QUEENSLAND COURTS

# OFFICE OF THE STATE CORONER

# FINDINGS OF INVESTIGATION

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| CITATION: | **Non-inquest findings into the deaths of Jamie Christopher ADAMS and Gary Robert WATKINS** |
| TITLE OF COURT: | Coroner's Court |
| JURISDICTION: | Brisbane |
| DATE: | 19 January 2016 |
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| FINDINGS OF: | John Hutton, Brisbane Coroner |
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## Findings required under s. 45(2) of the *Coroners Act 2003* in relation to the death of Jamie Christopher Adams

I find as follows:

- The deceased person is Jamie Christopher Adams, born on 13 February 1976.
- Jamie Christopher Adams died from multiple injuries as a result of being struck by a Track Machine in a railway incident.
- Jamie Christopher Adams died on 7 December 2007.
- Jamie Christopher Adams died at Mindi, in the State of Queensland.
- The circumstances of Jamie Christopher Adam's death are outlined below.

## Findings required under s. 45(2) of the Coroners Act 2003 in relation to the death of Gary Robert Watkins

I find as follows:

- The deceased person is Gary Robert Watkins, born on 24 August 1985.
- Gary Robert Watkins died from multiple injuries as a result of being struck by a Track Machine in a railway incident.
- Gary Robert Watkins died on 7 December 2007.
- Gary Robert Watkins died at Mindi, in the State of Queensland.
- The circumstances of Gary Robert Watkins' death are outlined below.

**EVIDENCE, DISCUSSION AND GENERAL CIRCUMSTANCES OF DEATH:**

**Background**

On 7 December 2007, two Queensland Rail workers, Mr Gary Robert Watkins (22 years of age) and Mr Jamie Christopher Adams (31 years of age), were killed as a result of being run over by a Unimat Track Machine (a type of train), whilst carrying out their duties.

**Where did the incident occur?**

The incident occurred at Mindi, which is approximately 130kms south west of Mackay and approximately 25kms by road, east of Coppabella, in the Central Queensland coal mining district. The railway system in the area is known as the 'Goonyella System'.

The Goonyella System is electrified and the main line where the incident occurred was a bi-directional double track. Double crossovers were located at the Tootoolah end of Mindi to enable trains to change over between the Up and Down lines in both directions. A disused occupational level crossing was adjacent to the incident site.

The incident occurred on the Down line at Points 12 C/D at GA120.560km.

**Why were Mr Adams and Mr Watkins at Mindi on 7 December 2007?**

On 7 December 2007, the planned work activity was track resurfacing work through turnouts on the Down line at Mindi and the associated crossovers. Mr Adams and Mr Watkins were the interlockers who made up the 'Systems Maintenance Crew'.

**Description of the Unimat Track Machine involved in the incident**

The track resurfacing work was carried out using a MMA59 Unimat Track Machine, which was the machine that struck Mr Adams and Mr Watkins that day.

The Unimat Track Machine consists of a Self-Propelled Switch and Crossing Tamper Liner (MMA59) and a Track Sweeper Broom Trailer and Hopper (MMB59), which are permanently coupled for operational purposes. For ease of reference, I will refer to the entire machine as the 'Unimat Track Machine'.

The Switch and Crossing Tamper is used to lift, line and level plain track as well as turnouts. The Broom Trailer is used for sweeping ballast from the top of the track. Ballast can be distributed to the side of the track or transferred to a five cubic metre hopper for storage and later distribution. Although the Broom Trailer is not self- propelled, it provides a driver cabin to control the Switch Tamper when travelling.

**How were train movements controlled at Mindi?**

A 'Network Controller' controlled train movements at Mindi remotely from the Mackay Network Control Centre. The Network Controller utilised a Remote Controlled Signaling (RCS) system, which operated on the principle of only one train being on a signal section at one time. The Network Controller monitored train movements and provided authorities for track inspection and maintenance activities. The Network Controller had direct control of all points and signals in that territory.

Whilst this process provided protection to the worksite from external hazards associated with train movements, this mechanism was incapable of providing any protection for track workers operating within the confines of the block.

**Who were the crew involved in the incident?**

The track resurfacing work at Mindi on 7 December 2007 was carried out by two separate work groups from different divisions within Infrastructure Services Group within Queensland Rail:

- The Resurfacing crew (who operated the track machine); and
- The Systems Maintenance crew (interlockers who worked on the track).

The Resurfacing crew consisted of five members from the Rockhampton depot:

- a Resurfacing Supervisor located in his motor vehicle (Mr Ross Kapernick);
- a Front Tower Operator (Plant Fitter/Operator) who drove the Track Machine from the front cab (Mr Peter Williams);
- a Main Seat Operator (Operator Maintainer 2) located in the middle cab (Mr Michael Boyd);
- a Second Middle Cab Operator and Team Leader, located in the middle cab (Mr

Benjamin Herd); and

- a Groundperson (Operator Maintainer 1), located on the ground and Track Machine at various times (Mr William Carter).

Members of the Resurfacing crew advised the Workplace Health and Safety Queensland investigator during their interviews that they did not have set positions. Each day / task, they would rotate through the various positions through self-nomination.

On 7 December 2007, the Mindi Resurfacing crew was an amalgamation of different Resurfacing crews.

The Systems Maintenance crew (also known as 'interlockers') was made up of a two-person team from the Moranbah Depot:

- a Systems Maintainer (Mr Jamie Adams); and
- a Trainee Systems Maintainer (Mr Gary Watkins).

**The roles and responsibilities of the Resurfacing crew**

The operational roles and responsibilities of the Resurfacing crew for the day of the incident were as follows:

- Mr Kapernick, the Resurfacing Supervisor, largely performed an administrative role.
- Mr Williams, the Plant Fitter/Operator (Front Tower Operator), was located in the front cab of the Unimat Track Machine. He was the 'train driver'. He took directions from the Groundperson or the Main Seat Operator in adjusting inputs in the lift and lining systems of the machine. During operational mode, Mr Williams maintained a clear view in the forward direction. He maintained constant communication with the Groundperson and all operators.
- Mr Boyd, the Main Seat Operator (Operator Maintainer 2), and Mr Herd, the Second Middle Cab Operator (Team Leader), were both located in the middle cab. They took directions from the Groundperson or the Front Tower Operator. Mr Boyd had control over the forward and reverse movement in 'work mode'. Mr Boyd was to set up the workheads and lift unit, then position the workheads of the machine over each individual sleeper before instigating the work cycle of the workheads. Mr Herd was to assist in setting up the workhead and lifting unit. He was also to advise Mr Boyd of any obstructions, and to monitor gauges and dials.
- Mr Carter, the 'Groundperson' (Operator Maintainer 1) was to advise the crew visually on vertical and horizontal alignment. He was to be physically located on the ground to the side of the Track Machine with the retention of visibility to the front and rear direction, as available. His position was also responsible for machine movements and had the ability to stop the machine while at walking pace. In addition, the Mr Carter held responsibility to:
    - define the start point for the tamping and advise the Main Seat Operator (Middle Cab) of the final positioning of the machine for the starting point;
    - advise the crew when the machine is set up for work; and

- continually communicate with the Front Tower Operator on the amount of lift and lining inputs required and the Middle Cab Operators on cant and obstructions.

**The roles and responsibilities of the System Maintenance crew**

The two Systems Maintenance crew, Mr Adams and Mr Watkins, were to disassemble certain points' components (turnout switch rollers and spreader bars) to enable the Unimat Track Machine to better pack the ballast and to prevent damage to the points by the passage of the tamping equipment. On completion of the tamping, the Systems Maintenance crew were to reinstate the points, including checking the adjustment and alignment of the points detection to ensure integrity.

**Sequence of events**

A chronology of events prior to the incident has been collated by the Queensland Transport investigator using information gathered from the Network Control System, train data-logger records, interviews with involved parties, and telephone records. The chronology is as follows.

The Track Resurfacing crew from Rockhampton arrived onsite at the Mindi siding at around 9:00am on 7 December 2007. Their task was track resurfacing work, using the Unimat Track Machine, on the Down line at Mindi through the turnouts at Points 11 A/B and Points 12 C/D and then through the associated crossovers.

The Unimat Track Machine was stowed in the Mindi siding after the previous day's rollout work activity, which had been carried out by a different crew on the Up line at Mindi.

Mr Williams, Mr Boyd, and Mr Carter fuelled the Unimat Track Machine and performed limited pre-start checks. An Operator Maintainer commenced filling out the Worksite Safety Briefing Form on behalf of the Resurfacing crew. He inserted the initials of each member to indicate their presence. However, no safety brief was actually provided to the crew.

The Systems Maintenance crew from the Moranbah Depot (Mr Adams and Mr Watkins) were expected to join the Resurfacing crew onsite before commencing work for the day.

When Mr Adams and Mr Watkins did not meet with the Resurfacing crew, the Resurfacing Supervisor, Mr Kapernick, phoned Mr Adams' mobile telephone at around 9:20am. He ascertained that Mr Adams and Mr Watkins had been working on the incorrect points (Points 11 C/D) and on the wrong line (the Up line at Mindi, just west of the siding). Mr Kapernick advised them that they were working in the wrong location. Network Control was unaware that Mr Adams and Mr Watkins had accessed the track at this location to carry out any type of work on these points.

Following Mr Kapernick's advice, Mr Adams and Mr Watkins reinstated the points, cleared the track, and relocated their vehicle to the disused occupational crossing, to the side of the Peak Downs Highway. This location was adjacent to the correct resurfacing worksite.

Shortly after 9:25am, Mr Kapernick obtained the appropriate safe working authorities from Network Control (ie. track blocks). The Unimat Track Machine was then moved from the Mindi siding on to the Down line in readiness to commence tamping.

Mr Kapernick then vacated the Track Machine to perform administrative duties (ie. to amend travel arrangements for the Resurfacing crew) from his motor vehicle. His motor vehicle was positioned near the Systems Maintenance crew's vehicle. Mr Kapernick then switched off all

radio communication in his vehicle.

From this time, Mr Williams became the sole occupant of the lead cab of the Unimat Track Machine. He conducted all communications with Network Control and he drove the machine.

Under the protection of Network Control's 'Proceed Authority' (for working under signals), Mr Adams and Mr Watkins disassembled the relevant components of Points 11 A/B and 12 C/D on the Down line in readiness for the tamping operations. On completion of this task, they vacated the track and returned to their motor vehicle.

At about 9:55am, the Resurfacing crew commenced the main line tamping run. The main line tamping operation was carried out under the protection of three separate 'Proceed Authority' blocks.

During the tamping run, the Groundperson, Mr Carter, observed Mr Adams and Mr Watkins relocate their vehicle and conduct further work on Points 11 C/D on the Up line, the incorrect points they had initially worked on. They then returned in their vehicle to the disused crossing (the correct worksite).

Immediately prior to commencing tamping on the last section of the Down line, the Network Controller requested the Front Tower Operator, Mr Williams, to "head towards South Walker behind signal MI2 for about 15 to 20 minutes". South Walker was in the Up direction. This was in the opposite direction to the tamping run. The reason for Network Control's request was to enable an empty coal train approaching the worksite on the Down line to continue through the crossover on to the Up line and on to the coal mines.

However, Mr Williams requested and received approval for another 10 minutes of working time to "finish with the main line run and then all that [was] needed [was] to swap the points and do the crossovers".

While tamping the last section of the main line, the Groundperson, Mr Carter, noticed Mr Adams and Mr Watkins in their vehicle. Soon afterwards, as the Unimat Track Machine had completed tamping through Points 11 A/B and 12 C/D, the Resurfacing Supervisor, Mr Kapernick, directed Mr Adams and Mr Watkins to reassemble those points.

On completion of the main line run, the Unimat Track Machine was in a position where the trailing end (Broom Trailer) was approximately 67m past Points 12 C/D. The Groundperson, Mr Carter, made his way from his operating position at the rear of the track machine to the front cab to obtain a drink of water from the toolbox area. He then remained on board the Track Machine.

At about 10:56am, EG53, a 1.9km long, triple header coal train, hauling 120 fully loaded coal wagons on the Up line, passed the Unimat Track Machine. The driver of the coal train sounded the horn and acknowledged Mr Adams and Mr Watkins at the rear of the Unimat Track Machine. The coal train was travelling around 36km/h at the time and took an estimated 3 minutes and 39 seconds to pass the Track Machine.

Meanwhile, as the locomotives of the coal train were passing the Unimat Track Machine, Mr Williams scanned the Track Machine's rear view camera monitors, sounded the pneumatic horn three times, and commenced reversing the Track Machine. He was unaware that Mr Adams and Mr Watkins were on the track behind them (at, or closely adjacent to, Points 12 C/D).

Mr Williams reversed the Track Machine from the Switch Tamper cab, which he had been working in. This cab was the trailing cab of the Track Machine for the reversing movement,

which meant he did not have line of sight in the direction of travel.

No Unimat Track Machine crew member, in any capacity, was stationed in the (now) lead Broom Trailer cab during the reversing movement. The Resurfacing Supervisor, Mr Kapernick, had no visibility of the worksite from his motor vehicle because it was obstructed by the passing coal train.

At the time that Mr Williams commenced reversing the Unimat Track Machine, Mr Adams and Mr Watkins had already re-assembled Points 11 A/B. It was believed that they were either working on the re-assembly of the switch roller on Points 12 C/D or, alternatively, standing on the track and facing the coal train as it passed the worksite on the Up line.

About 23 seconds after Mr Williams commenced reversing the Track Machine, and whilst the coal train was still passing, both Mr Adams and Mr Watkins were struck by the Unimat Track Machine. No one witnessed the collision.

Unaware of the collision, Mr Williams continued reversing the Track Machine towards signal Ml27 at about 20 km/h until he was urgently advised to stop by one of the Middle Cab Operators who had sighted their bodies on the track beneath the Track Machine.

Mr Williams then brought the Unimat Track Machine to a stop by closing the throttle, applying the pneumatic braking and deselecting the train transmission. After taking this action, the Track Machine came to a stop in approximately 2 seconds and travelled a further 5.5m.

Mr Williams immediately reported the collision by radio to Network Control and requested assistance. Network Control responded and initiated the dispatch of an ambulance to Mindi.

A Queensland Rail response crew from the Coppabella Depot arrived onsite at about 11:20am, around the same time as the ambulance. Both Mr Adams and Mr Watkins were confirmed deceased at 11:41am by the ambulance crew.

Police attended the accident site at about 12:30pm and conducted an initial investigation and analysis until about 5:25pm.

The Resurfacing crew members were taken by bus to the Queensland Rail Coppabella Depot, where police conducted breath testing. Each crew member returned a zero reading. Testing for drugs that may have affected the crew's ability to perform safely was not conducted.

Rail Safety Officers from Queensland Transport (the Rail Safety Unit) were informed of the incident at about 11:24am and attended onsite at about 6:40pm to conduct a preliminary investigation. At about 8:55pm, the Queensland Transport Rail Safety Officers approved the relocation of the Unimat Track Machine to Coppabella siding and quarantined it, pending further investigation. All personnel were clear of the site at about 9:40pm.

**Investigations conducted**

The Queensland Police Service (QPS), the Department of Transport and Main Roads (Queensland Transport), and Workplace Health and Safety Queensland (WHSQ) investigated this incident.

Queensland Rail was successfully prosecuted by WHSQ and a number of improvements were made to their systems of work as a result of the recommendations made in the Queensland Transport investigation report.

It is important to note, however, that none of the Resurfacing crew members involved in this incident have provided a full account of the specific circumstances, which led to this incident.

They refused to participate in an interview with police or to provide statements to the police.

The crew members participated in interviews with WHSQ and provided general information about their processes. However, they mostly claimed privilege each time they were asked questions about what happened on 7 December 2007.

The crew members appear to have provided some information to the Queensland Transport investigator regarding the specific circumstances of the incident, however, they did not provide statements and the notes taken by the Queensland Transport investigator were not annexed to the report and have so far not been provided to me, although I have requested them.

The result is that there is a significant gap in information regarding the circumstances of this incident. Whilst I referred this matter to the DPP on suspicion that criminal offences had been committed, the police have exercised their discretion not to charge any individuals in relation to this incident. An inquest is likely to have provided an opportunity to fill many of the gaps, however, the former State Coroner directed me not to hold an inquest.

Based on the information that is known, I provide the following further analysis of this incident.

**Further analysis of the incident**

***The weather was not a contributing factor***

Visibility at the time of the accident was assessed as good. The weather was fine and hot.

***Mechanical defects were most likely a contributing factor***

Queensland Transport performed an independent mechanical integrity examination on the Unimat Track Machine from 12 - 13 December 2007. Significant defects were identified during the examination.

Defective lighting items that impacted on the visibility of the Track Machine to track workers were detected. These included failed rotating beacon and strobe light bulbs on the rear left hand side and front right hand side of the Switch Tamper, as well as a damaged headlight. It was noted that the rotating component on the rear left hand side of the Broom Trailer also failed during the independent mechanical inspection testing process.

Examination of the Broom Trailer cab revealed the windscreen washer reservoir bottles were empty. This deficiency prevented optimum visibility (through the dirty screen) for any driver operating from that cab. It further suggested that this cab might not have been used for any reversing operations for some time.

Of greater significance was the fact that the rear facing camera lens, purported to assist reversing movements, was mounted in a location that was unswept by the windscreen washer system. This meant that effective visibility through this camera was unlikely to ever be regularly achieved.

The Queensland Transport investigation measured the effectiveness of the Track Machine's rear camera system. An object with dimensions measuring 1m above track level and 450mm wide was utilised as representative of a track worker in a semi-crouched position. A previously worn Queensland Rail orange safety shirt (similar to the ones worn by Mr Adams and Mr Watkins) was attached to this apparatus to add depth and realism to the assessment. Two persons were seated in the Switch Tamper cab, where Mr Williams was seated, and they assessed rearward visibility through the fitted monitors. The results were as follows:

- from 2m away the object was invisible;

- between 3.5m and 5m away, the object was visible;
- between 10m and 50m away, the object was barely visible; and
- from 75m and more away, the object was invisible.

***The failure to conduct a proper Daily Service Check was most likely a contributing factor***

Infrastructure Services Group established a comprehensive Scheduled Maintenance Program for the Unimat Track Machine known as 'Daily Service Checks'.

The extensive checklist required operating crew to perform a number of inspections and checks. The 'On-Start Up Check' contained a requirement to check that all lights were working properly. Yet the mechanical defect relating to the lights on the Track Machine was not discovered on the morning of 7 December 2007, prior to the commencement of work.

I also note that the reversing camera and monitors were not considered to be safety critical items, as evidenced by their absence from the 'Safety Critical Items' on the 'Daily Service Checks'. System failures were to be treated on a needs basis as assessed by individual operators.

Operating crew members stated to the Queensland Transport investigator that a complete adherence to the checklist was time consuming. Consequently, their usual practice was for a random crew member to conduct cursory checks only on the key items relating to lubrication, cooling and workhead mechanisms. The entire checklist would then usually be marked to indicate compliance.

I agree with the Queensland Transport investigator who was of the view that this 'tick and flick' practice, over time, eroded the assurance that was intended to be provided by the checklist. It permitted a technically unserviceable Track Machine to operate in work mode within a worksite. Given that I have found that defective lighting items is likely to have impacted on the visibility of the Track Machine to track workers, and those item were not detected as part of the Daily Service Check; it is my view that this failure is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***The failure to conduct a Worksite Safety Brief was most likely a contributing factor***

No Worksite Safety Briefing was conducted on the morning of 7 December 2007 for either crew. Members of the Resurfacing crew stated to the Queensland Transport investigator that their individual and collective experience with the tasks were sufficient to render the required Worksite Safety Briefing unnecessary.

It appears to have been common practice to dispense with this brief. The Resurfacing crew members interviewed by the Workplace Health and Safety investigator stated that their understanding was that no particular person or role was responsible for providing the brief. It was up to someone to volunteer for the task. They were all trained to provide the pre-start brief.

The Queensland Rail Track and Trackside Safety Manual required a Worksite Safety Briefing to be conducted before workgroups commenced work at any worksite, on or near the track. The Trackside Safety Manual further stated:

*A Track Protection Officer (TPO) was required to be nominated to:*

- *Determine the method of worksite protection and complete a track worksite protection planner (Forms SWOI or SW02);*
- *Remind workers or visitors to:*
    - *Comply with safety instructions;*
    - *Use the protective equipment provided;*
    - *Not place themselves and others at risk of injury; and*
    - *That trains/on-track vehicles may approach from either direction on the track at any time.*
- *Provide information to all workers on the worksite;*
- *The escape route to clear the track when trains/on-track vehicles approach; and*
- *The method of worksite protection.*

The Worksite Safety Briefing form which was partially completed for 7 December 2007, nominated both the Team Leader, Mr Herd, and Operator Maintainer 1, Mr Carter, as the 'Cat 3 Driver'.

The Queensland Transport investigation revealed that Category 3 driver training provided a specific requirement for the Category 3 driver to be responsible for the safe working. This requirement was also stated in the content of Queensland Rail 'Safety Message 1'.

The Track and Trackside Safety Manual required that when additional workers or workgroups joined a worksite (ie. the Systems Maintenance crew), the additional TPO (ie. either Mr Adams or Mr Watkins) was to liaise with the onsite TPO (ie. Mr Herd or Mr Carter) to determine the appropriateness of independent working. The additional TPO was also to complete a Worksite Safety Briefing or obtain a worksite briefing from the onsite TPO and work under the existing protection.

Whilst a Worksite Safety Briefing form was partially completed for the Resurfacing crew, the Systems Maintenance crew was not included on the form nor did they complete a form in their own right.

The Queensland Transport investigation concluded that as no Worksite Safety Briefing was conducted, it followed that no legitimate Category 3 driver was nominated for the site. This, in turn meant that no person assumed the formal role of TPO for the Mindi worksite.

Considerable variations in the interpretation of safe working were stated by Resurfacing crew during their interviews with the Queensland Transport investigator. When requested to describe the means of protection employed within the worksite, crew members unanimously stated that they would "look out for each other". However, this objective proved to be unachievable for this worksite due to the physical locations of workers. The axiom 'look out for

your mates' may have been well intended but the reality was that no individual person was in control of track protection within the Mindi worksite.

In my opinion, the provision of a Worksite Safety Briefing on 7 December 2007 is likely to have reminded both crews of their safety responsibilities and increased their situational awareness. Had a brief been conducted, an individual person is also likely to have been appointed to control track protection within the worksite. The track worksite planner and communication between the two TPOs for each crew is likely to have improved communication between the two crews. It is therefore my view that a failure to take this action prior to the commencement of work is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***Noise was most likely a contributing factor***

Mr Adams and Mr Watkins used hand tools to commence the reassembly of Points 12 C/D at the time of the incident. The passing coal train generated the primary noise sources. Tests carried out onsite indicated noise levels for Mr Adams and Mr Watkins, in a working position, would have been approximately 94 dBA as the loaded coal train passed on the adjacent Up line. No hearing protection was utilised, nor required to be utilised by them.

The Unimat Track Machine was equipped with roof mounted pneumatic horn. The independent functional engineering assessment of the Unimat Track Machine determined that activating the pneumatic horn whilst operating the machine from the Switch Tamper cab, would only sound the horns in a forward direction.

The audible level of the forward horns was measured as 103.5 dBA at a distance of 20m in front of the cab. The rear horns located above the cab of the Broom Trailer and directed toward Mr Adams and Mr Watkins did not sound, as they were incapable of being activated from the trailing cab.

The absence of a pneumatic horn sounding directly toward Mr Adams and Mr Watkins lowered the level of defence available to them on the track. It is unknown whether Mr Williams was aware of this shortfall in the design of the Track Machine.

However, in my opinion, Mr Williams should have driven the Track Machine from the lead cab in any event, to obtain line of sight in the direction of travel, rather than relying on imperfect camera vision. He should also have been aware through his experience as a Track Machine operator that the coal train, which was passing at the time, had the potential to drown out the Track Machine's pneumatic horn. This is despite the fact that Mr Williams was wearing a headset, which would have also drowned out ambient noise.

Changing cabs to the lead cab and waiting for the coal train to pass would only have taken a few minutes. In my view, Mr Williams' failure to take these simple steps is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***The lack of communication was most likely a contributing factor***

The Unimat Track Machine was fitted with a Telex BTR-300 duplex wireless communication system that permitted simultaneous coordination between all occupants of the Track Machine and the Groundperson. The machine-based crew communicated through a wired system whereas the Groundperson benefited from the mobility of a wireless headset.

Whereas, any communication, other than visual signaling, with Mr Adams and Mr Watkins was unlikely, as they had no practical means by which to connect to the Resurfacing crew's communications system.

Both cabs of the Unimat Track Machine (the Switch Tamper and Broom Trailer) were fitted

with a Trunk Radio, Train Control Radio (TCR), and Maintenance Supervisory Radio (MSR - telephone radio).

The primary means of communication with Network Control was the TCR system. Mr Williams' road vehicle was also fitted with a TCR. However, he switched it off in order to conduct administrative tasks.

In my opinion, Mr Kappernick did not adequately fulfill his supervisory responsibilities as 'Resurfacing Supervisor' when he directed Mr Adams and Mr Watkins to conduct work on a particular section of track, without maintaining communication with the Track Machine, or maintaining situational awareness by listening in to the TCR. In my view, Mr Kappernick's failure in this regard was unreasonable and is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***A failure to regularly scan the rear vision camera monitor was most likely a contributing factor***

I note that it would appear on the limited evidence obtained from Mr Williams, that he only scanned the rear vision monitor once before commencing the reversing movement. At that time, the Unimat Track Machine would have been around 65m away from Mr Adams and Mr Watkins. At that range, if Mr Adams and Mr Watkins were in a semi-crouched position, they would have either been invisible or barely visible. It was therefore not unreasonable for Mr Williams to have missed them at the time.

However, having made the decision to rely on the camera vision, it was unreasonable, in my view, for Mr Williams not to have continually scanned the cameras during the reversing movement. One scan at the beginning of the reversing movement was not enough. Had he have more regularly scanned the camera, he may have seen Mr Adams and Mr Watkins in time to stop the Track Machine or to slow it down to enable them to get off the track.

In my view, Mr Williams' failure to regularly scan the camera monitor is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***A failure to reverse from the lead cabin of the Unimat Track Machine was most likely a contributing factor***

It is even more unreasonable, in my view, for Mr Williams to have relied on the cameras at all, given that he could have easily achieved a clear line of sight by changing to the cab at the front in the direction of travel. Changing cabs would only have taken Mr Williams a couple of minutes.

The Queensland Rail Remote Controlled Signal Manual stated:

> *When it is necessary to set back (ie reverse), the Train Driver must drive from the leading driving cab in the direction of travel of a train unit.*

Section 2.1.3 of the Remote Control Manual established that the Unimat Track Machine was defined as a "train" for safety purposes.

It is unknown whether Mr Williams was aware of this instruction because he did not answer questions of this nature specific to the incident during his interviews. However, I find it difficult to believe that Mr Williams would not have been aware of this requirement, through training.

I understand that it was common practice to reverse the Track Machine from the trailing cab for short distances, at slow speeds. However, notwithstanding this practice, it is my opinion that it should have been common sense to occupy the lead cabin in the direction of travel. Mr

Williams' failure to occupy the lead cabin is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***The absence of a person on the ground to maintain visibility was most likely a contributing factor***

The Queensland Rail Remote Controlled Signal Manual also provided that when reversing:

> *the driver was to regulate the speed of the train to be able to stop within one half of the distance of line-of-sight or have a second train driver, or other qualified worker (with radio communication), proceed ahead of the reversing train to warn others travelling or working on the track.*
>
> *The second Train Driver/ Qualified Worker (when used) at the rear of train should tell the train driver the required speed and stop the train if required.*

Again, it is unknown what level of knowledge Mr Williams and the crew had of this written instruction but I find it difficult to believe that they would have not received guidance of this nature during training. Regardless, it should have been common sense and the Groundperson, Mr Carter, had a clear responsibility to be physically located on the ground to the side of the machine with the retention of visibility to the front and rear direction, as well as to retain communication with Mr Williams during the reversing movement.

Mr Carter climbed aboard the Track Machine just prior to the reversing movement and remained onboard. This was known by Mr Williams, because he asked the crew through his headset where Mr Carter was shortly after he commenced reversing and was advised by Mr Carter that he was "on". The Team Leader, Mr Herd, should also have been aware of this through the exchange over the headsets.

Mr Herd stated to the Workplace Health and Safety investigator that his understanding was that the Groundperson would normally act as a lookout at the rear of the train when the train is reversing. This demonstrated knowledge on his part of the correct procedures. However, he appears to have been reluctant to speak up on the day, given that he had only joined the crew for this particular tasking (ie. he normally worked with a different crew).

In my view, had Mr Carter remained on the ground and retained visibility ahead of the Track Machine, it is likely that he would have seen Mr Adams and Mr Watkins on time to advise Mr Williams of their presence. This failure by Mr Carter (and the failure of Mr Williams and Mr Herd) to insist that Mr Carter dismount the machine during the reversal movement, is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***The speed of the reversing movement was most likely a contributing factor***

Inherent with worksite protection at the Mindi site was that the Remote Controlled Signal Manual limited any reversal movement conducted within RCS territory to a maximum speed of 10 km/h and to regulate the speed of the train to be able to stop within one-half the distance of the line-of sight.

Mr Williams attained a maximum speed of about 20km/h before stopping. It is unclear exactly how fast he was travelling at the time of impact with Mr Adams and Mr Watkins but it would be reasonable to conclude that it was over 10km/h.

In my view, had Mr Williams been driving 10km/h or less, this would have increased his chances of spotting Mr Adams and Mr Watkins prior to striking them and he would have had a better chance of stopping or slowing down on time to avoid the collision.

It would not appear that Mr Williams was aware of the Remote Controlled Signal Manual's requirement. However, this should have been common sense.

In my view, Mr Williams' failure to travel at the required speed is likely to have contributed to the deaths of Mr Adams and Mr Watkins.

***A lack of vigilance by Mr Adams and Mr Watkins was most likely a contributing factor***

The Track and Trackside Safety Manual provides an obligation for vigilance and

warned against items such as reliance on:

- Train times;
- Schedules;
- Train overviews;
- Train announcements;
- Boom gates;
- Signal indications; and
- Points, or train monitoring systems for information as to the running of Trains.

There is also a warning that trains and on-track vehicles may run without prior advice.

The manual provided further procedures for situations when working on or near the track. When it is was necessary to be on or near the track and workers could maintain continual vigilance, the standard listed relevant responsibilities included:

- Be aware that trains/on-track vehicles may approach from either direction on any track at any time;
- Face an approaching train/on-track vehicle where possible;
- Do not rely on anybody else to give warnings of approaching trains/on-track vehicles;
- Watch and listen for trains/on-track vehicles approaching at all times;
- Do not be distracted by persons or events in your vicinity;
- Look frequently (*approximately every five seconds*) to make sure there is sufficient warning of the approach of a train/on-track vehicle;

(It was noted that this must be done even if a train/on-track vehicle is not expected to approach);

- Other than when performing shunting duties, move to a position of safety at least 10 seconds before the train/on-track vehicle arrives;
- Be aware of trains/on-track vehicles on adjacent tracks and noise which may mask the sound of an approaching train/on-track vehicle; and
- Keep clear of moving rail vehicles.

The Track and Trackside Safety Manual also provided that lookouts might be used when it was determined necessary, through a risk assessment. Lookouts must wear safety yellow clothing; and make sure ample advance warning of an approaching train/on-track vehicle can be given and when a train/on track vehicle approaches. Lookouts were not to carry out any other duty.

I note that a lookout does not appear to have been appointed at the Mindi worksite on 7 December 2007. Both Mr Adams and Mr Watkins were clothed in a safety orange shirt.

It is likely that even if Mr Adams and Mr Watkins were not aware of this written instruction, they would have received similar guidance during their training. In any event, much of this is common sense. In my view, both Mr Adams and Mr Watkins also contributed to their deaths by failing to maintain vigilance, whilst working on the track.

***The failure to conduct a positive site handover was most likely a contributing factor***

I agree with the Queensland Transport investigator's remarks that the individual team members of the Unimat Track Machine displayed a high level of cooperation and concern for the welfare of each other.

After being authorised by Network Control to move behind signal Ml27, Mr Williams commenced the reversing movement. Shortly afterwards, he sought confirmation from the rest of the crew (via headset) as to the location of the Groundperson, Mr Carter. This call was acknowledged by the Mr Carter who stated, "I'm on" as he entered the Switch Tamper cab adjacent to the driving position.

This action indicated a belated situational awareness by Mr Williams of his own crew's disposition. However, no consideration was applied to the Systems Maintenance crew (Mr Adams and Mr Watkins). Similarly, Mr Carter, by boarding the Track Machine, did not consider the Systems Maintenance crew as they were last sighted by him to be in their vehicle, adjacent to the roadway. As noted earlier, any communication, other than visual signaling, with the Systems Maintenance crew was unlikely, as they had no practical means by which to connect to the Resurfacing crew's communications system.

In my view, a positive handover of the worksite is likely to have defended Mr Adams and Mr Watkins from the collision. A failure to do so is likely to have contributed to their deaths.

***Fatigue may have been a contributing factor***

Queensland Transport's analysis of the operating rosters of both crews indicated that some individuals had worked substantial hours of duty in the days leading up to 7 December 2007.

Contemporary research concludes that working rotating shifts, with limited days off to rest and recover, increases fatigue and affects cognitive performance.

The analysis noted that the Resurfacing Supervisor, Mr Kappernick; Operator Maintainer 1, Mr Carter; and Operator Maintainer 2, Mr Boyd; were not provided with a ten-hour break between concluding work at 10:00pm on 5 December 2007 and commencing work at 7:00am on 6 December 2007. As this requirement was well known within track worker groups, the Queensland Transport investigator was of the opinion that this action further indicated the willingness of personnel to get the job done at the potential expense of safety.

In the case of Mr Kappernick and Mr Carter, their roles were pivotal in the sequence of events. I therefore agree with the Queensland Transport investigator that one cannot rule out the possibility that fatigue on the part of Mr Kappernick and Mr Carter contributed to the deaths of Mr Adams and Mr Watkins.

**Autopsy results**

Autopsy examinations were conducted on 12 December 2007 and confirmed that the cause of death for both Mr Watkins and Mr Adams was multiple injuries as a result of a railway workplace accident.

**Queensland Transport's investigation (finalised on 8 June 2008)**

This incident was the subject of an investigation by the Department of Transport and Main Roads (Queensland Transport). Their investigation was completed on 8 June 2008. The investigator's terms of reference dictated that the investigation report was to be based on a systemic style investigation approach and must not be written in a manner that apportioned blame or liability.

The Queensland Transport investigator's analysis of the evidence and conditions surrounding the accident revealed:

- An overall lack of compliance with elements of the Queensland Rail Safety Management System at the Mindi site; and

- Inadequate communication and coordination between workgroups at the Mindi site.

The investigator drew the following conclusions in relation to absent or failed defences:

- Worksite Safety Briefings were not performed at the Mindi worksite on 7 December 2007;

- No TPO existed at the Mindi worksite on 7 December 2007;

- No Category 3 driver was present in the lead cab of the Track Machine during the reversal manoeuvre to signal Ml27 on 7 December 2007;

- The Track Machine reversed at a speed twice that provided for within Queensland Rail safe working procedures;

- The rear vision from the Track Machine, and provided through external camera

monitoring, was ineffective;

- The procedures which existed for the daily maintenance and pre-departure inspections on the Track Machine were not fully complied with;

- Not all supplementary defences provided by visual lighting cues were functioning on the Track Machine;

- The Coordination was not effective between the Mindi worksite groups on 7 December 2007;

- Communication between the Mindi workgroups was inadequate on 7 December 2007;

- The pneumatic horns installed on the Track Machine provided an ineffective audible warning at the time of passing with the loaded coal train EG 53;

- Recurrent training and documented procedures that existed and were provided by Queensland Rail to all personnel, mandating Worksite Safety Briefings, were not utilised at the Mindi worksite on 7 December 2007;

- No distinction was made between the two different Track Machines usually driven (MMA59 and MMA64) in terms of operational processes despite obvious physical characteristics; and

- Spot audits were not effectively conducted by the Resurfacing operations and District Trackside Systems supervisory personnel.

The investigator drew the following conclusions in relation to individual or team actions:

- The Systems Maintenance crew performed work on Points 11 C/D on the Up line at Mindi without a safe working authority;

- The Systems Maintenance crew continued to work, at the same time; and, on the same track section as the operating Track Machine;

- The Track Machine Groundperson did not retain a continuous scan of the reversing area;

- The Resurfacing Supervisor was remote from the operational process but partially participated in its direction;

- Not all near miss track worker safety occurrences were reported to Queensland Rail due to a fear of retribution by Network Control;

- Risk management of the Mindi worksite was not as effective as it could have been in that it did not consider the noise hazard of passing coal trains;

- No Category 3 driver was nominated as the TPO for the Mindi worksite;

- Communication of the required task elements was deficient;

- No workgroup challenged the lack of a Worksite Safety Briefing; and

- The Front Tower Operator did not drive the Track Machine from the lead cab during the reversing movement.

The investigator drew the following conclusions in relation to the task or environmental conditions:

- Friction existed between some local District Systems Maintenance personnel and their supervisory structure;

- The passage of coal train EG53 generated a level of track noise sufficient to counteract the effectiveness of the forward facing pneumatic horns fitted to the Track Machine;

- The Resurfacing and District Trackside Systems rostering and fatigue management practices contributed to a progressive accumulation of fatigue at the Mindi worksite on 7 December 2007;

- The task was conducted in a challenging physical environment;

- Confusion existed over the selection of track protection modes;

- Track maintenance was considered to be an impediment to Queensland Rail revenue operations by some Network Control personnel;

- A blame culture existed within the Trackside Systems and Resurfacing local Districts at the time of the collision, which contributed to a reduction in the level of safety reporting;

- Queensland Rail operated under significant pressure to meet commercial obligations associated with the transportation of coal between mines and ports;

- Repetition of unaudited track maintenance tasks generated complacency within the local Trackside Systems and Resurfacing operational personnel; and

- The Regulator reduced audit activity due to a lack of operational Resources.

The investigator drew the following conclusions in relation to organisational factors:

- Task risk management was ineffective;
- The Queensland Rail processes for the dissemination of Safety Communications was ineffective;
- Follow-up processes for the validation of safety critical information were not utilized;
- Escalating overtime was considered a valid alternative to the recruitment of additional personnel resources within the District Trackside Systems and Resurfacing operations;
- No effective, consistent or organisation wide fatigue management policy existed at the time of the collision;

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- Operational change management processes resulting from the coupling of MMA59 and MMB59 (the Track Machine) were lacking;
- Local District incident reporting processes were cumbersome and relied on persons not involved in an occurrence to interpret and formally report events;
- Changes made to the "Blue Ticket" training course, regarding the responsibilities of the Groundperson, were not communicated to personnel previously subjected to recurrent training;
- Feedback and safety promotional guidance was not broadly provided by the Regulator to all facets of the Queensland rail industry;
- The local Coordinator's perception that spot audits could not be conducted masked the visibility of contemporary Trackside Systems practice;
- The Regulator (ie. Queensland Transport) relied solely upon Queensland Rail self-reporting to monitor incident types and trends;
- No means existed by which individuals could express safety concerns in confidence to the Regulator;
- The Regulator did not possess adequate awareness of human performance and limitations, which limited its ability to interpret occurrence reports;
- The lack of a spot audit capacity limited the effectiveness of the Regulator's audit program;

- The Regulator was unaware of the extent of non-compliance with elements of the Safety Management System by the local District Trackside Systems and Resurfacing operations;

- A production culture of getting the job done was in conflict with safe operations by the local District Trackside Systems and Resurfacing operations; and

- Despite numerous past Queensland Transport recommendations, radio telecommunication techniques relating to voice safety communications remain unaddressed by Queensland Rail.

The investigator made 22 recommendations directed to Queensland Rail (both interim safety actions and additional safety actions), and seven recommendations directed to the regulator (ie. Queensland Transport).

Interim safety actions were issued to Queensland Rail on 17 January 2008, which related to the maintenance of continuous and effective visibility and communication with track workers operating behind and adjacent to track machinery.

Additional safety actions relating to the following, were also recommended to Queensland Rail:

- The necessity for consistent and effective Worksite Safety Briefings

- Preconditions to the reversal of vehicles in accordance with Queensland Rail safe working requirements;

- Responsibilities and training syllabi for Resurfacing personnel;

- The necessity for pre-departure safety checks on Infrastructure Services Group trains;

- Provision of safe separation and segregation between track workers and trains;

- Safety Management System compliance monitoring, at the local level;

- Fatigue management within Queensland Rail, and in particular Infrastructure Services Group rostering;

- Management of the perceived relationship between Infrastructure Services Group and Network Control;

- Awareness of the priority of safety over commercial pressures by remote staff;

- Distribution of safety communications and documents within Queensland Rail;

- Representation for relevant stakeholders in operational change management processes;

- Risk and change management training for Infrastructure Services Group operational personnel;

- Safety risks presented to Infrastructure Services Group through the permanent coupling of track machines;

- The safety value to Queensland Rail of an enhanced and transparent reporting system;

- The management of Infrastructure Services Group district staff relationship issues; and

- Infrastructure Services Group and Network Access radio protocol compliance monitoring.

The following safety actions were also directed to Queensland Transport, as the Rail Safety Regulator for Queensland:

- The introduction and maintenance of a risk based approach to audit processes;

- Monitoring of occurrence reporting effectiveness and the subsequent safety climate within Infrastructure Services Group;

- Ongoing capability of its operational workforce with respect to human performance and limitations and investigative techniques;

- Consideration of a confidential occurrence reporting program to encourage the submission of additional safety data from the industry; and

- The provision of safety awareness activities to promote the development of an enhanced safety culture within the Queensland rail industry.

**Queensland Transport's review of Queensland Rail's implementation of recommendations**

Queensland Transport assessed Queensland Rail's response to their 22 recommendations in 2009. The assessment and review was conducted in two stages:

- A detailed desktop assessment to collect evidence of implementation; and

- Extensive field verification audits to test conformity at the operational level.

As a result of Queensland Transport's assessment, they produced two formal implementation reports dated 15 May 2009 and 19 August 2009.

On 28 August 2009, Queensland Transport wrote to me indicating that they were satisfied that the action taken by Queensland Rail fully met the intent of their 22 recommendations.

With respect to the 7 recommendations that were targeted at Queensland Transport, they advised that they took the following action:

- Development of tools and processes to aid risk based approach audits;
- Updates and implemented audit and inspection protocols;
- Enhanced resource capacity with the recruitment of a Human Factors Specialist;
- Development and implementation of safety management, regulatory and analytical skills training; and
- Introduction of the *Transport (Rail Safety) Act 2010* resulting in a range of audit, inspection and enforcement powers becoming available to the Rail Safety Regulator.

Since November 2009, Queensland Rail has also put in place a program called 'protecting people trackside'. This program consists of three components, namely: research, implementation of a program team, and the delivery of the following five key safety initiatives:

1. Pocket Pal (an easy to use quick reference guide);
2. Develop a new Trackside Rules (Safety) Manual;
3. Implement safety based courses through the 'Protecting People Trackside Safety Competence Program';
4. Supervisor and Protection Training; and
5. High Performance Safety Trainers.

It would therefore appear that as a result of the deaths of Mr Adams and Mr Watkins, both Queensland Rail and Queensland Transport have taken appropriate action to minimise the likelihood of similar occurrences in the future.

**Initial police investigation (finalised in July 2008)**

The original police investigator was Constable Terry Nickless from the Moranbah Police Station. He produced a police investigation report dated 10 April 2008.

Constable Nickless advised that police had attempted to obtain statements from the persons involved in the incident but they had all obtained legal representation and were not prepared to provide statements or their versions to police.

Constable Nickless did, however, provide statements from the police officers who attended the scene, as well as photographs of the scene. He provided a very brief assessment of the incident in his report. His investigation was by no means comprehensive.

The Officer in Charge of the Moranbah Police Station, Sergeant J.S. Muller, forwarded

Constable Nickless' investigation report to the District Officer of the Mackay District Office by cover letter dated 8 July 2008.

Sergeant Miller noted that it appeared that the towing instructions to operate the train were not followed by Queensland Rail employees working the equipment. He noted that due to the lack of assistance provided by the Queensland Rail employees involved, it was most probable that the Coroner would hold an inquest. Sergeant Miller forwarded the report and his comments on to the Mackay Coroner at the time.

In my view, the police failed to properly consider the potential criminal implications of this incident. They appeared all too eager to hand over their responsibility to thoroughly investigate this matter to organisations with a different focus, namely Queensland Transport and Workplace Health and Safety.

**Concerns letter from Mr Watkins' mother (2 September 2008)**

Mr Watkins' mother, Ms Ruth Burgess, wrote a letter dated 2 September 2008 to the Mackay Coroner. Ms Burgess noted that she had been given a copy of the police report. Ms Burgess stated that she had many unanswered questions. She had heard rumours that suggested that there had been a cover up in certain areas. She requested information from the police investigation including:

- statements from the employees involved in the incident;
- results of testing of safety equipment; and
- the results of alcohol / drug testing of staff involved in the incident.

Ms requested the Coroner to correspond with her separately.

**Workplace Health and Safety Investigation (finalised around January 2010)**

In a letter to the Coroner dated 10 September 2008, Workplace Health and Safety Queensland advised that they were investigating this incident.

No investigation report was ever produced by Workplace Health and Safety Queensland. Upon recent enquiry, they have advised that they hold around 26 boxes in archives and that the material they have relating to this investigation amounts to about 7,500 pages.

I have reviewed the index of material held by WHSQ and closely read all of the WHSQ transcripts of interview in relation to the Queensland Rail employees involved in this incident.

It is evident to me that the WHSQ investigators had a general lack of awareness of the subject matter involved in this incident and on many occasions, they did not ask the right questions. Whenever they did ask a question relevant to the circumstances of the incident itself, the Queensland Rail employees claimed privilege and did not answer the question.

The result was that there were significant gaps in information relating to the part played by the individual Queensland Rail employees in this incident.

**Interim decision by Coroner Risson not to hold an inquest (25 January 2010)**

My review of the file indicates that on 25 January 2010, the Mackay Coroner at the time, Coroner Ross Risson sent a letter to Mr Watkins' spouse, Ms Larissa Taylor, and to Mr

Watkins' father, Mr Tim Watkins, advising them that he did not propose to hold an inquest and that a request for an inquest must be made to him in writing.

It is unknown whether Coroner Risson wrote to Mr Watkins' mother, Ms Burgess, as per her earlier request.

There is no record on file of Coroner Risson writing to the next of kin of Mr Adams.

**Request for further investigation / inquest from Mr Watkins' father (3 February 2010)**

Mr Watkins' father, Mr Tim Watkins, responded to Coroner Risson's notification via a letter dated 3 February 2010.

Mr Watkins advised that whilst he felt that the Queensland Rail systemic failures had been adequately dealt with by Workplace Health and Safety Queensland, the train driver and ground observer had made basic but serious errors that needed to be dealt with. He requested answers through a further coronial investigation if possible. In the event that a further coronial investigation was not possible, he requested that an inquest be held.

**Request for further investigation / inquest from Mr Watkins' brother (9 February 2010)**

Mr Watkins' brother, Mr Geffrey Watkins, also sent a letter dated 9 February 2010 to Coroner Risson. The substance of his letter is identical to his father's dated 3 February 2010.

**Request for inquest from Mr Phillip Riley (22 November 2010)**

In 2010, this file was transferred from the Mackay Coroner to me.

On 22 November 2010, my Counsel Assisting received a request for inquest from Mr Phillip Riley.

Mr Riley identified himself as a workplace health and safety representative at Queensland Rail. It would also appear that he had some social connection with the families of the deceased.

**WHSQ prosecution of Queensland Rail (finalised on 17 April 2012)**

Workplace Health and Safety Queensland (WHSQ) commenced prosecution proceedings against Queensland Rail by way of four complaint and summonses for breaches of the *Workplace Health and Safety Act 1995.*

On 17 April 2012, I was informed by letter from WHSQ that they had been successful in prosecuting Queensland Rail. The Industrial Magistrate (whom I note was also the original Mackay Coroner handling this matter), Mr Ross Risson, ordered that Queensland Rail pay a $650,000 fine, as well as costs for investigative, professional, and court fees totalling $130,065.40.

**My initial decision not to hold an inquest (5 February 2013)**

Following advice I received from my new Counsel Assisting in January 2013, on 5 February 2013, I wrote to Mr Phillip Riley advising that I would not be holding an inquest. I advised Mr Riley that the reason I was not holding an inquest was because I considered that I was able to make findings concerning the deaths based on the information provided by the police and the doctor who conducted the autopsies. I noted the comprehensive investigations and reviews by the police, Queensland Transport and Queensland Rail. I also noted Queensland Rail's successful prosecution with respect to the breaches of workplace safety laws.

**Application to the former State Coroner for an inquest by Mr Riley (19 February 2013)**

As a result of my letter dated 5 February 2013, Mr Riley applied to the former State Coroner for an order that an inquest be held on 19 February 2013.

**My referral to the Director of Public Prosecutions (25 February 2013)**

On 25 February 2013, I wrote to the Director of Public Prosecutions, Mr A. Moynihan SC. I referred to my recent telephone conversation with Mr Moynihan and referred this matter to him pursuant to s 48 of the *Coroners Act 2003*.

By that time, I had taken a different view regarding the adequacy of the original police investigation.

I noted in my letter to Mr Moynihan that the police had regarded the incident just as a matter of Workplace Health and Safety and that it appeared they were only too eager to hand this over to Workplace Health and Safety. I noted that WHSQ had prosecuted Queensland Rail and they were fined $650,000, but that the police had not investigated the matter from a criminal perspective.

I noted that I was of the view that the train driver may have driven the train in a manner recklessly, dangerously and negligently, thereby causing the death of the two men. I requested that Mr Moynihan consider directing the police to conduct a proper investigation, which may or may not result in the prosecution of one or more persons concerned.

**The former State Coroner's decision not to direct an inquest (25 March 2013)**

On 25 March 2013, State Coroner Michael Barnes advised me by letter that he had declined Mr Riley's application to direct that an inquest be held. He noted that it "seemed appropriate that findings now be prepared" and he returned the file to me for this purpose.

Mr Barnes wrote to Mr Riley on 25 March 2013 and advised him that he had "instructed" me to prepare findings.

I have therefore taken this as a direction by the former State Coroner pursuant to s 12(2)(d) of the *Coroners Act 2003* not to hold an inquest.

**Provision of further information to the DPP (28 May 2013)**

By letter dated 28 May 2013, I sent to the DPP a copy of the police investigation report and accompanying attachments. The letter notes that I reasonably suspected that an indictable offence under s 289 and 328(a) of the *Criminal Code* had been committed and that this instance warranted a comprehensive police investigation and potential prosecution by the DPP.

**Referral by the DPP to the Police Commissioner for further investigation (4 June 2013)**

The DPP, Mr Moynihan, referred the matter to the Commissioner of the Qld Police Service, Mr Ian Stewart, by letter dated 4 June 2013. Mr Moynihan noted that it may be that the Queensland Transport Safety investigators had discovered more information than the original police investigators. He noted that in addition to the driver of the train, it is possible other members of the crew may have been parties to the dangerous operation of the machine. He noted that it was also possible that other persons may be potentially criminally responsible because of a breach of duty imposed under s 290 of the *Criminal Code*.

Mr Moynihan noted that further investigation was required to identify admissible evidence against any potential defendant. He requested the assistance of police to conduct a further

investigation into the criminal proceeding under investigation, pursuant to s 13 of the *Director of Public Prosecutions Act 1984*.

The Police Commissioner, Mr Stewart, acknowledged receipt of Mr Moynihan's request by letter dated 13 June 2013. He advised Mr Moynihan that investigations would be undertaken and an outcome advice would be provided as soon as possible.

On 24 June 2013, the Acting Regional Crime Co-ordinator of the Central Police Region, Acting Detective Inspector P.J. Elliot, referred the matter back to the District Officer of the Mackay District and requested that the file be assigned to a senior investigator attached to the District to fully investigate the issues raised in an effort to identify any negligence on the part of any involved person.

**Further concerns letter from Mr Riley (1 October 2014)**

On 1 October 2014, Mr Riley wrote an email to the former State Coroner's generic email address referring to the notification he received on 25 March 2013 that an inquest would not be held and that he has been unable to find reference to the findings for public viewing. He stated that he was therefore of the opinion that he may proceed with his "own proposed course of action" in the public interest.

It is unknown what Mr Riley is referring to when he referred to "his own proposed course of action". There has been no contact or further correspondence with Mr Riley by the Office of State Coroner.

**Police review of the initial investigation (finalised 10 November 2014)**

In response to my referral of this matter to the DPP and then their referral to QPS, The Officer in Charge of the Moranbah CIB, Detective Sergeant Jay Notaro, produced a police investigation report dated 31 October 2014.

It does not appear that Detective Sergeant Notaro conducted any further investigation as such. He appears to have simply reviewed the Queensland Transport investigation report and provided some further analysis to the original police investigation report.

Detective Sergeant Notaro was of the opinion that the key issues were:

- That the supervisor, Mr Ross Kapernick, did not provide the crew with a pre-start safety briefing, as required by the Queensland Rail Track and Trackside Safety Manual;

- That the driver, (Mr Peter Williams), did not reverse the train from the lead cabin. The Queensland Rail Track and Trackside Safety Manual seemed to allow this practice to occur within a 'safe work area'. It was also apparently common practice. However, the Manual stated that the supervisor (ie. Mr Kapernick) was to undertake a risk analysis to ensure safe separation distances were maintained, and he did not do so;

- That even through use of the rear camera, it was unlikely that the deceased persons would have been visible to the train driver when he initially scanned the monitor prior to reversing;

- That because the driver did not operate the train from the lead cabin, when he sounded the horn three times prior to reversing, it only activated the horns on the front of the train (which was the opposite end to the cabin approaching the deceased persons at the time). This was further muffled by the coal train which was passing by

at the time of the incident; and

- Mr Kapernick did not hear the broadcast by the Mackay Network Control Centre through the Train Control Radio to reverse the train at least 10 minutes prior. This was because he had turned the TCR off in his vehicle to make phone calls. It was unknown whether the deceased persons had TCR in their vehicle because no one checked as part of their investigations.

Detective Sergeant Notaro was of the view that if Mr Williams was charged with an offence of dangerous operation of a vehicle, so too would other Queensland Rail employees for such reversing manoeuvres, because it was common practice.

Detective Sergeant Notaro was of the opinion that it could be argued that Mr Williams breached his duty by failing to continually scan the reversing camera. However, he was of the view that this did not amount to gross or culpable negligence because he did not reasonably suspect that anyone was on the track. He noted that the section of track was within a safe working authority.

With respect to Detective Sergeant Notaro, I am of the view that he has failed to consider whether it was reasonable at all for Mr Williams to be relying on the reversing camera, rather than occupying the cab in the direction of travel. It would have only taken him two minutes to change cabs and no explanation has been provided by him as to why he did not do so. Detective Sergeant Notaro also has not considered the fact that Mr Williams did not make any enquiries as to the location of Mr Adams and Mr Watkins prior to reversing. He was only focussed on his own crew. Was it reasonable to make no enquiries?

Detective Sergeant Notaro was of the opinion that Mr Williams' failure to recognise that the horn could not have been heard due to the coal train passing by was not gross or culpable negligence. He was of the opinion that Mr Williams would have assumed that Mr Kapernick and the deceased crew members would have been aware of his intention to reverse as he had clearly indicated this on the radio.

In my view, Detective Sergeant Notaro has failed to recognise the likelihood that Mr Williams knew that Mr Adams and Mr Watkins did not have access to radio communications. Therefore, how would they have known of his intention to reverse through his clear indication on the radio?

Detective Sergeant Notaro noted that the failure of Mr Kapernick to listen to the radio was not grossly or culpably negligent, nor did Mr Kapernick show such disregard for the safety of the deceased persons because like most supervisory roles, he was on his mobile phone making further arrangements and did not have his radio on. When he sent them back onto the track, it appeared to be a safe separation distance. Detective Sergeant Notaro noted that Mr Adams was himself an experienced systems maintainer with over 12 years experience and raised no concerns with Mr Kapernick about returning to the track.

In my view, Detective Sergeant Notaro has yet again made assumptions, which may not be factually correct. What is the duty of a Resurfacing Supervisor, whilst resurfacing activities are taking place? I would be surprised if it was to remove himself from the activity and conduct administrative tasks. Mr Kapernick should have considered the fact that there was no communication mechanism between the two crews, and he needed to retain situational awareness when tasking Mr Adams and Mr Watkins back onto the track.

Detective Sergeant Notaro was of the opinion that the potential identified negligence did not

amount to criminal negligence. He shared the view of the principal WHSQ investigator, Mr Peter Hurrey, that the incident was caused by the procedural failing of Queensland Rail and that no individuals were to blame. He was of the view that this was supported by Queensland Rail's adoption of the 187 actions outlined by Queensland Transport.

In response to recent further clarification sought by me, Detective Sergeant Notaro states that he has read the 7,500 pages of the two-year WHSQ investigation. It is unknown whether Detective Sergeant Notaro has read the notes kept by the Queensland Transport investigator in relation to his interviews with the relevant Queensland Rail employees. One thing is for certain, due to the gaps in information caused by the Resurfacing crews' reluctance to answer questions specific to this incident, a number of assumptions have been made by Detective Sergeant Notaro in his analysis of this incident, which may not be factually correct.

Detective Sergeant Notaro has indicated to me that he was satisfied that this matter was dealt with due to the action taken by Queensland Rail in releasing 'Safety Spotlight No 99', a document with specific instructions relevant to this incident. However, it would seem that the Detective Sergeant has not taken into account the fact that the Queensland Transport investigation identified that the instruction he is referring to was not well communicated and that no one at Moranbah (where the incident occurred) knew about the document after the incident.

Detective Sergeant Notaro's report was forwarded to Detective A/Inspector S.D Bliss of Crime and Support Services of the Mackay District. By cover letter dated 7 November 2014, Detective A/Inspector Bliss forwarded the report to the District Officer of the Mackay District. He agreed with Detective Sergeant Notaro's opinion that no individuals were to blame for the deaths and that the potential identified negligence did not amount to criminal negligence and as such no charges were to be preferred against any persons involved in the incident.

By cover letter dated 10 November (received by OSC on 19 November 2014), the District Officer of the Mackay District, Acting Superintendent D.G. Shadlow, forwarded the report to the Coronial Support Unit. He concurred with the findings of Detective Sergeant Notaro and submitted that Queensland Rail's procedural failings were the main contributor to the unfortunate deaths.

I close the investigation.

Coroner Hutton
Brisbane
9 February 2016