QUEENSLAND COURTS

OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Bradley James GILLIES**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Southport
FILE NO(s):	Sout Cor 124/04
DELIVERED ON:	23/11/07
DELIVERED AT:	Southport
HEARING DATE(s):	8/11/06,9/11/06&16/2/07
FINDINGS OF:	Mr Dermot Kehoe, Coroner
CATCHWORDS:	
REPRESENTATION:	Sgt J. Pedlow Mr P.J.Byrne Solicitor appearing on behalf of the family Mr Diehm instructed by Ebsworth and Ebsworth for Readymix Pty Limited

The Coroner's Act Section 45 provides that when an inquest is held the Coroner's written findings must be given to the family of the person who died and to each of the persons or organisations granted leave to appear at the inquest.

Today my findings in relation to the death of **Bradley James GILLIES** are given and a copy will be sent to the office of the State Coroner.

As the deceased died on the first day of May 2004 my findings are delivered pursuant to the provisions of the Coroner's Act which came into force on the first day of December 2003 and applies to all reportable deaths after that date[1].

Pursuant to the Act, the purpose of the inquest is to establish as far as practicable who the deceased person is and how the person died and when the person died and what caused the person to die[2].

An inquest is not a trial between opposing parties but an inquiry into the death. In the English case of R v South London Coroner ex parte Thompson (1982) 126SJ625 it was said, "It is an inquisitorial process a process of investigation, quite unlike a criminal trial, where the prosecutor accuses and the defendant defends. The function of an inquest is to seek out and record as many of the facts concerning the death as the public interest requires."

The focus is upon determining how the death occurred with a view to reducing the likelihood of similar deaths.

The Coroner must not include in the findings any statement that a person is or may be guilty of an offence or simply liable for something.[3] See also R v Shaw ex parte Jager VC 200003284. A Coroner is authorised to make recommendations concerning public health or safety, the administration of justice or ways to prevent deaths from happening in similar circumstances in the future.

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[1]The Coroners Act 2003. Section 7 as to duty to report and section 8 as to the definition of reportable death.
[2] The Coroners Act 2003 Section 45.2
[3] The Coroners Act 2003 Section 45.5

The Coroner is not bound by the rules of evidence but must inform him / or herself in any way considered appropriate[4]. The Coroner must have regard to the rules of natural justice and procedural fairness. The Coroner may direct a person to answer questions even though the answers may tend to incriminate the person but the evidence derived does not admissible against the witness.

Power under this section gives the Coroner greater scope to receive information that may not be admissible in other proceedings however it is a matter of determining what weight should be given to the evidence.

The standard of proof a Coroner should apply is the civil standard of proof on the balance of probabilities the approach suggested in Briggenshaw is applicable[5]. This means that the more significant issue to be determined, the more serious an allegation or the more inherently unlikely an occurrence the clearer and more persuasive the evidence needed for the tribunal of fact to be sufficiently satisfied that it has been proved to the civil standard.

HISTORY

The deceased, Mr Bradley James Gillies was employed as a contract driver by Readymix Pty Limited through the employment agency Ardeco.

Mr Gillies was an experienced driver of cement trucks of approximately ten years. In the past he had extensive experience driving six wheel concrete trucks which were traditionally sprung. His ability was highly regarded as appears from the evidence of Mr Smart.

On the day in question the deceased commenced work at approximately 7:30am. During the course of the morning he delivered several loads of concrete.

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[4] The Coroners Act 2003 Section 37
[5] Brigginshaw v Brigginshaw 1938 60CLR 336 of 361

At about 12:15 on that day a traffic incident occurred. The vehicle involved was a fully loaded Iveco 2350.6 agitator owned by Readymix Holdings Pty Ltd and driven by Bradley James Gillies.

Whilst travelling around the corner of Smith Street and Kumbari Avenue Southport, the vehicle rolled over onto its' left side whilst negotiating a right hand turn. The photographs in the coroners police report and the map of the intersection provided by Arnold Developments Consultants accurately shows the intersection.

There are two east bound lanes and two dedicated right hand turning lanes at a controlled intersection. A fixed red light camera is installed at this location monitoring east bound lanes. The camera was not operational on the day of the incident.

The entry to the intersection has a slight gradient and through the turn into Kumbari Avenue a slight negative camber. These features may be relevant to the accident.

The speed limit is 60kph.

Whilst turning right the truck had a difficulty negotiating the corner. A thin tyre friction mark could be observed on the carriageway commencing on the left hand side of the right hand turning lane (lane 3) and continues unbroken to the gutter on the left hand side of Kumbari Avenue. The pattern of the mark was black tyre tread with striations across the marks forward and from right to left. The pattern was sharp and consistent throughout the curve. There was no gouging or scraping in the tyre mark.

The truck struck the gutter. Damage was sustained to the gutter. The truck turned over after striking the gutter with the cabin falling against a telegraph pole. The cabin was crushed against a telegraph pole. The rear of the vehicle was further to the east of the pole.

As a result of the accident the deceased died as a result of the injuries.

To assist the Court the family arranged for reports to be prepared by a Mr Di Christoforo and Dr Perl

The family are concerned about the death for two reasons:

1. Was a proper investigation completed by the police; and
2. Was there some defect in the suspension of the truck which led to the accident?

PRHEARING CONFERENCE

As a result of material received at the office of the Coroner it was determined an inquest should be held. A pre hearing conference was held at Southport on the 1st day of June 2006, arrangements were made for a full copy of the Police Report to Coroners to be provided to parties. Prior to this time the family of the deceased had commissioned a report in relation to the suspension of the truck, which was supplied to the court. Prior to the hearing a report was also obtained by the family of the deceased, from Dr Perl, who expressed slightly different views from Dr Culliford, whose report was included in the original brief.

Little mention was made by any of the parties as to the missing truck bolt; otherwise further investigations may have been made on this aspect prior to the two day hearing being held.

SUMMARY OF THE EVIDENCE

Medical Evidence – The autopsy report prepared by Dr Culliford indicated in the Certificate of Analysis as follows:

Alcohol	Nil
Drugs	Dextra – 9 – Tetrahydracabinol THC 0.002mg/kg
	- 9 – Carboxylic Acid 0.012 mg/kg

Dr Culliford prepared a report and gave certain opinions as to the effect of the drug on a person. She was examined and cross examined on the basis of this report.

Dr Perl, the Clinical Forensic Medicine Unit – Sydney Police Centre, also produced a report dated 26 July 2006. She was examined and cross examined in relation to her report.

In her final written opinion, she stated, "I would not expect the deceased to have been impaired by cannabis at the time of the collision".

On page 116 line 27, Dr Culliford says, "I am not saying that at all but I am saying it could have contributed to a person that may have had other medical issues and was using a vehicle that he was I understand, not entirely. It was new to him. That could have contributed in a small way to his ability to respond to the needs of managing a heavy vehicle.

Between line 10 and line 28 on page 116 She said "we know that people can drive with a blood alcohol concentration of .08 quite safely and a person with a cannabis level of .002 might be able to drive perfectly safely. I am not saying this was a cause of the incident."

It could be said that both doctors have stated a proposition that the cannabis may have had no effect on the accident due to the low percentage of Tetrahydracabinol found in the blood stream.

It was probably accepted by both doctors that they have stated the proposition that the cannabis may have been a contributing factor.

Sleep apnoea – Over a period of two years the defendant had been seeking medical treatment for the condition of sleep apnoea. He had done everything medically possible. He had hired an expensive machine and used same. Comments of the specialist said that treatment was extremely effective that apoeic effect had been reduced.

Evidence was given by Miss Roberts, who spent the last night with the deceased. Miss Roberts gave evidence the deceased was well rested and the deceased was excited about going to work on the day. (He did not appear to be depressed).

It is probably conceded by both parties that there is a degree of speculation about the contribution of either the marihuana or the sleep apnoea to the accident. They are only possible explanations for any lapse of judgment of the deceased, there appears to be insufficient evidence in either respect to say the accident was caused by either of these problems.

Evidence to Speed of the Vehicle

Mr Smart gave evidence that he thought the truck was travelling between 10 to 15kph through the intersection. Under cross examination he conceded that it may have been 20kph page 57 line 10 to 30. No indication was given by Mr Smart at the time to the police. He did not think Mr Gillies was trying to race the lights page 58 line 50. Mr Smart indicated a rubber base suspension truck going around the corner at 25 to 30 kph would have difficulty and 10 to 15 kph would be a safe speed for a truck to take the corner page 60 line 20. He also said due to the bad camber on the road this would mean the driver should take a little more care. (Mr Smart's truck was facing Southport on Kumbari Avenue and he had a view of the truck from the left side.)

Another witness, Mr Ryan, was on Smith Street facing westbound. Mr Gillies truck was coming straight towards him and turning across his path.

Mr Ryan gave evidence as to speed. He was probably in the best position to observe. He saw the vehicle coming directly towards him and turning in front of him.

Mr Ryan said at page 63 Line 1, "it was travelling at something like the speed of the cars that had gone before it." On line 26, 27, 28, he indicated that he considered standard cornering speed for a car on this corner would be 30 – 40 kph.

After final submissions were made by both parties a witness came forward, a Dr Gretchen Hitchins. A further statement was taken from her during the month of March 2007. A copy was circulated to both the solicitors for Readymix Pty Ltd and for the solicitors acting on behalf of the parents of Mr Gillies. Both parties were offered an opportunity to cross examine the witness on her statement. Both parties declined the opportunity.

Mrs Hitchins in her statement said, "I first saw the cement truck about in the middle of the intersection. I marked that with a point 1 on the sketch plan. I noticed it initially because it was a big red vehicle – visual and then very quickly after this I saw that the barrel appeared to be leaning to the left. Then I noticed the wheel, I don't remember any noise until it hit the post. I don't say that the cement truck speed was any different to other traffic and any significant difference. It wasn't like crikey he's going fast around the corner. It looked wrong, rather than it was going fast. Everyone was going around together. I think there was someone beside him but nobody behind him. From my experience, my expectation would be that heavy vehicles would go around that corner more slowly. They would go around more slowly than a standard sedan car."

It would appear 2 out of 3 witnesses have considered the cement truck was going around the corner at the same speed of the vehicles surrounding it. Generally a fully loaded cement truck should not be travelling at such speed. It is notoriously difficult for lay persons to determine speed. Whilst it is a possibility speed could be a contributing factor on applying the appropriate standard of proof I cannot say it is the most likely factor as the speed of the motor vehicles cannot be identified however it could be a possible factor.

A statement was admitted in evidence of a Mr Ross Blackman. Neither party wished to extend the time of the inquest to allow cross examination of this witness. Mr Blackman had observed a Readymix truck of similar wheel configuration travelling around a roundabout on the same day at the intersection of Hinde Street , Bailey Crescent and Nerang road . He described

the vehicle as listing alarmingly to the left. I give very little weight to the statement . It appears clear it was not the truck driven by the deceased. The configuration ,corner and approach to the intersection is not comparable to the intersection in question

On page 224 and 225 of the transcript of the inquest, both parties were given the opportunity to call further witnesses and another day of hearings was offered. Both parties declined. When the statement was obtained from Dr Hitchin's the parties were offered another opportunity to cross examine and neither party wish to proceed further. On the basis of the material before me it is difficult to make a conclusive finding as to the cause of the accident however some relevant matters have been raised as a result of this inquest.

INSPECTION OF THE VEHICLE

Unfortunately the investigating officer and his assistant were forced to leave the scene for another urgent job. As a result the investigating officer did not oversee the recovery of the vehicle at the scene. Consequently it is not known for certain whether the slight twisting of the chassis roles occurred during the recovery of the vehicle or during the accident itself.

Further it is uncertain whether the U bolts or any essential parts were lost in the recovery process.

Various members of the Traffic Accident Appreciation Squad played a role in the investigation. Carl Hutchinson and Phil Aldrick.

A mechanical inspection was completed by Sergeant K Carlton as well as Queensland Transport inspectors, Andrew Archibald and Darryl Brown.

Both inspectors found the vehicle complied with regulation mass requirements. It was noted there were 5 U bolts on one side and 6 U bolts on the other side. Whilst it states in their report dated 18 May 2004, the vehicle coupling complies with regulation mass requirements the total determined mass requirement is 25.69 tonnes. This would appear to be the mass weight load.

There was some suspense spillage and some weight may have been lost in the turnover. No one was called from Queensland Transport to comment on their report.

It would also appear as a result of inspection there were 11 U bolts. The investigating officer was of the opinion one was lost in the crash. There is no evidence before me as to whether there was supposed to be 6 on each side or whether or not this effects the stability of the barrel connected to the truck. In any case there is documentary evidence that previous loads of 7.4 cubic metres were delivered by the driver on the same day without mishap. However we cannot be sure as to whether the driver took the same trip as he did before.

If he had completed the same trip twice he may have been aware of the difficulties in relation to the corner. Whatever the case may be it is considered in heavy truck accidents, greater consideration must be given to the inspection of the vehicle and the load mass weight load requirements should be determined with a weigh in of the dry load together with an estimate of the wet load of the concrete It is possible other loads as heavy as this particular load have been carried in the past and the barrel has not come off.

The nature of the load should also be considered. Consideration should be given to the testing of how live loads affect vehicles and even though the weights may appear to comply with the axle weights required it is possible also that they may not. Greater consideration also needs to be taken by the Traffic Accident Appreciation Squad and the Department of Transport in respect of these matters.

To find out the answers comprehensive testing may have to be done as to how different loads react under cornering and the effect they may have on the stability of the truck. eg petrol or bulk handling of chemicals or other items may be different to that of concrete.

Without scientific testing of live loads in this situation it is not possible on the evidence before the inquest to come to a conclusion as to the effect the weight load had on the accident.

A report was obtained by the family of the deceased from Road User Systems Pty Ltd. On page 4 certain conclusions were reached . " Computer simulations based on the weights provided by Queensland Transport indicated as follows.

1. The vehicle would negotiate the turn with reasonable safety at a speed of 25km/k or less

2. The vehicle would negotiate the turn with a high rollover risk at 30 km/h; and

3. The vehicle would roll over at a speed of 35km/h or greater.

4. The conclusions reached regarding speed through the turn do not necessarily indicate that the driver was travelling at 35klm or greater. Had the driver lost control of the vehicle at a lower speed and made contact with the kerb,it is likely that the vehicle could have been tripped into a rollover condition."

At page 22 line 4 he opined by way of intuitive response that the truck would have been less stable the more weight it was carrying. When questioned as to the change in weight due to the revolving barrel and its effect on stability he advised this had not been taken into account in any of his simulations or calculations.

It is difficult to give weight to the report due to the factors of weight of concrete and barrel roll not being taken into account. One thing though is certain concrete trucks must proceed around corners at a much slower rate than motor vehicles. If the concrete truck was proceeding around the corner and if the motor vehicles were travelling at 30 kl/m then there would be a high prospect of a rollover. At 35 kl/m it would appear the truck would rollover.

Mr Smart an experienced truck driver gave evidence he considered a safe speed to go around the corner in a rubber based suspension truck was 10 to 15 kl/m. There would appear to be evidence from 2 witnesses which indicate the cement truck was travelling as quickly as the surrounding cars. It would seem improbable the cars were only travelling at the speed suggested by Mr Smart.

Mr De Graaf in his evidence page 83 line 27 to30 indicated 25kl/m to 30 klm per hour would be a safe speed to travel around this corner. The fact there are variances in these opinions between drivers and experts as to safe speed to travel around the corner indicates more research and training needs to be done to promote safety.

SAFETY PROCEDURES AND INDUCTION PROCEDURES

Mr DeGraaf gave evidence during pages 70 to 85. In his evidence he said that drivers were given instructions that due to different suspensions the trucks will behave a little differently. Page 74 Line 10

On page 80 he said there is nothing in the safety DVD regarding possible differences in the centre of gravity on both types of trucks.

He said that since the incident they have changed but he did not know as to how or what extent the induction procedures had changed. During the course of his evidence Mr DeGraaf indicated that he considered that it would have been safe for a truck to go around the corner at between 25 to 30 kph.

It is noted Mr Smart, an experienced truck driver, gave evidence that in his experience he indicated trucks should only travel around that particular corner at between 10 and 20 kph.

Whilst a great deal of time has been spent by Readymix in relation to preparation of their induction courses, it would appear by way of Mr DeGraaf's evidence on page 80, which indicates that centre of gravity issues in relation to trucks rolling over, is only covered in relation to the importance of wearing seatbelts.

On pages 83 and 84 Mr DeGraaf gave evidence and he indicated that it was impossible for Readymix to make any indication to drivers as to cornering speeds. This matter is left to the judgment of the individual driver. It would appear that from his evidence, it is important to educate drivers as to the dangers of not wearing seatbelts or using mobile phones and obeying road rules, though at the same time there does appear to be a need to educate drivers as to problems which may arise as to the different suspension characteristics of the trucks and how the centre of gravity of the truck may change.

Summary and Conclusions

Some of the matters raised prior and during the 2 days of the inquest were as follows:

A The adequacy of the investigation

B Problems with the suspension.

C The health of the driver.

D Training and induction issues

During the course of preparation and the conduct of the inquest many possibilities have been raised as to what may have caused the accident to occur. To examine every possible cause and bring every possible witness may take two weeks and not two days. Whilst there may be some criticism of the initial investigation which may be justified it is sometimes easy to be critical with the wisdom gained by time and hindsight.

One of the possibilities raised during the course of the inquest was the cannabis reading in the blood of the deceased contributed to the accident. Two experts gave their opinion as to the possible likely effect and at best they were only prepared to say it may have been a contributing factor.

It does seem unusual that in the past certain categories of persons were required to have a 0% of alcohol in their blood whilst driving yet a person could drive

with some drug content and the Police had to prove the defendant was under the influence of a drug. It is pleasing to see the Government has moved to rectify legislation to ensure there is no inconsistency in the law. If this had not been done during the course of the year it would have been one of my recommendations that the legislation be amended.

Another matter raised was the camber of the road which may have slightly affected the centre of gravity of the truck whilst it passed through the corner. Even placement of the electricity pole may have been a small factor which led to the loss of the life of Mr Gillies. There are many small things which may have contributed to the accident though on the standard of proof required it is difficult to find any one of these caused the accident. Even momentary inattention for whatever reason could have caused same.

The deceased Bradley Gillies died on the first day of May 2004 as a result of physical injuries suffered by him when his concrete truck rolled over whilst taking the corner of Smith St and Kumbari Avenue Southport. It remains to be said the sincere condolences of the Court are offered to the family. He is sadly missed and flowers are still placed at the scene of the accident. Unfortunately sometimes death may be possibly caused by a number of factors and it is not possible to say exactly what caused the accident. The purpose of the inquest is not to recommend persons be charged with offences or make civil findings of guilt. The purpose of the inquest is to make findings which may relate to improving public health and safety or to prevent deaths happening in similar circumstances in the future. Accordingly I make the following recommendations.

Recommendations

1. The Traffic Accident Appreciation Squad should liaise with the Queensland Transport to review inspection procedures in relation to heavy vehicle accidents on a wider basis. Matters for consideration should be as follows:

(a) Reviewing the way in which loads are measured after accidents. Both the dry and wet weight should be determined to ensure legal compliance.

(b) Reviewing the static roll thresholds of heavy vehicles ; and

(c) How dynamic loads affect the stability of trucks.

2. Readymix Pty Limited address in their induction and training procedures the following matters concerning safety :

(a) Specific information as to the propensity of cement trucks rolling over due to centre of gravity issues when taking corners.

(b) In what situations the static rollover threshold of the truck is likely to be exceeded and safe cornering speeds.

(c) Further information should also be provided as to the difference in handling characteristic of air suspension trucks as compared with rubber block suspension trucks and safe cornering speeds taking into account the characteristics of the truck which they are driving.

D E Kehoe
Coroner