IN THE CORONER'S COURT
AT GORE

CSU-2009-DUN-000315

IN THE MATTER OF	THE CORONERS ACT 2006
AND	
IN THE MATTER OF	An inquest into the death of DAVID SHAW

Before:	Coroner D Crerar, Coroner for Otago/Southland
Date of Hearing:	8 April 2011
Date of Findings:	June 2011
Appearances:	G Nicholson for Fonterra Senior Constable M Cupit

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FINDING OF CORONER D CRERAR

Introduction

[1] Whilst he was working on the installation of a lift in a building at the Fonterra Milk Processing Factory at Edendale, Southland, David Shaw became trapped in the lift mechanism and received fatal injuries. The death of David Shaw was reported to me as designated Coroner for Otago/Southland and I have continued with an enquiry.

[2] I have not met members of the family of David Shaw but CSU staff and I have spoken to family members by telephone and have corresponded with them. There has also been correspondence with the employers of David Shaw and other interested parties.

Purpose of Enquiry

[3] An Inquest is held to establish:

(a) That a person has died

(b) When and where the person died

(c) The causes of the death

(d) The circumstances of the death.

An Inquest is not a trial. A Coroner has no function to determine civil, criminal or disciplinary liability. There is an obligation on a Coroner to draw to public attention the circumstances of a death where the recurrence of such circumstances may, if drawn to public attention, reduce the chances of future deaths in similar circumstances. The text of s 57 Coroners Act 2006 (the Act) is included in the appendix to this Finding.

Evidence

[4] Evidence was given to the Inquest Hearing by:

(a) Constable Stephen John Heyrick of the Gore Police (Constable Heyrick)

(b) Nicholas Breton, general manager for New Zealand of the Otis Elevator Company Limited, Otis (Nicholas Breton)

(c) Andrew Keith Doran, site manager for Ebert Construction Company Limited (Keith Doran)

(d) Terrance David Keene, health and safety inspector for the Department of Labour, Invercargill (Terrance Keene)

(e) Robert David Johnston of Christchurch, manager of Lifteye Consultancy (Robert Johnston).

[5] Ebert Construction Company Limited was contracted to perform certain works at the Fonterra Factory at Edendale. Ebert subcontracted Otis Elevator Company Limited (Otis). As part of this subcontract David Shaw (on occasions

assisted by another employee of Otis) performed the installation and commissioning of an elevator.

[6] The installation was subject to the supervision of an independent engineer. Some requisitions of this engineer required attention by Otis and on the morning of 13 August 2009 David Shaw went to the site to complete the installation.

[7] The elevator would not move. David Shaw contacted his supervisor by cellphone and a fault identification exercise was commenced. David Shaw also telephoned a branch of Otis in Sydney, Australia which supervised a function termed Remote Electronic Monitoring (REM). The last communication with the REM supervisor was at 4.35 pm, 13 August 2009. This call "dropped". Further attempts to contact David Shaw on his cellphone were unsuccessful.

[8] David Shaw had not contacted his wife overnight as would have been expected. Otis management contacted Andrew Doran who, with others, located the body of David Shaw in the roof space of the lift shaft. Andrew Doran called the Police who in turn reported to the Department of Labour who conducted its investigation.

[9] The Department of Labour Report effectively identifies the series of events which occurred and ended with the fatal outcome. This was not effectively disputed by either the Police investigation or by the "Incident Investigation" produced in evidence, by Nicholas Breton for Otis.

[10] David Shaw was faced with a problem of a lift which was not running. Several causes for this were discussed by David Shaw with his supervisor, Glen Davis. There was an issue with the brake switch, or there was a faulty brake rectifier or there was a mechanically stuck brake. A mechanically stuck brake is a major issue which was stated to have been a "two-man job to fix." A faulty brake switch or a faulty brake rectifier are more minor matters. The difficulty faced by David Shaw is that he, at that moment in time, was unsure as to what the problem was. Analysing the cause of the problem with the brake ought not to have involved risk to David Shaw. A good deal of the content of the Department of Labour Report,

and to a lesser extent the Otis report, addresses the issue of workplace health and safety and the need for a job hazard analysis. Otis have a safety handbook for reference. David Shaw had completed the appropriate Job Safety Analysis before commencing work on the day of his death but did not continue with a specific Hazard Analysis after identifying more risky procedures which needed to be adopted.

[11] What in fact occurred was that the mechanically stuck brake was established to have been caused by the effects of condensation on the brake disk. David Shaw identified what he considered to be the cause of the stuck lift, obtained a hammer and screwdriver and was in the process of striking the brake with the screwdriver when the frozen disk released from the brake pad. Because David Shaw had bypassed all of the inbuilt control systems and had removed the battery from the control panel, (plugging it directly into the brake to enable the lift to move), the safety system did not operate as it ought to and the lift moved, trapping David Shaw and causing his fatal injuries.

[12] Constable Heyrick produced to the Inquest Hearing the following:

(a) Certificate as to Life Extinct signed by Dr Ravi Tamma

(b) Statement of Identification completed by Shaun McNamara

(c) A copy of the Police job sheet of Constable S Heyrick

(d) A copy of the Police job sheet of Constable Lindsay

(e) A copy of the Coronial Autopsy Report completed by pathologist Dr A D Pettigrew

(f) A copy of the Toxicological Report prepared by ESR forensic toxicologist Alexandra Park.

[13] In his Autopsy Report to the Coroner, Dr Alan David Pettigrew summarised his findings and said that, in his opinion, death was due to "asphyxia" – consistent with being trapped between the wall of the lift shaft and the components of the lift.

There were no anatomical abnormalities which could have been considered contributory or causative of the death.

[14] ESR toxicological analysis revealed no medicinal drugs that affect the mind, alter mood or cause sleep detected in the blood of David Shaw. There was a trace of alcohol which may have been due to means other than deliberate ingestion detected. There was no evidence in the urine of the use amphetamine-type stimulants, opiate-type drugs, cocaine or cannabis.

[15] Constable Heyrick summarised:

> On the evidence available at the present the Police are satisfied that the death of David Shaw was accidental and do not consider that there are any suspicious circumstances or that any other person was involved.

Comments/Issues/Reasons

[16] The evidence provided prior to the Inquest Hearing, during the hearing and subsequently satisfies me that David Shaw was an experienced and safety conscious elevator technician with appropriate qualifications. David Shaw was asked by Otis to attend to the final testing and commissioning of a lift which had been installed. He identified a fault in the brake mechanism but was unable to ascertain the cause of the fault whilst he was consulting with fellow Otis employees by telephone.

[17] As Robert Johnston stated, in his submission to me at the conclusion of the Inquest evidence, it was clear that David Shaw identified the problem by his actions in travelling to purchase a hammer. This indicated to Robert Johnston that David Shaw had formed a belief that the brake was mechanically binding.

[18] The submission by Robert Johnston contains the most appropriate analysis on the actions taken. David Shaw would have understood that, when the brake was released the lift would have completed its final 350 millimetres of travel. As I

understand the submission, the action taken by David Shaw was reasonable in the circumstances and that the failure by David Shaw was in his not placing himself in a safe position. By placing power directly onto the coil, the brake could have released at any moment and more likely and specifically once a mechanical blow was effected. Robert Johnston points to a number of other contributors to the sequence of events. All are relevant and the submission has been forwarded to both Otis and to the Department of Labour for their information and future action. The comment in relation to the lift industry generally attempting to rely on reducing numbers of employees carrying out lift installation and maintenance resulting from technological improvements as well as the need for making the industry profitable, is probably outside the "circumstances of the death" which I am required to investigate and comment upon.

[19] I am particularly interested however in the comment made relating to the need for the "safety guard" on the top of the lift; it being this guard which effectively created the cause of the death. The installation of any safety equipment needs always to be critically assessed. There must be a "cost-benefit analysis." By fitting safety guards, the possibility of a fall in to a narrow gap may be reduced but the safety guard in itself creates a hazard. I accept that at the time, the guard may not have been recognised as presenting the degree of hazard which it did.

[20] A lesson will have been learned by the industry in its identifying the possibility of a lift brake freezing. What has been pointed out is that, with a brake designed to release only on electrical impulse, there is a total reliance upon the supply of electricity. It may be appropriate for the industry to consider a mechanical method to release as a backup.

[21] If David Shaw had used the claw hammer and lodged it in the pulley bar belt drive to stop the lift movement, then it is clear that such action was unsuccessful.

[22] In adopting further the comment of Robert Johnston, I incorporate other knowledge I have gained as a Coroner that decision making by an individual is generally not as sound as that obtained by a collegiality. Although there appears to be an increasing emphasis in the lift industry, and others, on persons, albeit well

trained and safety conscious, working on their own, consideration must be given by employers to ensure that a team culture is created. An obvious example is the pilot/co-pilot configuration in commercial aircraft. Other obvious examples I have encountered are in tramping and mountaineering deaths. Hazardous situations generally benefit from a joint assessment of a risk profile.

Recommendation

[23] I recommend that a copy of this Finding be forwarded on a provisional basis to the Shaw family, to Otis Elevator Company Limited, to the Department of Labour and to Robert Johnston of Lifteye Consultancy Limited and to Fonterra which was taking over the site. The Formal Finding will be similarly circulated following any further submission.

[24] My empowering legislation requires me to adopt only comment or submission when "adverse comment" has been made in respect of any individual or organisation.

Finding

[25] I Find that David Shaw of Christchurch, a lift technician, died at the Fonterra Factory, Edendale on 13 August 2009 when, whilst working installing and commissioning a lift, he was attempting to free a brake on the lift which had jammed. The lift moved and he became trapped between the top of the lift, a safety barrier and the ceiling of the lift shaft. The cause of the death of David Shaw was established at autopsy as being "asphyxia".

[26] My reasons for this finding are as outlined at paras 4 to 24.

Conclusion

[27] I acknowledge the assistance given to me by the Police in their investigating for me the causes of the death and the circumstances of the death of David Shaw. I acknowledge the assistance given to me by the Department of Labour with its report and also by Otis Elevator Company Limited with its report. I specifically

acknowledge the great assistance given to me by Robert Johnston of Lifteye Consultancy Limited in both his submission prior to the Inquest Hearing, his evidence at the Inquest Hearing and his later commentary.

[28] I thank the representatives of the family of David Shaw for their contribution to the Inquest Hearing and extend to them and the friends of David Shaw my condolences for their loss.

[29] This finding is to be read in conjunction with a Certificate of Findings issued pursuant to s 94 Coroners Act 2006.

[30] In addition to the witnesses, the following attending the Inquest Hearing:

(a) Alan Shaw, the brother of David Shaw

(b) Joy Villalino, the sister-in-law of David Shaw

(c) Elsie Shaw, the mother of David Shaw

(d) Ken Shaw, the father of David Shaw

(e) Keith Mason of Fonterra

(f) Mike Phillips of Ebert Construction Limited

(g) John Pannett of the Department of Labour

(h) Craig Hyde, a friend of David Shaw

(i) Shaun McNamara, a friend of David Shaw

(j) Janelle McNamara, a friend of David Shaw

(k) Hugh Armstrong, a friend of David Shaw

(l) Sonja Gerkin of the Southland Times

(m) Melanie Ilhan of Radio Live News

D Crerar
Coroner

Signed at Dunedin on this day of 2011.

APPENDIX

57 Purposes of inquiries

(1) A coroner opens and conducts an inquiry (including any related inquest) for the 3 purposes stated in this section, and not to determine civil, criminal, or disciplinary liability.

(2) The first purpose is to establish, so far as possible,

(a) that a person has died; and

(b) the person's identity; and

(c) when and where the person died; and

(d) the causes of the death; and

(e) the circumstances of the death.

(3) The second purpose is to make specified recommendations or comments (as defined in section 9) that, in the coroner's opinion, may, if drawn to public attention, reduce the chances of the occurrence of other deaths in circumstances similar to those in which the death occurred.

(4) The third purpose is to determine whether the public interest would be served by the death being investigated by other investigating authorities in the performance or exercise of their functions, powers, or duties, and to refer the death to them if satisfied that the public interest would be served by their investigating it in the performance or exercise of their functions, powers, or duties.