identify train movements and alert track workers to move to the designated safety place.

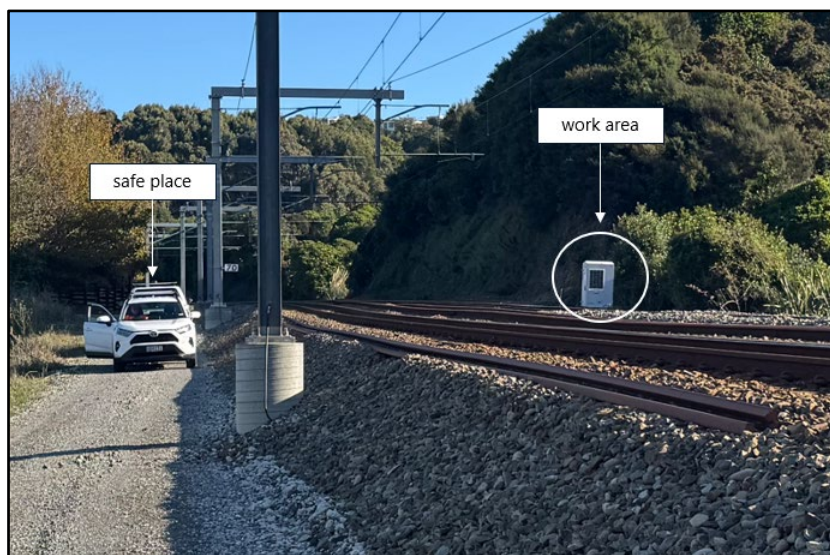


Figure 5: Worksite location re-enactment

(Credit: TAIC and KiwiRail)

- 2.17. The RPO could not complete the ITD digital form using their iPhone, so instead used a paper-based Mis 70R form (see Figure 6). KiwiRail rules and procedures did not permit ITD at this location. It was also not the protection system outlined on the DIB dated 8 May 2025. For additional information on the use of ITD see Section 3 of this report.

KiwiRail **Mis 70R**

This form must be completed when working alone or with an Observer, when encroaching within two outstretched arm lengths of the edge of the rail.

Individual Train Detection Safety Check

Name [REDACTED]

Date 08/05/25 Time 07:15

Location/km 25.65km

Between FEATHERTON and PUKERUA BAY
(rail location) (rail location)

⚠ You must be in your Safe Place 15 seconds before the arrival of rail vehicles

Maximum Authorized Speed for area in Km/h	Required Sight Distance in Metres		Observer
	Alone	Tick box	
10	40	☐	60
25	100	☐	140
40	170	☐	220
50	200	☐	280
60	250	☐	340
70	300	☐	380
80	350	☐	440
90	400	☐	500
100	450	☒	550
110	500	☐	620

Tick the appropriate box alongside the maximum speed which rail vehicles can run at this locality.

If you are unfamiliar with the maximum speed that applies at this locality then you must use the maximum line speed of 110km/h.

If in doubt, contact KiwiRail Area Infrastructure Office. (details on last page of book)

continued on page below.

Emergency - call 0800 808 400 02/17

Figure 6: ITD Mis 70R form

- 2.18. Following the completion of the Mis 70R, the subcontractors began unloading tools and equipment from their vehicles. The RPO and the two subcontractors crossed the two tracks to the other side of the rail corridor where the control box was located.
- 2.19. SC1 accessed the top of the control box to refill the grease tank. They could see that it was already full as the dispenser had not been working.
- 2.20. SC2 opened the front access door on the control box and started to replace the missing wiring loom. In this position they had their back turned to any approaching rail traffic.
- 2.21. The RPO stood next to the control box to alert the two subcontractors of any approaching rail traffic.
- 2.22. During the period that they were at the worksite (63 minutes), nine trains passed (see Figure 7). The green lines represent the scheduled train movements as per the timetable, while the red line indicates the actual time each train passed.

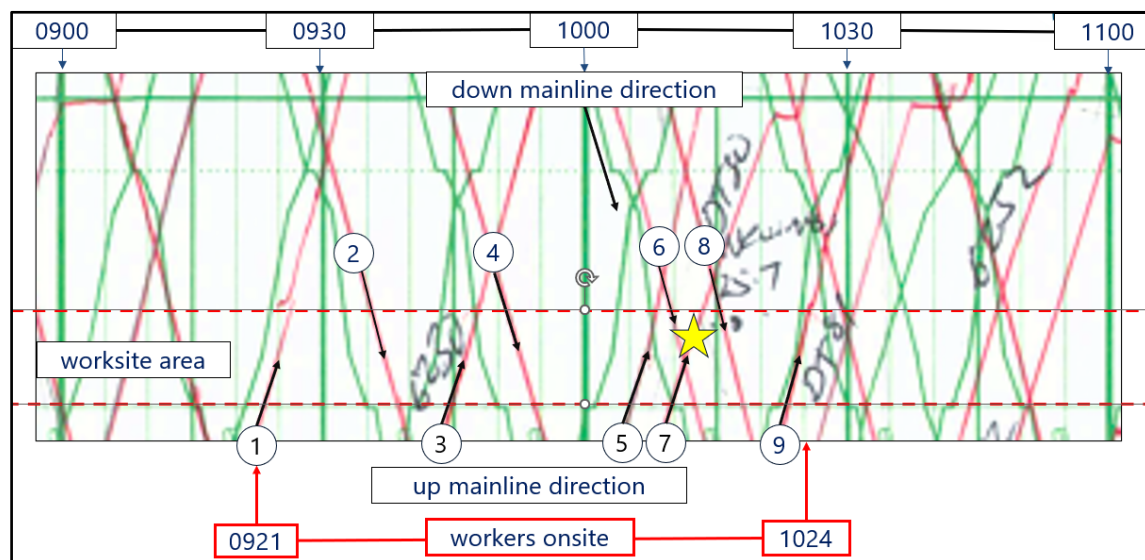


Figure 7: Recorded train movements past the worksite area
(Credit KiwiRail annotated by TAIC)

- 2.23. SC2 installed the missing components and saw that when the last train passed over the track grease dispenser it had failed to activate. They spoke to SC1 about the fault and continued with additional checks of the solar panel on the side of the control box.
- 2.24. SC1 walked south, away from the control box, alongside the UP main line outer track. They were inspecting for damage to the wire that ran from the control box to the wheel sensor (the sensor), approximately 8 m away.
- 2.25. On arriving at the sensor, they determined that the supporting bracket had dropped downwards. This meant the sensor was not functioning correctly when train wheels passed over it (see Figure 8).

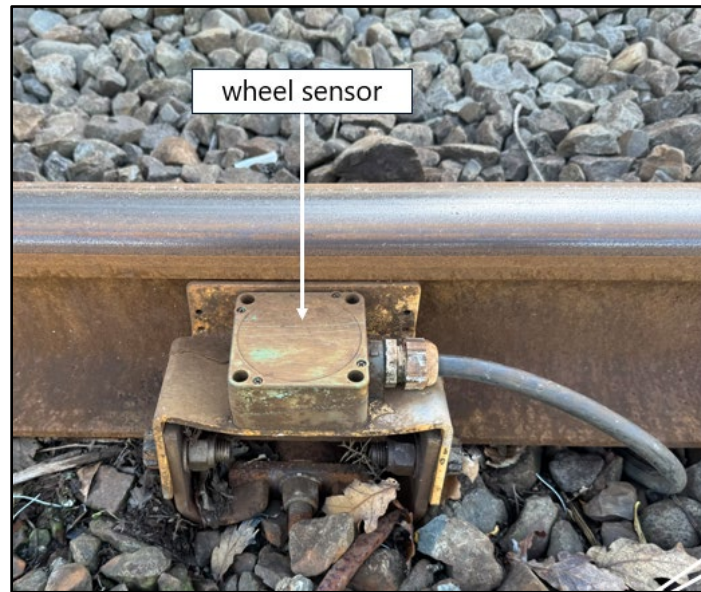


Figure 8: Trackside wheel sensor

- 2.26. SC1 walked back to the control box and retrieved the tools needed to lift the sensor to the correct height.
- 2.27. On arriving back at the sensor, SC1 knelt between the tracks and started lifting the sensor into its correct location. As they were doing this, a northbound empty passenger train (DT80),¹² operated by Transdev Wellington, approached the worksite on the UP main track.
- 2.28. The train was travelling at 62 km/h and rounded the curve approximately 220 m away from SC1's location (see Figure 9).

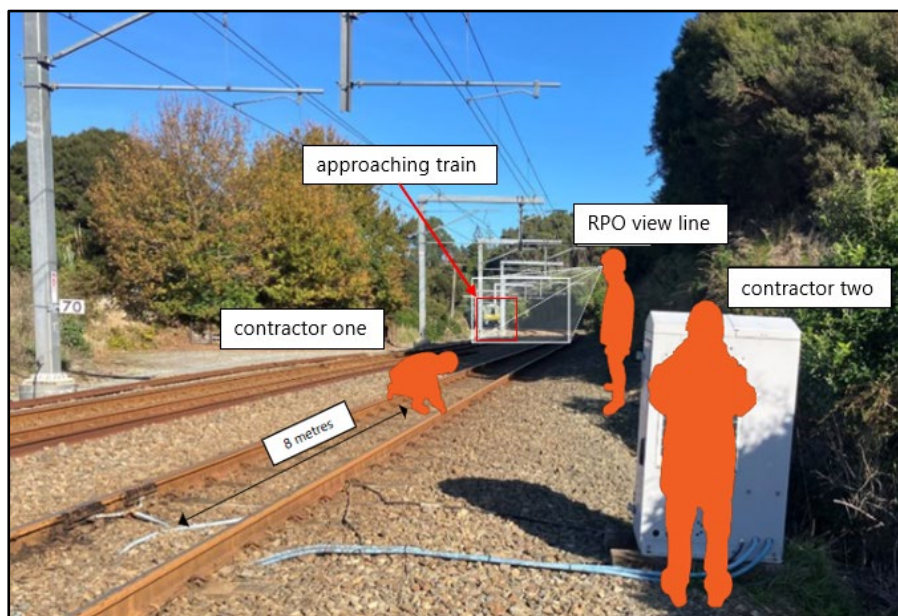


Figure 9: Track worker locations and approaching train

¹² Used to oversee on-job training and supervision of locomotive engineers.

- 2.29. The RPO saw the train approaching and called out to alert SC1. SC1 did not respond because they were focused on removing a ring spanner that had become stuck vertically on the sensor equipment. The RPO moved towards SC1 to get their attention.
- 2.30. The trainee locomotive engineer¹³ (TLE) of *DT80* saw the two workers wearing orange high-visibility vests in the middle of the UP mainline (see Figure 10). At 1014:55 the TLE took swift action and applied the train's emergency brake, approximately 180 m from the workers' location.



Figure 10: Train forward-facing video footage of track workers on track

- 2.31. The RPO reached SC1 and pulled them upward and away from the track. At the same time the ring spanner was dislodged.
- 2.32. At 1015:11, the train stopped approximately 5 m before where SC1 had been working. Their tools and equipment remained in the centre of the track (see Figure 11).

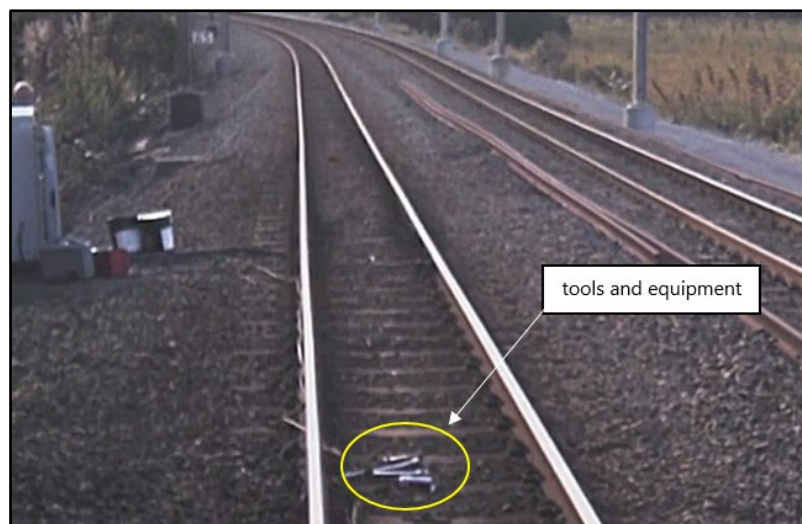


Figure 11: Train forward-facing video footage once stopped

¹³ A locomotive engineer undertaking on-job training as part of their certification process.

After the incident

- 2.33. The locomotive-engineer supervisor (LES), who was supervising the TLE, opened the train's cab window to check on the wellbeing of the RPO and SC1. They asked whether the train could proceed over the remaining hand tools and equipment left in the centre of the track.
- 2.34. The RPO responded that neither of them was injured and that the tools would not pose a hazard to the train's movement.
- 2.35. The train continued north to Pukerua Bay station. As the train departed the incident site, a Transdev Wellington employee¹⁴ on the train used their mobile phone to contact train control¹⁵ to report the near miss.
- 2.36. Train control was unaware of any scheduled work at that location and initially thought the workers were trespassers.
- 2.37. Train control notified the network control manager¹⁶ of the incident, then contacted the RPO. The RPO confirmed that their work group had been involved in the near miss and had since completed work at the site. They acknowledged that they had not reported the incident.
- 2.38. The RPO informed their manager of the incident and returned to the Wellington depot to undergo post-incident impairment testing, which produced a negative (clear) result.

Personnel information

KiwiRail rail protection officer

- 2.39. The RPO had been employed by KiwiRail since 2021. They had 20 years of industry experience as an RPO and were certified for the role at the time of the incident.

Subcontractor one

- 2.40. SC1 had previously worked as an employee for ILS and had recently retired and become a contractor. They did not have all the required KiwiRail qualifications to undertake work in the rail corridor at the time of the incident.

Subcontractor two

- 2.41. SC2 was an automotive electrician who was contracted by ILS to fix the grease dispensers. They did not have all the required KiwiRail qualifications to undertake work in the rail corridor at the time of the incident.

Trainee locomotive engineer

- 2.42. The TLE was employed by Transdev Wellington and certified for the role at the time of the incident.

¹⁴ A total of four Transdev staff were on the train: two driver supervisors and two trainee locomotive engineers who were sharing the driving and supervision duties on the day of the incident.

¹⁵ A certified person who controls the movement of trains on the rail network.

¹⁶ Rail personnel who oversee rail network operations and responses to rail incidents or accidents.

Locomotive engineer supervisor

- 2.43. The LES was employed by Transdev Wellington and was supervising the TLE in the cab of the train at the time of the incident. They had the correct certification to supervise on-job training at the time of the incident.

Train information

- 2.44. The train *DT80* was a Wellington-based electric multiple unit (EMU). The train consist¹⁷ was a two-unit set comprised of four carriages. The train was a non-revenue service for training purposes and was recorded on the DIB.

Recorded data

Train data recorders

- 2.45. Tranzlog data¹⁸ was extracted and obtained by the Commission and used in this report (see Figure 12).

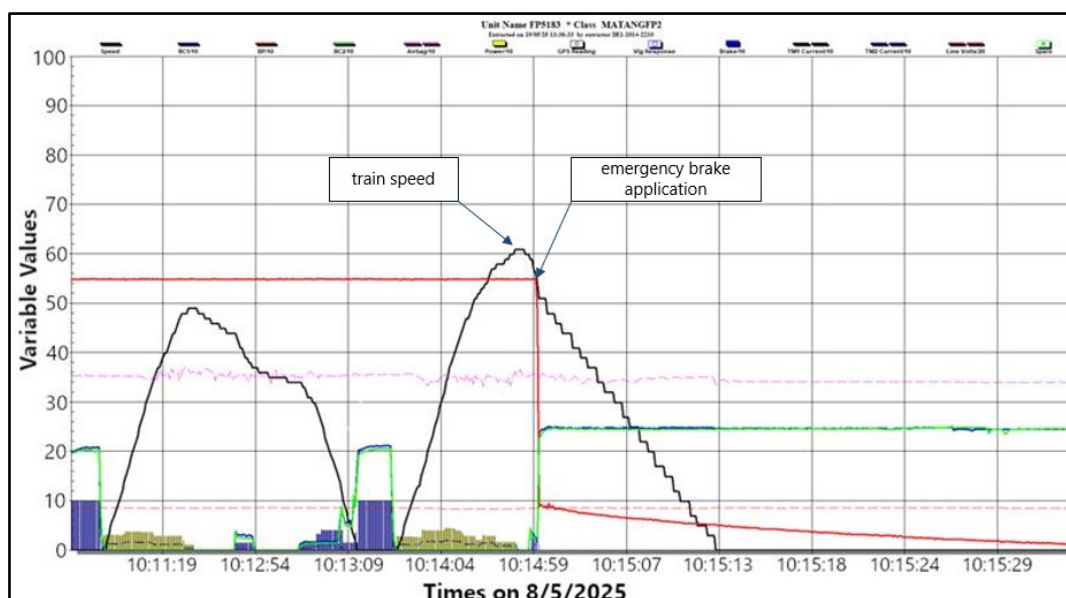


Figure 12: Tranzlog data from train *DT80*

Other data sources

- 2.46. The Commission obtained the following data sources, which are used in this report:
- forward-facing video footage from *DT80*
 - train control signal logs¹⁹
 - train graph²⁰ from the NIMT on the day of the incident
 - train control voice logs²¹ between the RPO and train control

¹⁷ The configuration of a train's wagons or carriages, connected for a specific journey.

¹⁸ Records and stores the trains operational inputs, location, speed and braking configuration.

¹⁹ Reply data of the signals aspects and train movements between stations.

²⁰ Graph completed by train control that shows the position of each train as it travels along the track.

²¹ Recordings of radio and phone transmissions to train control.

- GPS data from the RPO's vehicle.

Previous occurrences

RO-2023-103 Safe-working irregularity 3.85 km mark Johnsonville line – tunnel 5, 04 May 2023

- 2.47. In 2023, a passenger train had a near miss with two track workers as they were exiting tunnel 5 on the Johnsonville Line, Wellington. The Commission investigation identified that the workers did not have permission to enter the corridor and communication was via a mobile telephone, not the open radio channel. Further, the train controller incorrectly recorded the location and applied protection at the wrong points.
- 2.48. No recommendations were issued by the Commission because of the safety actions taken by KiwiRail, namely:
- working with relevant teams to update the Rail Operations Rules and Procedures
 - radios must be used for communication with train control
 - alternative methods are only to be used in the event of radio failure
 - train control will decline any track access request if radio communication is not attempted in the first instance
 - review of the train control track occupancy authority matrix to ensure it aligns with the Mis 71 form, and to investigate the practicability of developing a Train Control Rule 908 paper authority template.

RO-2024-102 Freight Train 882, near miss with track workers, Main South Line, Hornby 27 km, 7 March 2024

- 2.49. In 2024, a trainee RPO authorised workers to start work on the Main South Line in Hornby before a scheduled train had passed through. The workers realised a train was approaching when nearby level-crossing bells started ringing and were able to get off the track in time. The Commission found that available engineering controls (which physically reduce hazards) were not being used.
- 2.50. On 30 April 2025, the Commission recommended that KiwiRail utilise engineering controls on track worksites to mitigate the risk of human error by track workers carrying out safety-critical tasks. KiwiRail replied:

This recommendation is accepted. KiwiRail is working on a number of projects including the Mobile Radio Warning System (MRWS), and other engineering controls to keep track workers safe; along with opportunities to expand use of the Machine Avoidance System which is currently approved for use.

Organisational information

- 2.51. KiwiRail Holdings Limited (KiwiRail) is a New Zealand state-owned enterprise. It operates trains and rail vehicles, controls rail movements on the national rail network and maintains the railway infrastructure as the rail access provider.
- 2.52. Industrial Lubricants and Services Limited (ILS) is an importer and distributor of industrial and marine lubricants in New Zealand. They supply and fit trackside grease and traction-gel applicators on the rail network and are contracted by KiwiRail to maintain them on a regular basis.

- 2.53. Transdev Wellington Limited operates passenger train services throughout the Wellington metropolitan region under a lease agreement with Greater Wellington Regional Council. The Council owns the electric multiple units.

3 Analysis Tātaritanga

Introduction

- 3.1. On 8 May 2025, a non-revenue passenger train undertaking locomotive driver training rounded a bend north of Plimmerton on the NIMT, travelling at 62 km/h. The TLE sighted two track workers positioned on the track and immediately applied the emergency brake. The train came to a stop approximately 5 m from the workers' location.
- 3.2. Section 3 analyses the circumstances surrounding the event to identify those factors that increased the likelihood of the event occurring or increased the severity of its outcome. The inquiry identified the following safety issues:
- selecting the correct type of worksite protection
 - KiwiRail's management of subcontractors' competencies
 - auditing and assurance of RPOs
 - emergency-brake alert system.

Selecting worksite protection

Safety issue 1: KiwiRail's process for determining the appropriate worksite protection did not identify all the relevant risks nor consider the practicality of the protection. This meant the applied protection method differed from the approved method, increasing the risk to the safety of track workers.

Planning and selecting worksite protection

- 3.3. The selection of appropriate worksite protection requires effective planning. Having clear rules and procedures in place to support this process is important to ensure the safety of all personnel working within the rail corridor.
- 3.4. All contractors working in the rail corridor must complete KiwiRail's six-stage protection request and approval process before the work can be undertaken (see Figure 13).

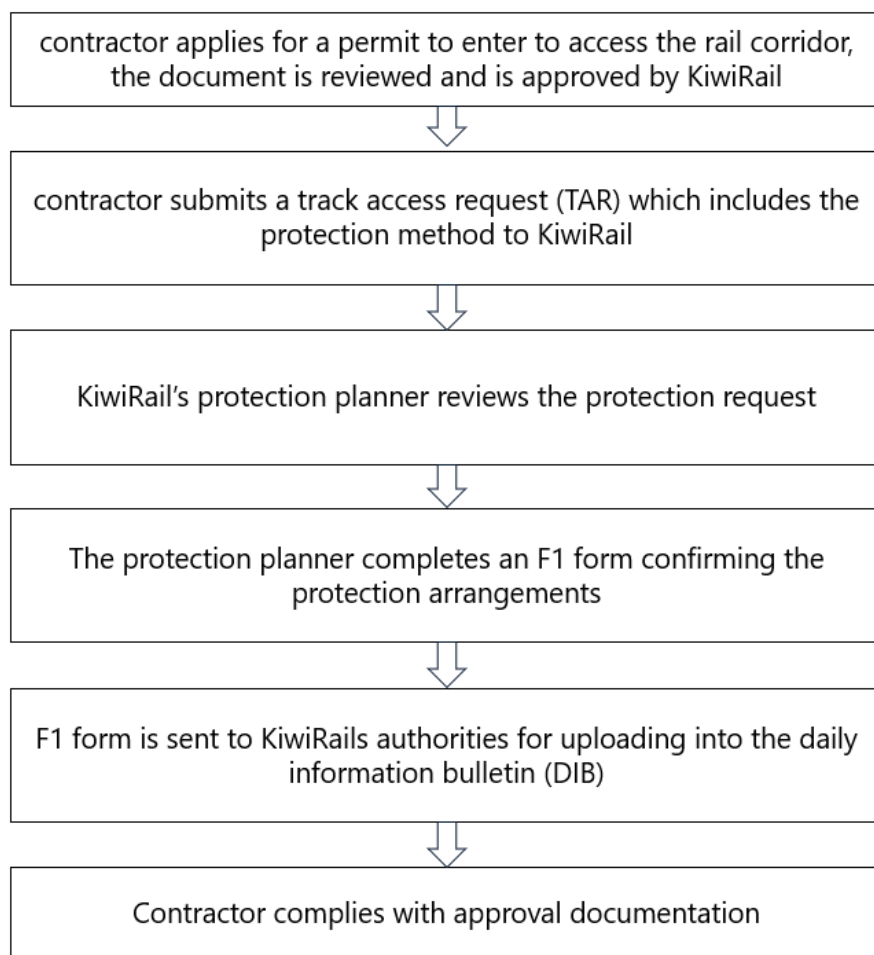


Figure 13: KiwiRail's protection request and approval process

- 3.5. KiwiRail had four worksite protection options available, as set out in its Track Safety Rules, Section 5.1. The protection options were:
- **Individual train detection (ITD)** – certified personnel detect approaching rail vehicles and move to a safe place 4 m from the centre of the track, 15 seconds before the vehicle reaches them. Working under ITD does not need to be acknowledged on the DIB. Personnel must comply with rules and guidelines.
 - **Blocking protection** – train control holds controlled signals at stop for approaching rail traffic at each end of the worksite. It requires the certified person to contact train control, fill out a Mis 71 document with train control, and then cancel the protection within an agreed time.
 - **Compulsory stop protection** – certified personnel erect a series of trackside warning and stop boards each side of the worksite. Once a train has stopped at the board, the locomotive engineer (LE) and RPO communicate over radio to allow the train to enter the worksite area when it is safe to do so.
 - **Track and time permit** – certified personnel close a portion of the main line to complete planned maintenance work. This type of protection can also be used for multiple activity worksites or in emergency situations where the track must be closed for safety.
- 3.6. ILS had requested and was given blocking protection for the maintenance work. This created a challenge for the RPO: the frequency of scheduled train movements on the UP and the DOWN main lines only allowed short work windows of 6 to 11 minutes.

- 3.7. A further challenge was that, during these short time periods between train movements, the RPO was required to call train control, complete the Mis 71 blocking document, clear the tracks and carry out the cancellation process.
- 3.8. During interviews with KiwiRail track maintenance staff, they commented that obtaining blocking in high-frequency train periods on the Wellington passenger network 'is near impossible'.

Why was a lower form of protection used on the day?

- 3.9. On the day of the incident, the DIB included 'TS06 Blocking (as required)' (see Figure 14), giving autonomy to the RPO to select a suitable option of worksite protection at the Plimmerton site.

Plimmerton 25.60km Up & Down mains	Pukerua Bay 29.45km Up & Down mains	TS06 Blocking (as required)	0900 – 1500 Sandite Grease Unit Inspections / Maintenance
--	---	-----------------------------------	---

Figure 14: Excerpt from the DIB

- 3.10. The Commission requested documentation from KiwiRail to understand how the RPO determined what blocking was required, but they were unable to provide any.
- 3.11. KiwiRail informed the Commission that the '(as required)' wording has since been removed from the DIB to prevent any confusion about the blocking process.
- 3.12. During interview, the RPO commented that the time restrictions on implementing blocking at the worksite because of train frequency, meant they had elected to use ITD protection.

Use of individual train detection

- 3.13. Under ITD protection, trains continue to operate through a worksite, and at normal line speed. The RPO was responsible for alerting the subcontractors when trains were approaching.
- 3.14. The use of ITD is only permitted in certain parts of the rail network, and different conditions apply depending on the location, sightline rules and safe place rules (see Figure 15).

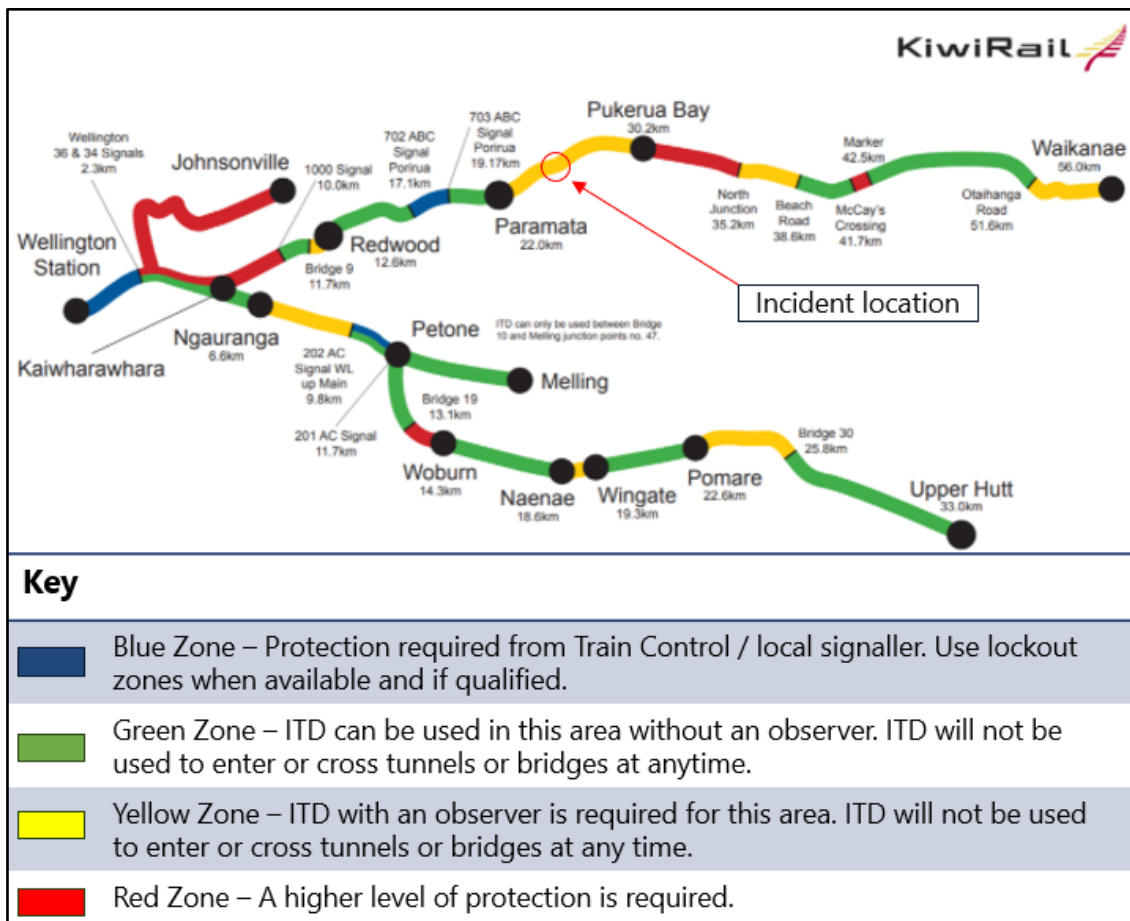


Figure 15: Wellington ITD guidance map

(Credit KiwiRail, annotated by TAIC)

- 3.15. KiwiRail discontinued the use of the paper-based ITD pads in April 2025 and transitioned to a digital application. However, the paper-based pads remained in circulation and some RPOs continued to use them.

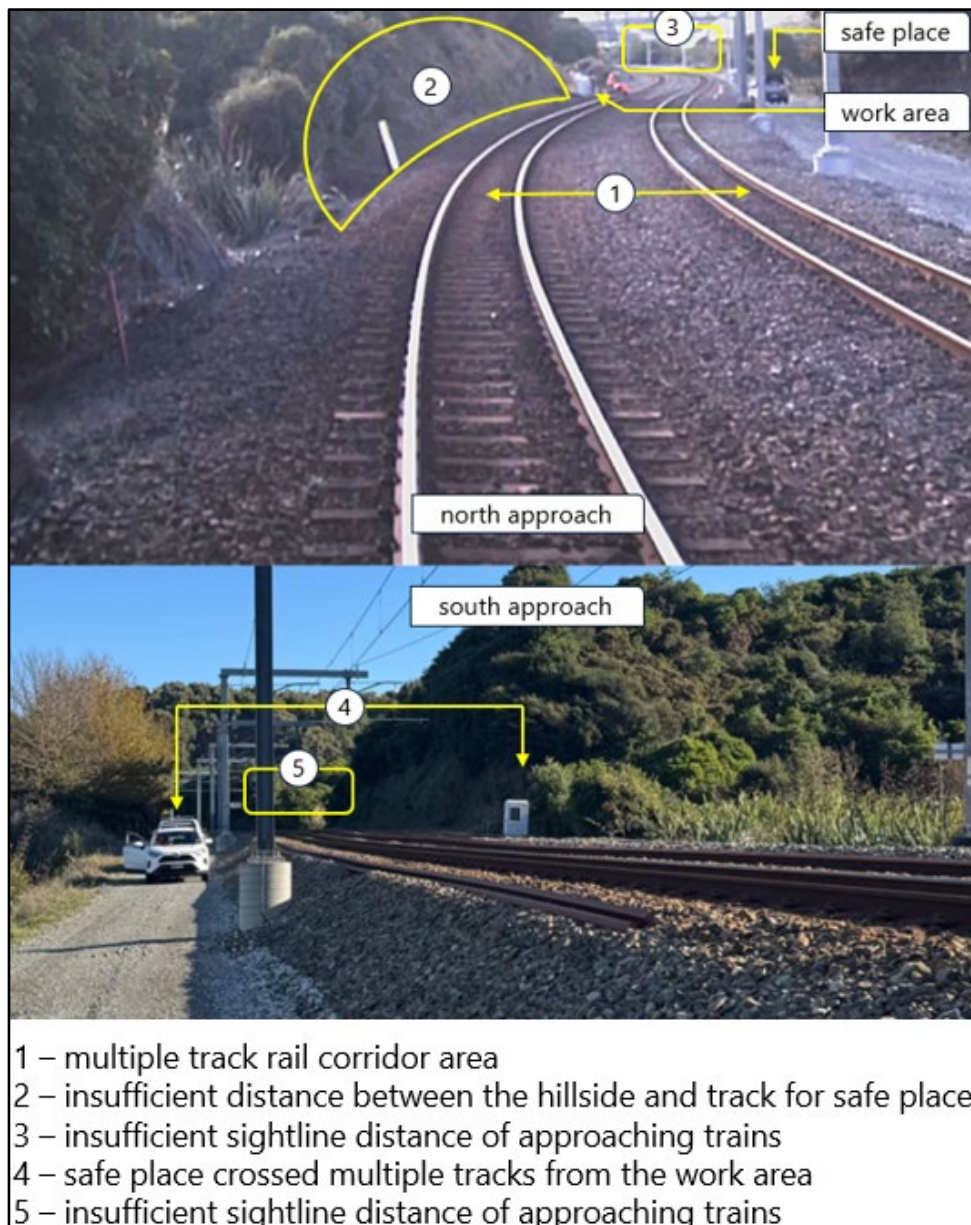


Figure 16: Why ITD was not allowed at the worksite

- 3.16. The location of the worksite did not allow the use of ITD, and this was known to the RPO (see Figure 16).
- 3.17. In addition, when using ITD the RPO is required to have a sounding device, such as a whistle or air horn. The RPO informed Commission investigators during their interview that they had carried a whistle, but did not use it on the day of the incident.

Rule violations

- 3.18. Research shows that people are more inclined to follow rules when the rules are easy to comply with, and when they see other people doing so (Kuiper, M. et al, 2022) (The Behavioural Insights Team, 2024).
- 3.19. The RPO informed Commission investigators during interview that they believed blocking would be difficult to attain in this situation because they needed to call train control to request it. They also believed that using blocking would make it difficult to complete the planned work because they did not expect to be granted a sufficient block of time (approximately an hour) because of frequent train movements.

- 3.20. In comparison, ITD could be applied without a request to train control. The RPO perceived that this would allow the workers to conduct their work more flexibly between train movements.
- 3.21. It is **virtually certain** that the RPO opted to use ITD even though they knew it was not allowed. They perceived it to be both a simpler and more practical method of protection than blocking, given the location and timing of the planned work.
- 3.22. The RPO's decision is an example of a 'situational breach': an intentional action that results in non-compliance with known rules or procedures, resulting from organisational and environmental factors that make it difficult for employees not to commit violations (Hudson, P. T. W. et al., 1998)
- 3.23. The Commission investigators were informed it was common for RPOs to use ITD in this location and other locations with limited sightlines (for example the Johnsonville Line) for similar reasons. This indicates that non-compliant use of ITD may be perceived by some as normalised, and that the misalignment between planned work and compliant protection methods may not be isolated to this incident.
- 3.24. The Commission also found that the maintenance work programme for grease applicators had not been risk assessed by KiwiRail or ILS at this or any other locations with restricted view lines or busy network rail movements. Therefore, although the challenges of using blocking in certain locations was known to RPOs, the issue had not been assessed at a higher level.
- 3.25. Had KiwiRail conducted a risk assessment for maintenance tasks at each grease applicator site, the RPO **likely** would have applied a more appropriate and effective track protection control method.

Contractor competencies

Safety issue 2: The level of management and oversight by KiwiRail of contractors working within the rail corridor was inadequate. This increased the likelihood of unqualified contractors carrying out work within the rail corridor in an unsafe manner.

- 3.26. Without a clear and consistent contractor management process, established safety protocols may be bypassed. Effective oversight ensures that all contractors operate under approved accreditations and that every party complies with the required safety conditions and contractual obligations. This structured approach reduces risk, strengthens accountability and supports a safer working environment.
- 3.27. Rail-based and civil contractors are commonly used on KiwiRail's rail network to perform critical maintenance and infrastructure upgrades.
- 3.28. The Railways Act 2005 (the Act) establishes a duty on rail participants and persons working for rail participants to ensure the health and safety of persons so far as is reasonably practicable.²² The Act further requires certain rail participants to be licensed.²³
- 3.29. Operators and rail access providers that are required to be licensed have to develop safety cases, which must be submitted to and approved by the Rail Regulator,

²² Railways Act 2005, Section 7.

²³ Railways Act 2005, Section 10.

New Zealand Transport Agency Waka Kotahi, as a prerequisite to the issuing of a licence.

- 3.30. Section 30 of the Act specifies, among other requirements, that a safety case must contain a statement or description, as appropriate, of the following:

- (g) the arrangements in place to ensure that —
- (ii) safety-critical tasks and activities are clearly identified; and
- (iii) rail personnel carrying out safety-critical tasks and activities have received appropriate training and instruction; and
- (iv) the competence of rail personnel carrying out safety-critical tasks and activities has been appropriately tested.

- 3.31. Section 22 of the Act imposes a licence condition on licensed rail operators and rail access providers that:

If the rail activities are carried out by another person who does not hold a licence, the licence holder must take all reasonable steps (including providing necessary monitoring personnel and resources) to ensure that the person carries out those rail activities in accordance with the licence, the approved safety case and safety system and any relevant rules.

- 3.32. These sections of the Act require KiwiRail to provide appropriate training, supervision and testing of all personnel who conduct safety-critical tasks within its rail operation, including contractors and their subcontractors.

- 3.33. Specifically, Section 11(b)(i) of the Act states in part:

A licence holder must: ...provide appropriate training and supervision of all rail personnel who do anything for, or on behalf of, it in respect of its rail activities, and ensure that those persons comply with ... the conditions of its licence.

- 3.34. KiwiRail had a system in place to identify and record contractors that conducted work in the rail corridor. KiwiRail required all contractors to have a current 'permit to enter' document, which outlined special conditions they must meet to conduct work in the rail corridor. (See Appendix 2 for permit and see Figure 17 for special conditions).

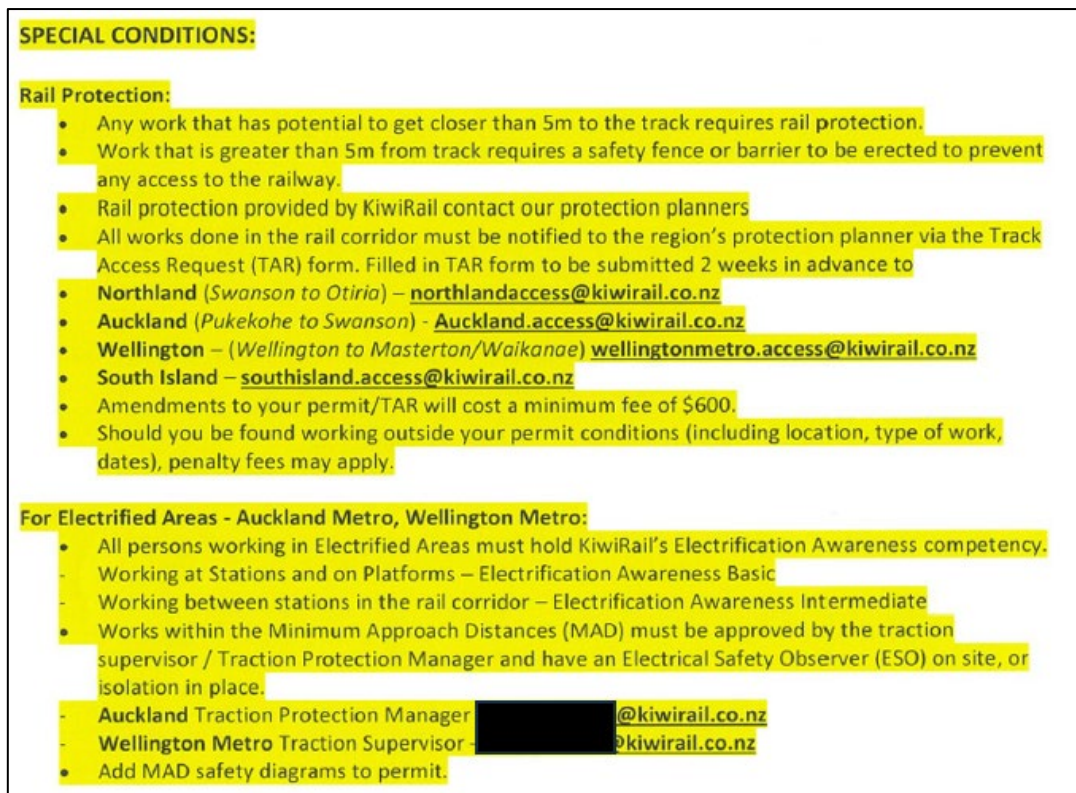


Figure 17: Permit to enter special conditions

(Credit: KiwiRail)

- 3.35. KiwiRail's Track Access Request (TAR) planning document required the contractor to record a competency number for each worker as evidence of ability to work in the rail corridor. However, the TAR relating to the maintenance work was approved without the details being supplied. The TAR did not require the contractor to confirm competency or fitness for duty. The process was reliant on the contractor meeting KiwiRail's obligations or the RPO checking them on the day of work.
- 3.36. On the day of the incident, the RPO asked SC1 and SC2 if they had the necessary competencies, but did not specify whether they were referring to the competencies required to allow them to work in the rail corridor under the special conditions or to do the work needed to fix the control box.
- 3.37. SC2 questioned what the RPO meant by 'competent' and both subcontractors said they were competent to do the work on the control box.
- 3.38. The RPO then wrote the letter 'C' in the column in the Job Plan Book (JPB) to mark them as 'Competent and Current' (see Figure 18).

TS90 (JPB) (if in protected work area) **Work Site Register** (if in non-protected work area)

Work Site Limits: From RUMPERION To PIKEHIA RAIL RPO or Site Protector [Redacted] Date 8-5-25

I have been briefed on protection, work site limits, the Safe Place and rail hazards.
 I am aware I must report to the RPO/Work Site protector before leaving the Work Site.
 I am fit for duty today.

Please insert the following acronyms in the "On Site & Briefed" column below

Tunnels Only

- GMO - Gas Monitor Observer
- SO - Safety Observer

All track related activities incl. tunnels

- C - Competent and Current
- DS - Under direct supervision
- MPC - Mobile Plant Controller
- PDU - Personal Data Unit

Frame Number	Name/Hi-Rail Call Sign	Contact Number	*	On Site & Briefed		Off Site	
				Time	Initial	Time	Initial
P	[Redacted]	[Redacted]	C	8:00	[Redacted]	10:45	[Redacted]
1	[Redacted]	[Redacted]	C	9:15	[Redacted]	10:45	[Redacted]
2	[Redacted]	[Redacted]	C	9:15	[Redacted]	10:45	[Redacted]
3							

Figure 18: TS90 competency extract
 (Credit: KiwiRail)

- 3.39. The RPO had no means of verifying the subcontractor's competencies as they did not have authorised access to any individual's training certifications other than their own.
- 3.40. KiwiRail requires the following competencies and medical certification to be completed before work can be undertaken in the rail corridor (see Figure 19).

	Rail HSE Induction Finished on : Unlimited English (GB) Passed Online
	Electrification Awareness Basic (EAB) Finished on Unlimited English (GB) Passed Online
	Electrical Awareness Intermediate (EAI) Finished on Unlimited English (GB) Passed Online

Figure 19: KiwiRail's required training certifications for contractors
 (Credit: KiwiRail)

- 3.41. The Commission found that neither subcontractor held the required competencies or a current medical certification from a Rail Medical Officer to enable them to work in the rail corridor.
- 3.42. Neither the RPO nor ILS were aware that the workers did not hold all required competencies to work in the rail corridor. ILS did not hold or maintain records of subcontractors' competencies or their current medical certification.

- 3.43. KiwiRail advised the Commission that this was not an isolated case. Following this incident, KiwiRail had identified other contractors with missing or lapsed training and medical certifications.
- 3.44. Had there been a system in place to verify contractors' competencies, it is **likely** that both ILS and KiwiRail would have identified that the contractors did not hold the required competencies or current medical certification to work within the rail corridor.

Worksite protection and compliance-assurance processes

Safety issue 3: KiwiRail's process to assure itself that rail protection work is being carried out safely and as required is not adequate. This increases the risk of unsafe work being undertaken within the rail corridor.

- 3.45. Rail corridors are high-risk zones with live tracks, moving trains and heavy equipment. Rail protection systems (eg, blocking protection, lookout systems, warning technology) are the last lines of defence for workers, and their implementation relies on workers completing the right actions at the right time.
- 3.46. Audits and external assessments provide regular and independent verification and assurance that these systems are being implemented correctly and that risks are being mitigated.
- 3.47. At the time of the incident, KiwiRail had a rail protection system in place that required the worksite to have an RPO present while the subcontractors completed the scheduled work on the grease-dispenser unit.
- 3.48. KiwiRail required the RPO to be certified and to carry out work in accordance with the organisation's rule-based requirements.
- 3.49. Before starting any work within the rail corridor, the RPO is required to complete the JPB. The book provides information and prompts designed to ensure that risks have been identified, assessed and mitigated before work starts. Each job plan consists of five pages:
- i. Job Plan Form and Pre-Start Meeting Record
 - ii. Work Site Register (form TS90)
 - iii. Worksite Plan
 - iv. Job Safety & Environment Analysis
 - v. Job Plan Debrief.
- 3.50. The Commission found that the RPO involved in the incident had completed the JPB incorrectly on several occasions. The book was missing mandatory safety information that should have been recorded and communicated to rail workers.
- 3.51. Furthermore, there was no robust audit system in place for the JPBs or the ITD pads that RPOs completed. The auditing process relied solely on RPOs voluntarily presenting their JPBs to a health and safety representative for review, and this occurred on an ad hoc basis.
- 3.52. Had KiwiRail completed regular auditing of worksite protection, ITD paper-based pads and JPBs, it is **likely** non-compliance with the required work practices, including the use of a non-compliant and unsafe protection method, could have been identified.

Automatic emergency alert

Safety issue 4: Wellington passenger trains do not send an automatic radio call to train control when emergency braking is applied. This could result in a delay in implementing a response to an emergency situation.

- 3.53. Engineering controls are mechanisms that respond when human performance and time-based controls are insufficient. An example of an engineering control is an automatic emergency alert (such as an automatic radio emergency response alert)²⁴ to train control when a train's emergency brake is applied.
- 3.54. Automatic emergency alerts are widely used elsewhere in the rail industry, both in New Zealand and internationally. The absence of such systems on metropolitan passenger trains could delay an emergency response and notification to other rail vehicles operating on the same network.
- 3.55. At the time of the incident, Wellington metropolitan passenger trains were equipped with a manually activated emergency radio button (the button) located on the LE's control console (see Figure 20). Activation required the LE to intentionally depress the button during an emergency.



Figure 20: Driver's in-cab equipment positions

- 3.56. In this incident, after the TLE applied the emergency brake, they did not activate the emergency radio button, nor were they instructed to do so by the LES. As a result, train control was not immediately alerted to the incident, and the appropriate post-incident procedures were not initiated.
- 3.57. When the Transdev Wellington staff member on board the train contacted train control by mobile phone, there was initial confusion about which work group was

²⁴ Automatic radio emergency response alerts are sent to train control when brakes are placed in the emergency position, or the braking system loses air.

involved. During the delay this caused, the work group continued operating at the incident site while train control carried out its enquiries. This increased the workers' exposure to risk by keeping them in the rail corridor without appropriate protection measures.

- 3.58. Had an automatic emergency alert been fitted to the train, train control would have received an immediate notification when the TLE activated the emergency brake. This would have enabled train control to recognise the incident in real time and initiate the appropriate after-incident procedures without delay.
- 3.59. The Commission has previously identified this safety concern in the Kāpiti passenger train derailment report *RO-2021-104* (Transport Accident Investigation Commission, 2024).

In that inquiry, the Commission issued a recommendation to Transdev Wellington calling for the adoption of systems that automatically notified train control when emergency braking is activated. Transdev Wellington replied:

This recommendation is Under Consideration. Transdev Wellington will raise an engineering change request to implement this recommendation and submit it to Metlink for approval and funding. Greater Wellington Rail Limited via Metlink, own the rolling stock and approve and fund any alterations. We note there may be occasions where an emergency radio call would be appropriate, a trackside fire for example, but the use of the emergency brake would not be applied. Similarly, testing the emergency brake (a frequent occurrence) would not require an emergency notification to train control.

- 3.60. On 4 February 2026, the Commission met with Transdev Wellington to determine whether progress had been made toward the recommendation under consideration and whether the engineering change request had been submitted to Metlink and Greater Wellington Rail Limited.
- 3.61. On 5 February 2026, Transdev Wellington updated the Commission on the safety action taken in response to this recommendation. In the Commission's view, the safety action taken addresses the safety issue. The details of this safety action are discussed in Section 5.

4 Findings

Ngā kitenga

- 4.1. The required level of worker protection was not applied; the inadequate level of protection increased the risk of harm to track workers.
- 4.2. It is **virtually certain** that the RPO opted to use ITD even though they knew it was not allowed in the worksite location. They perceived it to be both a simpler and more practical method of protection than blocking, given the location and timing of the planned work.
- 4.3. Had KiwiRail conducted a risk assessment for maintenance tasks at each grease-applicator site, the RPO **likely** would have applied a more appropriate and effective track protection control method.
- 4.4. The Commission found that neither subcontractor held the required competencies or a current medical certification from a Rail Medical Officer to enable them to work in the rail corridor.
- 4.5. Neither the RPO nor ILS were aware that the workers did not hold all required competencies to work in the rail corridor. ILS did not hold or maintain records of subcontractors' competencies or current medical certification.
- 4.6. Had there been a system in place to verify contractors' competencies, it is **likely** that both ILS and KiwiRail would have identified that the contractors did not hold the required competencies or current medical certification to work within the rail corridor.
- 4.7. The RPO had not filled out the Job Plan Book correctly on multiple occasions; it was missing key safety information that should have been captured and disclosed to the subcontractors.
- 4.8. Had KiwiRail completed regular auditing of worksite protection, ITD paper-based pads and JPBS, it is **likely** non-compliance with the required work practices, including the use of a non-compliant and unsafe protection method, could have been identified.
- 4.9. A member of the train crew called train control as the train departed the incident site. The RPO and workers continued to complete their tasks with an inadequate form of protection.
- 4.10. Had an automatic emergency alert been fitted to the train, train control would have received an immediate notification when the TLE activated the emergency brake. This would have enabled train control to recognise the incident in real time and initiate the appropriate post-incident procedures without delay.

5 Safety issues and remedial action

Ngā take haumarū me ngā mahi whakatika

General

- 5.1. Safety issues are an output from the Commission's analysis. They may not always relate to factors directly contributing to the accident or incident. They typically describe a system problem that has the potential to adversely affect future transport safety.
- 5.2. Safety issues may be addressed by safety actions taken by a participant. Otherwise the Commission may issue a recommendation to address the issue.

Safety issue 1: KiwiRail's process for determining the appropriate worksite protection did not identify all the relevant risks nor consider the practicality of the protection. This meant the applied protection method differed from the approved method, increasing the risk to the safety of track workers.

- 5.3. No action has been taken to address this safety issue. Therefore, the Commission has made a recommendation in Section 6 to address this issue.

Safety issue 2: The level of management and oversight by KiwiRail of contractors working within the rail corridor was inadequate. This increased the likelihood of unqualified contractors carrying out work within the rail corridor in an unsafe manner.

- 5.4. On 14 November 2025, KiwiRail informed the Commission of the following safety actions taken:
- Check Safe competency system currently being rolled out.
 - System to be accessed by RPOs, managers and elected personnel.
 - Alerts to managers and competency holders when certifications are about to expire.
 - Auditing oversight system for KiwiRail to have oversight of contractors.
 - Full rollout of the Check Safe system in July 2026.
- 5.5. In the Commission's view, these safety actions have addressed the safety issue. Therefore, the Commission has not made a recommendation.

Safety issue 3: KiwiRail's process to assure itself that rail protection work is being carried out safely and as required is not adequate. This increases the risk of unsafe work being undertaken within the rail corridor.

- 5.6. No action has been taken to address this safety issue. Therefore, the Commission has made a recommendation in Section 6 to address this issue.

Safety issue 4: Wellington passenger trains do not send an automatic radio call to train control when emergency braking is applied. This could result in a delay in implementing a response to an emergency situation.

- 5.7. On 5 February 2026 Transdev Wellington informed the Commission of the following safety action taken:

An engineering modification request to modify the Matangi EMU fleet to send an automatic alert when the train's emergency brake is activated was accepted by Greater Wellington Regional Council. An agreed trial period between 16 September 2025 and 14 December 2025, was completed successfully, with the system operating as intended.

On 2 March 2025 following a successful trial Greater Wellington Regional Council has agreed to modify the Matangi fleet to incorporate the automatic alert system. One EMU unit has been fully modified and in service, 13 Tranzlog units have been upgraded to support the new alert system and are awaiting installation in the EMU cabs. The project is scheduled for completion by June 2027.

- 5.8. In the Commission's view, this safety action has addressed the safety issue. Therefore, the Commission has not made a recommendation.

6 Recommendations Ngā tūtohutanga

General

- 6.1. The Commission issues recommendations to address safety issues found in its investigations. Recommendations may be addressed to organisations or people, and can relate to safety issues found within an organisation or within the wider transport system that have the potential to contribute to future transport accidents and incidents.
- 6.2. In the interests of transport safety, it is important that recommendations are implemented without delay to help prevent similar accidents or incidents occurring in the future.

New recommendations

- 6.3. On 30 July 2026, the Commission recommended that the chief executive of KiwiRail review and improve the protection planning process to ensure all associated risks controls are applied and the practicality of the protection is considered when selecting the worksite protection method. **[024/26]**
- 6.4. On 18 August 2026, KiwiRail replied:

This recommendation is **accepted**.

KiwiRail will provide further information to the Commission in due course.
- 6.5. On 30 July 2026, the Commission recommended that the chief executive of KiwiRail implement procedures to formally audit worksite rail protection measures being used by RPOs to ensure they are complying with protection requirements. **[025/26]**
- 6.6. On 18 August 2026, KiwiRail replied:

This recommendation is **accepted**.

KiwiRail will provide further information to the Commission in due course.

7 Other safety lessons

Ngā akoranga matua

- 7.1. It is important to follow risk-based rules and procedures when operations involve an interaction between plant and people.
- 7.2. Adequate and frequent auditing and oversight of safe-working systems supports the identification of gaps in a safety system and allows corrective measures to be adopted.

8 Data summary

Whakarāpopoto raraunga

Vehicle particulars

Train type and number:	Matangi EMU operating as a non-revenue passenger train for training purposes – <i>DT80</i>
Classification:	Passenger
Year of Manufacture:	2011
Operator:	Transdev Wellington Limited

Date and time 8 May 2025, 1014

Location Plimmerton, Wellington

Operating crew rail protection officer (RPO)
subcontractor one (SC1)
subcontractor two (SC2)
trainee locomotive engineer (TLE)
locomotive engineer supervisor (LES) of the TLE

Injuries nil

Damage nil

9 Conduct of the inquiry

Te whakahaere i te pakirehua

- 9.1. On 8 May 2025, the New Zealand Transport Agency notified the Commission of the occurrence. The Commission subsequently opened an inquiry under section 13(1) of the Transport Accident Investigation Commission Act 1990 and appointed an Investigator-in-Charge.
- 9.2. Commission investigators attended the site on 21 May 2025 and conducted a site examination, which included site measurements and photographs.
- 9.3. The Commission obtained records and information from sources that included:
 - interviews
 - training and certification records
 - Tranzlog data from the locomotive
 - train control graphs
 - GPS data for the RPO's truck
 - train control voice call logs
 - train protection documentation
 - signal logs of train movements
 - forward-facing video footage from train *DT80*.
- 9.4. On 29 April 2026, the Commission approved a draft report for circulation to ten interested parties for their comment.
- 9.5. Five interested parties provided a detailed submission and three interested parties replied that they had no comment, two interested parties did not respond despite efforts to contact them. Any changes as a result of the submissions have been included in this final report.
- 9.6. On 30 July 2026, the Commission approved this final report for publication.

Abbreviations

Whakapotonga

DIB	daily information bulletin
EMU	electric multiple unit
GPS	global positioning system
ILS	Industrial Lubricants and Services Limited
ITD	individual train detection
km	kilometre
km/h	kilometres per hour
LE	locomotive engineer
LES	locomotive engineer supervisor
m	metre
NIMT	North Island Main Truck
RPO	rail protection officer
TAR	Track Access Request
TLE	trainee locomotive engineer

Glossary

Kuputaka

blocking	a protection method used by train control to place trackside signals at stop to hold trains from entering a section of track where work may be undertaken
control box	trackside infrastructure configured to apply grease to the track at various locations on the rail network
<i>DT80</i>	driver-training train
emergency brake application	maximum air-brake application made when a rail vehicle must be stopped in the minimum distance possible using only the air-brake system
gauge face	the portion of rail head that faces inward on a railway track, to which grease can be applied
grease applicator	linked to the control box to allow grease to be applied to the gauge face of the inside of the rail head
individual train detection (ITD)	a type of protection that allows workers entry to a part of the rail corridor whilst keeping watch for train movements and enabling workers to move to a safe place when the train passes their location
locomotive engineer	a person certified by examination to operate in-cab controls for train speed and braking applications to conform with the signal indications or written authority on the rail network
locomotive engineer supervisor	a certified person that observes on-job training of locomotive engineers
permit to enter	a formal safety authorisation issued by KiwiRail that allows people or organisations to enter, work in or carry out activities in or near the operational rail corridor in New Zealand
rail corridor	the land between the legal boundaries of railway land, or land within 3 m of the centreline of any operational track where the land boundary is less than this distance

Track Access Request (TAR)	formal operational request used to obtain permission and protection to access the track itself, usually by rail-qualified workers, where the work may affect train movements or require control of the railway
train controller	the person who controls the movement of all trains and authorisation of maintenance occupancies within a specific area on the controlled network
wheel sensor	device that detects the train's wheels as it passes over the top of the sensor

Citations

Ngā tohutoru

Hudson, P. T. W., Verschuur, W. L. G., Parker, D., Lawton, R., & Van Der Graaf, G. (1998). Bending the rules: Managing violation in the workplace.

Kuiper, M., Chambon, M., de Bruijn A., Reinders Folmer, C., Olthuis, E., Brownlee, M., Kooistra, E., Fine, A., van Harreveld, F., Lunansky, G. & Van Rooij, B. (2022). A Network Approach to Compliance: A Complexity Science Understanding of How Rules Shape Behavior. *Journal of Business Ethics*. 184.

The Behavioural Insights Team. (2024). *EAST framework: Four simple ways to apply behavioural insights (updated edition)*. Retrieved from <https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/>.

Transport Accident Investigation Commission. (2024). *RO-2021-104, Passenger train 6205, Train derailment, Kāpiti, 17 August 2021*. Retrieved from <https://taic.org.nz/sites/default/files/inquiry/documents/RO-2021-104%20FRV2%20Final%20Report.pdf>

Appendix 1 DIB on the day of the incident

– 4 –
Information Bulletin – continued

		Thursday 08 May 2025 Wellington – Waikanae, Johnsonville Line Wellington Junction – Masterton and Branches	
Wellington – Waikanae continued:			
Protected Work Area		Rule	Work Details
Porirua 19.50km Up & Down mains	Paekākāriki 8L, 10LABC Signals Up & Down mains	TS06 Blocking (as required)	0001 – 0430 Spark Gap Testing (clear of existing worksites)
Plimmerton 25.60km Up & Down mains	Pukerua Bay 29.45km Up & Down mains	TS06 Blocking (as required)	0900 – 1500 Sandite Grease Unit Inspections / Maintenance
South Junction 8RAB Signal Up & Down mains	North Junction 10L Signal Up & Down mains	TS06 Blocking (as required)	2030 previous day to 0430 2030 to 0430 next day Signals Maintenance
Paekākāriki 2R, 4RABC Signals Up & Down mains	Paekākāriki 8L, 10LABC Signals Up & Down mains	TS06 Blocking (as required)	2030 previous day to 0430 2030 to 0430 next day Signals Maintenance (clear of existing worksites)
Paekākāriki 8R, 10RA, 10RB Signals Loop, Up & Down mains	Paraparaumu 10L, 12LAC Signals Up & Down mains	TS06 Blocking	0045 – 0400 Rail Grinding Turnouts and Tangents

Appendix 2 Permit to enter and special conditions



KIWIRAIL HOLDINGS LTD (KIWIRAIL) PERMIT TO ENTER

PERMIT NO: 535-23N v4

KIWIRAIL OFFICE DETAILS

Corridor Access Advisor

CONTACT: [REDACTED] Mob #: [REDACTED] Email: [REDACTED]

PROTECTION REQUIRED BY: Signals & Comms [Y/N] Traction - (Permit to Work EF201) [Y/N]

ISSUING DATE: 28 November 2023 PERMIT APPROVAL: (Signature) [REDACTED]

APPLICANT'S DETAILS

COMPANY: Industrial Lubricants & Services Ltd ADDRESS: 1/15 Accent Drive East Tamaki, Auckland	CONTACT: [REDACTED] MOB #: [REDACTED] BUSINESS #: [REDACTED] e-mail: [REDACTED]
--	---

PERMIT TO ENTER DETAILS

THIS PERMIT IS ONLY VALID FOR THE FOLLOWING

DATES: 12/12/23 12/12/24 to 12/12/25

DURING HOURS: 0800 to 1700

LOCATION: NORTHLAND – ALL LINES
AUCKLAND METRO – ALL LINES
WELLINGTON METRO – ALL LINES
MDLND 0.00KM TO MDLND 1.00KM - ROLLESTON
MSL 0.00KM TO MSL 16.00 KM - HORNBY
MNL 0.00KM TO MNL 100.00 KM – ETHELTON

ACTIVITY: WORKS DIRECTED BY KIWIRAIL | INSTALLING AND MAINTAINANCE
CHECKS ON TRACKSIDE GUAGE FACE LUBRICATORS TO REDUCE WEAR ON CURVES.

PERMIT FEE PAYABLE: [REDACTED] plus GST amendment fee
KIWIRAIL SPONSORED ANNUAL PERMIT

DETAIL OF PROTECTION REQUIRED (go to a separate page if required):
RAIL PROTECTION IS REQUIRED AND PROVIDED BY KIWIRAIL. SEE SPECIAL CONDITIONS BELOW

KiwiRail and the Applicant agree that the Applicant may enter the Location solely for the purpose of carrying out the Activity, subject to the following conditions:

General

- This permit must be shown when requested by any KiwiRail Holdings Ltd, or KiwiRail Limited (together referred to as "KiwiRail") employee, contractor or agent, or the Project Construction Manager.
- The permit is not transferable.
- The permit may be cancelled at any time by KiwiRail, and for any reason. The Applicant shall have no claim against KiwiRail where this permit is cancelled.
- The Applicant must pay the fees and costs chargeable under this Permit. For non-account holders, permits will not be supplied until payment is made. The costs include, without limitation:
 - staff and external contractors' and agents' time in assessing this application and associated with providing access, including meetings to establish work methods and protection systems. This may include risk assessments for inclusion in health and safety plans;
 - staff and external contractors' and agents' travel and mileage costs; and
 - costs of any equipment supplied by KiwiRail.
- Where any infrastructure other than KiwiRail infrastructure is to be installed, the Applicant must enter into a separate agreement with the Grants team within KiwiRail's Property department relating to the installation, maintenance, and continued access to and use of that infrastructure following construction.

[REDACTED]

34. The Applicant shall indemnify KiwiRail for all losses suffered by KiwiRail (including, without limitation, staff time, and business interruption losses) as a result of the Activity, whether arising in tort or contract or otherwise.
35. The continued operation of the rail corridor and rail operations in and around the Location at all times during the execution of the Activity is of critical importance to KiwiRail. Accordingly, and without limiting clause 33, if the Applicant causes unapproved or unplanned disruption to train services then the Applicant shall be liable for the following liquidated damages:
 - a. \$1,500 per 15 minute period or part thereof between the hours of 08:01 to 09:00 and 15:01 to 19:01; and
 - b. \$500 per 15 minute period or part thereof at all other times.
36. The Applicant and KiwiRail agree that the liquidated damages at clause 34 are a genuine pre-estimate of KiwiRail's loss in the event of an unapproved or unplanned disruption.
37. No liquidated damages under clause 34 shall apply for delays less than 5 minutes in total duration.
38. If a 15 minute period extends over two time periods set out above, then the damages shall apply for the full 15 minutes of the higher value time period that the delay occurred in.
39. For the purposes of this clause a delay shall be deemed to have come to an end, where train services have been deemed by KiwiRail to have returned to normal scheduled operation on that operating day, or the effects of the delay(s) caused by the Applicant have been overcome. KiwiRail will act as a reasonable and prudent network access provider to mitigate the effects of such delays.
40. The Applicant is required to hold public liability insurance satisfactory to KiwiRail (minimum \$10,000,000).
41. The work site must at all times be kept secure against trespass.
42. The Applicant shall keep confidential and make no disclosure of the existence and contents of this permit and all information obtained from KiwiRail under this permit.

SPECIAL CONDITIONS:

Rail Protection:

- Any work that has potential to get closer than 5m to the track requires rail protection.
- Work that is greater than 5m from track requires a safety fence or barrier to be erected to prevent any access to the railway.
- Rail protection provided by KiwiRail contact our protection planners
- All works done in the rail corridor must be notified to the region's protection planner via the Track Access Request (TAR) form. Filled in TAR form to be submitted 2 weeks in advance to
 - Northland (Swanson to Otiria) – northlandaccess@kiwirail.co.nz
 - Auckland (Pukekohe to Swanson) – Auckland.access@kiwirail.co.nz
 - Wellington – (Wellington to Masterton/Waikanae) wellingtonmetro.access@kiwirail.co.nz
 - South Island – southisland.access@kiwirail.co.nz
- Amendments to your permit/TAR will cost a minimum fee of \$600.
- Should you be found working outside your permit conditions (including location, type of work, dates), penalty fees may apply.

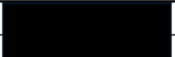
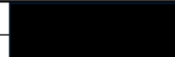
For Electrified Areas - Auckland Metro, Wellington Metro:

- All persons working in Electrified Areas must hold KiwiRail's Electrification Awareness competency.
 - Working at Stations and on Platforms – Electrification Awareness Basic
 - Working between stations in the rail corridor – Electrification Awareness Intermediate
- Works within the Minimum Approach Distances (MAD) must be approved by the traction supervisor / Traction Protection Manager and have an Electrical Safety Observer (ESO) on site, or isolation in place.
 - Auckland Traction Protection Manager [REDACTED]
 - Wellington Metro Traction Supervisor [REDACTED]
- Add MAD safety diagrams to permit.

Appendix 3 Track Access Request (TAR)

Wellington Track Access Request (TAR)				Protection Planner Contact [REDACTED]	
				Wellington Metro to Waikanae	
Please submit this request to WellingtonMetro.access@kiwirail.co.nz along with all relevant documentation. Please allow two weeks notice for your access requests				Permit to Enter # 535-23 USiv2	Reference / SWO# 124463312
				PO#	
Name of Person Submitting this request	[REDACTED]		Contact Number	[REDACTED]	
Organisation undertaking the works	UCL		KiwiRail Sponsor	Council job	
Brief description of requested work	Doing electrical works on sandite and grease units at three different location. 7.3km Boxhill, 25.60km Plimmerton and 29.449km Pukurua Bay				
Detail Network Authorities					
Requested date for works to commence:	08 May 2025		Planned finish date:	08 May 2025	
Requested start time:	09:00		Finish Time:	15:00	
Which line are the works taking place on?	☒ NIMT ☐ WL ☐ Johnsonville ☐ Melling Branch line ☐				
	☐ UP ☐ DN ☐ UP ☐ DN ☐ Single ☐				
Other (Sidings, Loops etc):					
Will the line/s be impassable?	N/A				
Which One/s?					
Start KM Limit (if known)	7.3 km		End KM Limit (if known)	29.449 km	
Start Location (ie. Station, signal, traction post)	Boxhill		End Location	Pukurua Bay	
Protection / Coordination					
Do you require the services of:	Protection ☒ RPO ☐ SP	Signals ☐ Form 3 ☐ Permit to Dig	Traction ☐ Form 6 ☐ ESO	Other specify:	☐ S&I Diagrams
Are you providing your own qualified Rail Protection Officer?	☒ No ☐ Yes				
Protection Methodology Being used:	☐ BOL Rule 24	☐ CSB Rule 905	☐ Track Warrant Rule 602	☒ Blocking Rule 908	
Other:	☐ ITD Rule 017	☐ Lock out Rule 919	☐ Working clear (all work and machinery > 4 m from track centre)	☐ Non Interlocked Rule 007	
Will you be using any Plant or Machinery?	☐ No	☐ Hi Rail	☒ Rubber Tracked vehicle	☐ Hiab/Crane	
Other:					
At what location will you be entering the Rail Corridor?	7.3km Boxhill				
Work EF201 holder Name:			Contact Number:		
Work Party Names:			KiwiRail ID Or competency Number:		
Rail Protection Officer / Site protector					
Work site supervisor	[REDACTED]				
Conditions					
By submitting this form you are acknowledging that all personnel included in the works detailed within this document, and who will be entering the rail corridor, have attended KiwiRail Track Induction and Electrical Awareness Courses (for electrified area's.)					
Wellington PLANNING TEAM USE ONLY:					
Access Given	YES - NO	Updated on Interface Planning Calendar:	YES - NO	Week Number:	
Updated on Interface Planning Tracker:		YES - NO	Date Received:		

Appendix 4 Planning application for work F1 Form

KiwiRail 		Application for Planned Work		F1 - Form 1	
		Clear Form	Reference No.:	45-25	
Note: This form must be submitted to / by the Regional Protection Planning Team, complete with all additional forms and diagrams, no later than the agreed minimum application period					
Regional Protection Planning Team (select):		Wellington Metro Access - Email: wellingtonmetro.access@kiwirail.co.nz			
Person filling out form:		Name		☎	
RPO - Rail Protection Officer(s): (Holds appropriate protection certification)		Day	Name	☎	
		Night	Name	☎	
Additional RPO Info:				HRV	
Day(s) of Operation:		From		To	
☒ Each Day / Daily ☐ 24hrs Continuous Excl. Days (specify):		Date	8/05/2025	Date	8/05/2025
		Day	THU	Day	THU
		Hrs	0900	Hrs	1500
Protection Method required: ☐ Special Conditions (specify) ☐ Track Warrant ☐ Foul Time ☒ Blocking ☐ Lockout (specify) ☐ Track and Time Permit (Mis 60) ☐ Compulsory Stop Protection (CSP) NAP Use - DMS Eprotect Ref #:		☐ Single Line Area ☐ Station Limits ☐ Loop / Sidings ☒ Multi Line Area ☒ All Mains ☐ Up Main ☐ Centre / Middle Main ☐ Down Main ☐ Other Lines (specify) Other Lines / Lockouts / Special Conditions (specify): BLOCKING AS REQUIRED			
Description of Work: (specify requirements for any track machines / work trains / etc.)		SANDITE GREASE UNIT INSPECTIONS AND MAINTENANCE			
Note: Working in Multi Line Area - When protection is not planned for adjacent line, safe working arrangement discussion held and Network Access Planning contacted:					
PWA - Protected Work Area:		Date		Hrs	
Between - Stations / Locations		Line	NIMT		
		Stn	PLIMMERTON	Stn	PUKERUA BAY
Between - Metrages / Signals / Points		From	25.600 KM	To	29.449 KM
Between - Stations / Locations		Stn	PLIMMERTON	Stn	PUKERUA BAY
Between - Metrages / Signals / Points		From	25.600 KM	To	29.449 KM
CSP - Compulsory Stop Protection:		Km		Km	
Boards erected near / beside signals? ☐		Signal & / Stn		Signal & / Stn	
Reduced Safety Buffer apply? (specify) ☐					
If unable to erect CSP Advanced / Inner Warning Boards as specified, name location(s):					
Call Sign (specify):					
☐ RPO Location outside of PWA (specify)		Communication Plan required ☐ attached			
S&I Diagram(s) sketch showing CSP / Work limits: (required for all CSP / Line Impassable worksites)		☐ attached			
Secondary Protection Arrangements: (Form 9)		Line Impassable Requirements:			
Multiple Worksite apply? ☐		From		To	
Line Impassable required? (specify details)		Day		Day	
		Hrs		Hrs	
		Limits		Limits	
Signalling & Interlocking Arrangements:		☐  Signals Form 3 must accompany this Form 1			
Traction Overhead Power Arrangements:		☐  AC Traction: Form 7 (NIMT) / Form 8 (AEA) ☐ DC Traction: Form 6 (WEA)			
Is Your Work Under Or Near Traction Overhead?					
Do you need the Overhead Power Cut Off?					
Applicable Days / Nights? (specify)					
NAP - Network Access Planning use:					
☐ Bulletin prepared ☐ Drawn on graph		Prepared by		Checked by	
		Issue V22.5		Feb-23	

Kōwhaiwhai - Māori scroll designs

TAIC commissioned its four kōwhaiwhai, Māori scroll designs, from artist Sandy Rodgers (Ngāti Raukawa, Tūwharetoa, MacDougal). Sandy began from thinking of the Commission as a vehicle or vessel for seeking knowledge to understand transport accident tragedies and how to avoid them. A 'waka whai mārama' (i te ara haumarū) is 'a vessel/vehicle in pursuit of understanding'. Waka is a metaphor for the Commission. Mārama (from 'te ao mārama' – the world of light) is for the separation of Rangitāne (Sky Father) and Papatūānuku (Earth Mother) by their son Tāne Māhuta (god of man, forests and everything dwelling within), which brought light and thus awareness to the world. 'Te ara' is 'the path' and 'haumarū' is 'safe' or 'risk free'.

Corporate: Te Ara Haumarū - the safe and risk free path



The eye motif looks to the future, watching the path for obstructions. The encased double koru is the mother and child, symbolising protection, safety and guidance. The triple koru represents the three kete of knowledge that Tāne Māhuta collected from the highest of the heavens to pass their wisdom to humanity. The continual wave is the perpetual line of influence. The succession of humps represents the individual inquiries.

Sandy acknowledges Tāne Māhuta in the creation of this Kōwhaiwhai.

Aviation: Ngā hau e whā - the four winds



To Sandy, 'Ngā hau e whā' (the four winds), commonly used in Te Reo Māori to refer to people coming together from across Aotearoa, was also redolent of the aviation environment. The design represents the sky, cloud, and wind. There is a manu (bird) form representing the aircraft that move through Aotearoa's 'long white cloud'. The letter 'A' is present, standing for a 'Aviation'.

Sandy acknowledges Ranginui (Sky father) and Tāwhirimātea (God of wind) in the creation of this Kōwhaiwhai.

Maritime: Ara wai - waterways



The sections of waves flowing across the design represent the many different 'ara wai' (waterways) that ships sail across. The 'V' shape is a ship's prow and its wake. The letter 'M' is present, standing for 'Maritime'.

Sandy acknowledges Tangaroa (God of the sea) in the creation of this Kōwhaiwhai.

Rail: rerewhenua - flowing across the land



The design represents the fluid movement of trains across Aotearoa. 'Rere' is to flow or fly. 'Whenua' is the land. The koru forms represent the earth, land and flora that trains pass over and through. The letter 'R' is present, standing for 'Rail'.

Sandy acknowledges Papatūānuku (Earth Mother) and Tāne Mahuta (God of man and forests and everything that dwells within) in the creation of this Kōwhaiwhai.



Transport Accident Investigation Commission

**Recent Rail Occurrence reports published by
the Transport Accident Investigation Commission
(most recent at top of list)**

RO-2025-105	Freight train MP8, Collision with hi-rail vehicle, 72.28 km East Coast Main Trunk line Near Kaimai Tunnel, 06 April 2025
RO-2025-104	Wellington Station signalling power outage, Wellington, 27 March 2025
RO-2024-103	Bridge 57 Main South Line, Pier 8 collapse, Rangitata, 12 April 2024
RO-2025-103	Mainline shunt, Train 170S, Signal passed at danger and near miss with passenger train, Westfield, Auckland, 1 February 2025
RO-2025-102	Y20 shunt, runaway rail vehicle collision and near miss with rail crew, Port Chalmers, Dunedin, 23 January 2025
RO-2024-104	Freight train MR1, Signal passed at danger and near miss with HRV, Kereone Station, 2 August 2024
RO-2025-101	Train 931, safe working irregularity, 553.82 km Main South Line, Mātaura, 12 January 2025
RO-2023-105	Derailment of Tamper 703, Purewa tunnel, Auckland, 9 October 2023
RO-2024-102	Freight Train 882, near miss with track workers, Main South Line, Hornby 27 km, 7 March 2024
RO-2023-106	Passenger train 804, TranzAlpine, train parting, Arthur's Pass, 17 December 2023
RO-2024-101	Loaded coal train 850, signal passed at danger, Cora Lynn, Midland line, 27 February 2024
RO-2023-104	Passenger train (Te Huia) signal passed at danger and potential conflict, Penrose, Auckland, 17 June 2023
RO-2021-104	Passenger train 6205, train derailment, Kāpiti, 17 August 2021
RO-2023-102	Freight train 360, derailment, Te Puke, 29 January 2023
RO-2023-101	Hi rail vehicle collision near Te Puna, 86.43 km East Coast Main Trunk Line, 10 January 2023

Price \$18.00

ISSN 2815-889X (Print)
ISSN 2815-8903 (Online)