OFFICE OF THE STATE CORONER
FINDINGS OF INQUEST

CITATION:	Inquest into the Death of Muraka Jenny Vearncombe
TITLE OF COURT:	Coroners Court
FILE NO:	2010/761
DELIVERED ON:	28 March 2013
DELIVERED AT:	Cairns
HEARING DATE(s):	14 June, 2012; 14 August, 2012; 17 September, 2012
FINDINGS OF:	Kevin Priestly, Coroner
CATCHWORDS:	Inquest, operation of slasher, ejection of debris, traumatic head injury, experienced operator, use of manufacturer's safety information, adequacy of WHS investigation, missed opportunities for better industry awareness.

REPRESENTATION:

Counsel Assisting:	Ms S Williams, i/b Office of the State Coroner, Northern Region
Office of Fair and Safe Work Queensland:	Mr P Major of Counsel i/b Legal & Prosecution, OFSWQ
Sun City Mowing & Slashing (Mr Rose)	Mr L Shanahan, Wilson Ryan Grose Lawyers
Mr M J Rowley	Mr H Walters of Counsel i/b Connolly Suthers

Introduction

It is important that the reader understand the statutory role of the Coroner as well as the powers and limitations that affect how the Coroner discharges that role.

A Coroner is required to make findings as to how a person died, when the person died, where the person died and what caused the person to die.

A Coroner is precluded from including in his findings any statement or comment that a person is or may be guilty of an offence or civilly liable for something (s.45(5) and s.46(3)).

A Coroner may, whenever appropriate, comment on anything connected with a death investigated at an inquest that relates to public health or safety and ways to prevent deaths from happening in similar circumstances in the future. My comments take the form of recommendations at the conclusion of the findings.

Ms Vearncombe was walking on a footpath in suburban Townsville when the slasher attached to a tractor operating on an overgrown but vacant block, struck a length of metal pipe. A section of that pipe struck her in the head, inflicting traumatic injury and killing her instantly.

The evidence gathered during the coronial investigation is sufficient to make findings about who, when, where and what caused this death. No issues arise about these matters that require any further investigation. But the issue of 'how' this incident occurred requires closer examination.

The purpose of this inquest was to explore more about how Ms Vearncombe died and what lessons might be learnt from this tragedy. This involves reviewing the investigation by Inspectors from Workplace Health and Safety and the contractor's management of safety, in particular, how the risk from projectiles was managed.

I approach this task by considering the evidence relating to each of these aspects and my analysis of the evidence is used to formulate the findings and recommendations.

The Narrative

Maruka Jenny Vearncombe was 42 years of age and resided at 1/77 Eyre Street, North Ward.

At about 8:00 am on 3 March 2010 Mr Michael Rowley, an employee of Sun City Mowing & Slashing, was slashing a vacant block at 67 Eyre Street, using a tractor with a seven foot EHD series slasher attachment. Mr Stephen Rose, the proprietor of Sun City Mowing & Slashing, was the owner of the tractor. The allotment was overgrown with grass and weeds over a metre high. Witness Ms King does not recall any warning or caution signs in the area but recalled the tractor's flashing orange light was operating. The block was last slashed in late September 2009. Considerable growth had occurred over the wet season.

Ms Vearncombe was walking on the footpath outside 69 Eyre Street, the adjacent block to the north-west.

Mr Rowley drove towards the front of the lot and turned the tractor parallel to the road and the foot path, facing south-east. As the tractor turned, the rear opening of the

slasher faced the direction of Ms Vearncombe. During the turn, the slasher blade made contact with a length of metal pipe and flung it with great force towards Ms Vearncombe, then only about 15m away. She was struck in the head and died instantly. The metal pipe came to rest about 20 metres beyond Mrs Vearncombe, having continued in the same direction after striking her.

Ms King, who was doing a u-turn at the time of the incident, saw Ms Vearncombe fall to the ground and called 000. Queensland Ambulance Service paramedics attended and found Ms Vearncombe was deceased.

Professor David Williams, Consultant Forensic Pathologist, conducted an autopsy and concluded that Ms Vearncombe died due to a head injury as a consequence of a slasher accident.

The Police Investigation

Queensland Police Forensic Crash Investigators conducted a scene investigation. Investigators noted that the incident occurred in a built up area. Although there was a park opposite the scene, the vacant block was surrounded by commercial premises and unit buildings. The map and photographs of the scene (see Appendix) accurately depict the nature of the surrounding area. The presence of pedestrians on the footpath at that time of day was normal.

The weather was fine and clear. It had rained in the days before and this caused the slasher operator some concern about moisture in the ground over which he was driving.

A later mechanical inspection of the tractor and slasher revealed there were no mechanical defects which might have contributed to the incident. While inspecting the slasher at the scene, the investigating Forensic Crash Unit officer found a couple of the chains at the rear discharge area ‘knotted’ together creating a gap in the curtain of hanging chains. It was his opinion that this feature was more likely the area where the piece of metal pipe was discharged.

Police officers re-attended the scene two days later and found a metal pipe lying on the grass. It was not found at the time of the initial scene investigation. This pipe ran parallel with the front of the vacant block and then disappeared under the surface into the ground. It was rusted and housed electrical wiring, possibly for a dwelling originally on the block. The pipe was bent back on itself and identical to that which struck Ms Vearncombe. Police officers saw an indentation on the surface of the ground running at a 45 degree angle to the pipe. The investigator laid the bent pipe along this indentation. It was a perfect match. The officer concluded that the indentation showed the position of the pipe prior to the slasher running over it.

Police investigators found no suspicious circumstances surrounding the death. However, the investigation report concluded expressing concern about the use of slashers in an urban setting.

The Workplace Health and Safety Investigation

Inspectors from Workplace Health and Safety Qld (WHSQ) within the Office of Fair and Safe Work Queensland were primarily responsible for the investigation of this incident from work and public safety perspectives. The investigating Inspector and the acting Regional Investigations Manager prepared an internal report to the Legal and Prosecutions Unit which concluded:

1. The items of plant being utilised to mow the grass were in good condition and suitable for the task undertaken.
2. In the absences of any signage it was identified that the tractor had a 'flashing light' in operation to indicate the presence of mobile plant in operation.
3. There appears to be no legislative guidance for operators when mowing or clearing blocks of land within a populated area and it is believed that the obligation holder was at the time of the incident exercising proper diligence. This was achieved by ensuring the plant was in good condition and suitable for the task.
4. Further it is believed that due to the height of the grass and low vegetation, it would have been difficult to identify all material that may become a projectile if hit by the slasher. Stephen Rose has also stated to the investigator that he had told the tractor operator to do a walk-through the block but it can not be substantiated if this had occurred as the operator declined to give a statement.

At the conclusion of the investigation, it was recommended that WHSQ investigate the possibility of legislative guidelines developed in conjunction with industry stakeholders to improve safety requirements.

During the course of this coronial investigation I became concerned about aspects of the approach to the WHSQ investigation and obtained a copy of the investigation file to review. The approach, direction and progress of the investigation is best reflected in the investigation plans that were developed and implemented. In the early stages of the investigation, the investigating Inspector developed the following action plan (29/4/10 – about two months post accident):

1. Both the obligation holders identified have sought legal advice. Try to obtain a statement from the tractor operator (may have to provide a caution pending the information received);

2. Any breach relates to an assessment of the vacant block for foreign objects prior to the slashing commencing. Factors to consider here include the work being undertaken in a built up area with respect to pedestrians and the adequacy of the guarding on the slasher;

3. QPS have seized the pipe for scientific testing. Need to obtain a copy of the results;

4. QPS are treating this as a traffic incident and may intend to pursue charges against the tractor operator. Need to keep abreast of what action (if any) QPS intend to pursue;

5. Need to obtain the maintenance records for the tractor and slasher;

6. Follow up the operator's licence to operate the tractor;

7. Need to determine what the foreign object is.

This plan does not reflect an analysis of the known circumstances so as to identify what was the hazard, what was the magnitude of the risk of harm, what control measures were in place to mitigate that risk and what other control measures were available which, if implemented, might have further mitigated the risk. In other words, an application of the basic risk management process does not appear to have informed and guided investigators about what should be investigated.

There was a later review of progress on the investigation during which a further plan of action was developed:

> “1. As per previous recommendation, need to follow up a statement from the operator through his legal rep;
>
> 2. The QPS have confirmed the source of the pipe that struck the deceased. Obtain results;
>
> 3. QPS have suggested that the tractor operator will not be charged with a criminal offence. WHSQ will continue with a view to a possible breach;
>
> 4. Stephen Rose will need to be cautioned if he agrees to attend WHSQ and provide a statement;
>
> 5. Follow up maintenance records;
>
> 6. Follow up licence to operate the tractor;
>
> 7. Follow up Telstra Technician statement to identify the foreign object (pipe);
>
> 8. Need to enquire with Local Council to find out about exclusion zones when slashing in built up areas as the deceased was approximately 15 metres away at the time of the incident.”

As reported earlier, the tractor and slasher were found in good serviceable condition. Notwithstanding this fact, WHSQ went to considerable effort to obtain copies of documents relating to its purchase and servicing.

Mr Rowley did not participate in a record of interview with police or WHSQ as was his right. However, he did attend and give evidence at the inquest. I also note he suffered post traumatic stress as a consequence of this incident and it took some time for him to recover sufficiently to give instructions to his solicitors.

As to the last point in the action plan about exclusion zones, WHSQ only considered this aspect from the perspective of possible Council imposed requirements and not from an operator initiated, risk management perspective.

In the WHSQ investigation report under the heading ‘Failures’, the following were identified as ‘hazards requiring management’:

- “Mowing and or slashing of land within a populated area”; and
- “Systems of work when conducting this type of activity”.

The investigation report then identified the risk from the ‘hazards’ as death to workers or others at the workplace.

I find the manner in which the Inspector expressed his analysis as confusing. He introduced the concept of ‘hazards’ requiring management and then identified an activity, not the hazards specific to that activity. He then raises the subject of ‘systems of work’, an altogether different concept from hazards and failures. Without identifying the specific hazard and possible control measures; how does an investigator develop an investigation plan aimed at exploring whether a hazard was managed appropriately? The first source of information about aspects of plant safety

is usually the manufacturers or operators manual. However, no reference is made in the report to efforts to obtain manufacturer's manuals. I will later address this topic in more detail.

By file note dated 11 March 2011, Mr Dean Coggins, Regional Investigations Manager – North Queensland, who was on long service leave and returned to review the file in preparation for release to me, was critical about aspects of the investigation. He identified three areas of focus that should have been comprehensively covered, namely:

- The use of exclusion zones;
- The suitability of the type of slasher used; and
- The risk management steps taken to ensure public health safety.

Mr Coggins reported that the incident happened in a built up area and there were no signs in place or alternative routes for pedestrians whilst slashing was underway. In his opinion, the employer should have initiated a reasonable exclusion zone to mitigate the risk of a person being struck by a projectile.

Mr Coggins also raised concerns about the suitability of the type of slasher used, suggesting that the use of a mulcher instead of a slasher should have been considered in this urban setting.

Finally, Mr Coggins wrote about risk management in these terms:

> It is evident that the block being slashed contained grass/weeds to a height of approx 4 ½ feet. In a built up area with the potential for a higher number of foreign objects to be present, this places more emphasis on the need for a risk management approach to identify potential projectiles and take the necessary steps to decide how the grass will be cut (i.e. in stages) and/or in conjunction with the 2 pre-mentioned considerations.

In February 2011 NSW WorkCover, in conjunction with other state authorities including WHSQ, published a guide on health and safety standards relating to the operation of slashers. Although not published at the time of this incident or the WHS investigation, it does reflect the existing safe practices and procedures within that industry.

One hazard addressed in the publication is projectiles. In addition to design and manufacturing considerations to deflect projectiles, the publication notes that:

> "Additional safety controls may be required when operating in the vicinity of people or traffic – e.g. alongside highways, roads or other public areas."

The safety signage recommended in the publication includes warnings on slashers to encourage operators to ensure all onlookers are well clear of the work area and objects that may be thrown by blades.

The singularly most important recommendation in this publication is to follow the manufacturer's recommendations.

What did the manufacturer's manual say about projectiles?

The Howard Safety Instructions (version 6/06 – representing June 2006) issued with this slasher contained information which I summarise as follows:

- Slashers are capable of ejecting debris at over 300kph;
- Debris can readily travel up to 200m if guarding is insufficient for the application or has been removed;
- The requirements for guarding must be appropriate for the situation in which the unit is to be used;
- Do not allow people to stand directly behind slashers;
- Check the area for debris that may be picked up and thrown by the implement, causing injury or damage. Be alert to hidden obstructions.

In another section titled Machine Suitability to Application, the publication states, "Before beginning work assess the affect of the machine on the safety of the operator and any potential bystanders".

The Howard EHD Rotaslasher Operating Instructions (4/2008) contain a warning that the Rotaslasher was designed in its base configuration as suitable for agricultural operation only. Other personnel, bystanders and road traffic are never expected to come within 100m while operating. It further states that operation of that machine in built up areas or anywhere in the presence of bystanders or road traffic will require additional guarding and adequate risk minimisation measures. The publication then provides a number of ways to minimise risks including:

- Remove debris from area to be worked;
- Set high cut heights to avoid debris;
- Work when passing traffic and people are not around;
- Block access to bystanders and passing traffic;
- Stop forward travel when passing vehicles come within 100m.

A risk assessment in the publication takes the form of a table with three columns. The first is headed 'Identified Hazard', the next 'Existing Safety/ Hazard Control Features', and the last 'Notes'.

Under 'Hazard' appears "Ejection of Debris causing injury to personnel or damage to property". Chain guards are then mentioned as a control measure. However, in the Notes column appears the following:

> "Can not 100% prevent ejected debris!!! Bystanders must be kept clear while operating. See also 'Methods of minimizing the risks in relation to high speed ejected debris' under 1. Safety".

Safety signage on this slasher reinforces the same message.

Clearly, although the slasher used in this instance had a chain guard fitted to the discharge area, its use in a built up area with the possibility of persons and vehicles in the general vicinity warranted further control measures as the manufacturer recommends.

Inspector Dare from WHSQ, who gave evidence at the inquest, was asked about the need to obtain copies of service records and responded that aspects of maintenance required checking. However, he conceded that his inspection at the scene failed to suggest any issue about maintenance. The photographs of the slasher and tractor

show both were relatively new and in excellent condition. It appeared this line of investigation was pursued more as a matter of routine rather than need.

Inspector Dare also explained his reason for not pursuing the use of an exclusion zone, stating:

> "I formed the opinion that there wouldn't be any exclusion zones that would be required by the council for that area".

While Council may not have prescribed such a requirement, his response did not address the need for an exclusion zone as an operator initiated control measure to reduce the risk of harm associated with projectiles.

Inspector Dare was asked a series of questions about hazard identification and risk controls culminating in this exchange:

> During your investigation did you consider what mechanism Sun City Slashing and Mowing might have put in place to minimise the risk of debris being thrown out from under the slasher?-- I couldn't think of any measures that they could have put in place.[1]

A couple of the possible minimisation measures referred to in the Operations Manual for the slasher were then put to Inspector Dare (without disclosing the source). It was evident he did not know about them. For example:

> What about the option of setting a high cut height; slashing at a higher cut and then doing a walk-through looking for debris before dropping it down in height?-- I'm not sure if a slasher is adjustable in height.

If Inspector Dare had obtained a copy of the manual for the slasher, he would have been better informed about the relevant hazards and possible control measures. The information might have better guided the nature and direction of his investigation.

Inspector Dare told the court that although he assumed Ms Vearncombe was struck with piping ejected from the slasher, he did not initially walk through the whole block and only later on returning to the scene, walked part of the block observing debris.

The following exchange took place with Inspector Dare:

> And I take it at some point your investigation then moved to what were the control measures used by the contractor to minimise the risk?-- Well, the only thing-----
>
> No, no, the question was, I take it that during the investigation, you would have then turned your mind to what control measures the contractor was using to mitigate the risks associated with ejecting debris?-- From what I was informed, yes. The - that the owner of the business had informed the operator to do a walk-through prior to slashing.
>
> Mmm?-- Now, a walk-through of that block that had been overgrown, there's a possibility of debris could be missed.

[1] See Transcript page 46, lines 17-23

> But did you turn your mind to or research what were the control measures that should have been in place?-- No.
>
> Why is that?-- 'Cause at the time, I didn't think of it, to - to research it if there were some other control measures that could have been in place.[2]

Inspector Dare told the court that he did discuss the matter with other inspectors, including Inspector Warren, who he thought had more experience with slashers. Finally, Inspector Dare told the court that he did not ask for and had not seen the Operations Manual for the slasher during the investigation. He had not seen it prior appearing at the inquest.

Inspector Warren gave evidence at the inquest. He also agreed that no effort was made to obtain the operations manual for the slasher. However, he reported he was not conducting the investigation and did not consider the need to obtain it or that it might contain information relevant to safety. However, as Acting Regional Investigations Manager, Inspector Warren was the person ultimately responsible for oversight of the investigation as well as the quality of the report to Legal and Prosecutions within WHSQ. When questioned about the content of the slasher manual including the suggestion of a100m 'no go' zone, he conceded he hadn't read the manual. Inspector Warren conceded that without knowledge of the hazards and control measures identified in the manual, an investigator was not in a position to check whether or not the operator was appropriately managing safety. [3]

Inspector Warren was taken to his report and that part of his conclusion in which he reported that the operator had exercised proper diligence. He said this conclusion was based on the evidence that a yellow flashing light was activated on the tractor and the operator had conducted a walk through prior to starting slashing operations. I note that it appeared the operator had walked through the block, more for the purpose of checking moisture.

Mr Coggins, Regional Investigations Manager, gave evidence at the inquest. As to the use normally made of manuals and the like, the following exchange took place:

> Both Mr Dare and Mr Warren did not obtain the slasher operating manuals or instructions. That material was provided to the Coroner's Office once the decision to hold an inquest was made. Did you obtain those manuals yourself upon review of the investigation file?-- Yes. I - I considered that manufacturer's instructions or operating manuals are a very basic and fundamental piece of evidence that you would obtain as part of any investigation. I requested one of my other investigators to source those manuals as well as the information from Townsville City Council with respect to their risk management program.

When asked whether there was a missed opportunity for WHSQ to issue a safety alert based on lessons that should have been learnt from this incident, Mr Coggins responded:

> I think so. I think the fact that even described here today, the remoteness of a foreign object being ejected from, you know, a piece of plant that was deemed to be quite well guarded, demonstrates that we don't know whether, if they had taken any of those other control measures, whether it

---

[2] See Transcript p.48
[3] See T p.59

> had - it would have prevented or even minimised the risk of that same incident happening. But, certainly, a safety alert would bring it to the attention of, particularly, local councils that there is the potential for these things to happen in urban areas.

The quality of the investigation report passed through the Legal and Prosecution section as well as the Workplace Investigations Governance Group within WHSQ without any adverse comment or follow up action. It was only Mr Coggins who, on review of the investigation file, wrote what might be described as a dissenting view.

In conclusion, the Inspectors from Workplace Health and Safety did not access the manufacturer's manual. Their investigation report demonstrates that they also did not fully appreciate the magnitude of the risk associated with projectiles and the array of control measures available to mitigate that risk. Their investigation report also demonstrates an incomplete understanding and application of the basic risk management process to the circumstances of this incident.

The failure of the Inspectors, as well as the broader WHS organisation, to detect their omission was a missed opportunity to learn and disseminate lessons to industry groups (like local authorities) involved in slashing operations. What might appear to be a freak accident may well be a preventable incident by application of current manufacturer's safety information in a risk management framework.

Operators Approach to Safety Risk Management

How did the contractor approach the management of safety in the circumstances surrounding this incident?

Mr Rose, the proprietor of Sun City Mowing and Slashing, was an experienced slasher operator. He gave evidence at the inquest outlining his experience in maintaining this vacant block of land. The owner engaged Mr Rose in early 2009. He personally slashed the block on the first occasion, Mr Rowley on the second and three employees using whipper snippers worked on the block in September 2009. That was the last occasion that it was Sun City worked on the block.

Mr Rose said Mr Rowley started work for him in early 2008 and came from a rural background with many years experience with farm machinery including slashers.

On the morning of this incident, Mr Rose said he instructed Mr Rowley to give the block a check and remove any hazards. He said that in his experience, people tend to use a vacant block as a dumping ground so it was his expectation that operators check the block first. When asked what he thought was the danger area around a slasher, Mr Rose said that prior to this incident, he thought about15 -20 metres. However, now he would say more like 60m. It was apparent from his questioning that workers were not given any directions about safe working distances. Mr Rose responded to most questions about how he would manage particular scenarios as if he was a worker rather than what directions or guidance he gave workers about how he expected them to safely perform work. He appeared to expect his workers to perform task in a like manner to his way by virtue of their experience. Along a similar line of reasoning, Mr Rose said he would expect workers to be aware of the potential for damage vehicles although he didn't expect them to stop the slasher unless the vehicle was parked nearby. Interestingly, he said as an operator you would try and keep the slasher deck discharge area facing away from traffic.

Mr Rose was asked about the use of a higher cut where there was a risk of debris. He didn't like that idea. He was concerned about the increased danger of projectiles by reason of the limited shielding offered by the guard. However, on further explanation of the concept, he acknowledged the better opportunity for an operator to avoid debris and a better line of sight through cut grass to the ground and potential debris.

Mr Rose also told the court that there was an operator's manual with the slasher when it was purchased with the tractor in July 2008 and it would have been available to Mr Rowley. However, he did not go through it with Mr Rowley. When it was suggested that his slasher was intended for agricultural use, Mr Rose disagreed. He said it could be used in an urban area and there was no difference between the urban and rural setting. Mr Rose was shown the EHD slasher manual and agreed that it was similar to the one he got with the slasher. He was taken to the highlighted sections already referred to in evidence with earlier witnesses and acknowledged that the manual says the slasher was intended for agricultural operation and required extra precautions for operation in non-agricultural settings. When shown photographs of the pipe found on the block, Mr Rose offered the opinion that the tractor may have driven over one end of the pipe, raising the other end which came into contact with the passing slasher cutting bar.

With the benefit of hindsight, Mr Rose told the court a better way of slashing this block might have been to keep the rear of the slasher directed to the back of the block, to drive the tractor to the front of the block until there was a clear line of sight of vehicles and pedestrians. If all clear, the operator could turn to return to the rear. Alternatively, the operator could reverse to the rear of the block with or without the slasher engaged. Another possibility was to disengage the slasher and turn around to return to the rear before engaging the slasher and cutting while approaching the front of the block. Although there were advantages and disadvantages to each possibility, from a safety perspective the discharge side of the slasher was kept facing rearwards where there was a block wall.

Mr Rowley gave evidence at the inquest, in addition to a statement he provided. Mr Rowley was asked about his experience with debris ejected from a slasher. He responded to the effect that such things happened 'all the time' but that he had never seen anything go like what happened this day. He said:

> "If you mean that, do you hit stuff when you're slashing that you don't see, that - that happens all the time.
> And does it remain in place?-- Generally, yes. I've never seen anything go like what that - that metal did. You do get occasional things that do get through, but the main comment I'd make is that most things stay flat. They tend to, if they hit the chains or whatever, they just stay down, they don't sort of reach any higher."

Later, when asked about proximity of people or vehicles before he would have safety concerns, Mr Rowley responded:

> "---If I had known anybody was walking across the front of the block and I was towards the front of the block, say 30 - 20 or 30 metres from the front of the block, I would stop. I just wouldn't move till that person walked out of the vicinity. If somebody had parked a car in front of that block, I would probably be - stop and ask them if they could move it just for a while so I could get finished. That's not always possible on a lot of blocks we do around the place because there's parked cars there and we just have no

choice. That - yeah, at that block I think certainly if anybody I saw was walking across in front, I would stop."

Mr Rowley was taken to parts of the slasher manual and accepted he was unaware of the suggested safe working distance away from persons and vehicles of 100m. He previously considered a distance of 15 to 20 m was appropriate.

Mr Rowley told the court he walked the perimeter of the block to ascertain whether it was too wet to slash. I gained the impression that Mr Rowley normally paid considerable attention to the presence of debris while slashing, taking advantage of his height during each run, peering over and through the grass adjoining the tractor and 'feeling' his way with the wheels of the tractor, sensitive to any change in the terrain.

Mr Rowley was unable to recall the sequence of runs or path over the block, whether he cut the perimeter and then worked his way inwards or cut through the centre of the block. He did recall concern about getting bogged due to excessive moisture in the ground.

At the time of the incident, Mr Rowley had driven to the front of the block and turned to his left thereby facing the discharging rear in the direction of the approaching Ms Vearncombe. He was unaware of her presence as she was on his right hand side and concealed by the building line. Also, he was probably more focussed to his left, the direction of intended travel.

In conclusion, I note that during the slashing operation Mr Rowley was mindful of the prospect of the blades contacting debris. He carefully worked his way through the block, using his height to look for debris in his path and adjacent to him (the next area to be cut). Although Mr Rowley and Mr Rose (his employer), were experienced slasher operators; their knowledge about management of the risk of projectiles was not informed by reference to the manufacturer's manual that came with the slasher. They did not fully appreciate the magnitude of the risk associated with projectiles and the array of control measures available to mitigate that risk. These matters are fully addressed in the manufacturer's manual.

The failure to access and use this information was a missed opportunity on the part of Mr Rose to improve his safety procedures and reduce the risk of debris ejected from the slasher, including on this occasion. It was Mr Rose's responsibility as employer to ensure that employee's were trained on new procedures and complied with them.

Finding required by s.45 of Coroners Act

Who died:	Muraka Jenny Vearncombe
When she died:	Ms Vearncombe died on 3 March 2011
Where she died:	Ms Vearncombe died at 69 Eyre Street, North Ward, Townsville
What caused her death:	Ms Vearncombe died due to a head injury due to ejection of a section of steel pipe from slasher
How she died:	

At about 8 pm on 3 March 2011 Mr Rowley was driving a tractor with a slasher attached on an overgrown vacant block at 67 Eyre Street. As he was drove to the front of the block with the slasher engaged, he turned to his left to head in a south west direction. Ms Vearncombe was walking on the footpath in front of commercial premises at 69 Eyre Street. She was about 15m to the north-west of the slasher. The slasher blade came into contact with a length of steel pipe lying on the ground. A section of the pipe was ejected under the force of the rotating blade, passing through a chain curtain at the rear of the slasher and fatally striking Ms Vearncombe in the head.

Comments and Recommendations

It is important to understand that this coronial investigation is not focussed on blame or criticism of the operator, his employer or the WHSQ investigators. It is focused on a better understanding about 'how' the incident occurred with a view to learning lessons that might help prevent incidents of a like nature in the future.

As a general proposition, this case demonstrates that reliance on an individual's personal experience, what ever that level, is very limiting.

There was a body of important safety information in the form of the manufacturers' manual available, at different times, to Mr Rose, Mr Rowley, Inspector Warren and Inspector Dare. That information could have informed the application of the risk management process to the task of slashing this block. There existed a clear risk of projectiles, as the block was known to have or attract debris in the form of building material. Based on the manufacturer's recommendations, reliance on a guard chain across the discharge area of the slasher alone was not enough as a control measure against projectiles in an urban setting. A walk through, even if for the purpose of finding debris and while necessary, will be of limited effectiveness on a thickly vegetated block. There were further control measures available including an initial higher cut improving visibility, an exclusion zone to the extent of directing or encouraging pedestrian traffic to the other side of the street, undertaking the work on a day and at an hour when less vehicular and pedestrian traffic was present, and devising a cutting path over the block that kept the rear discharge area facing away from where the prospect of people present was greatest.

It appears that the operator, employer and WHSQ investigators had a limited understanding of the risk of an object projecting beyond the chains and the distance for which it might remain lethal. For the WHS investigators, the absence of such knowledge made is easier to apparently think of this incident as a freak accident, an extremely unlikely and unusual event; one that little more could have been done to reduce the risk.

It is exactly why in the investigation of such events, a disciplined approach to the application of the risk management principles is required. What is the hazard? What is the risk of harm (chance x magnitude)? What are the available control measures? Is the risk of harm mitigated through implementation of the control measures to an acceptable level? What are the available sources of information about these matters and how might they be accessed?

On 18 October 2010 I delivered my findings into the death of Gregory Clifford Paterson. He died at Townsville Hospital on 15 June 2007 due to a head injury suffered on a construction site near Mackay on 4 June 2007. He was supervising a

concrete pour for a slab. A concrete pump was in use. To extend the reach of the concrete line, Mr Paterson was shouldering the concrete line when an air block developed and self released causing hose whip. He was knocked backwards and struck his head. The coronial investigation revealed that although hose whip was identified as the relevant hazard, it was considered a rare occurrence and not a significant safety issue. That view was maintained throughout the WHS investigation until half way through the inquest.

To my mind, there are similarities between these investigations. There was a tendency of Inspectors in both investigations to apply their personal experience and working knowledge in analysing the circumstances of the fatalities without tapping into the knowledge and experience peculiar to those operations. I have to record that in both instances, by way of background information, I was able to immediately access a wealth of information of direct relevance to each hazard on the internet.

I am not able to take the issue of quality of investigation on the part of WHS any further. It is too simplistic to simply conclude that the Inspectors erred in not obtaining the manufacturer's manual and in application of the risk management process. It is more important to consider the organisational setting in which these errors were made, to identify where opportunities exist for improvement in that setting and to implement them. That is a matter that WHS should investigate.
What were the missed opportunities for improvement to public health and safety?

Careful investigation and analysis on the part of WHS would have identified undue reliance on personal experience and the failure to make use of the manufacturer's safety information in developing safe operating procedures. A safety alert might have issued to raise awareness about the issue of the NSW guidelines, a reminder about the importance of incorporating the important safety information from manufacturers into operating procedures and the importance of applying that information in a risk management framework. Given that a great deal of use of slashers through contractors for larger organisations like government departments and local governments, there is the opportunity for such organisations to influence constructive change through their contractual arrangements. But first these organisations need to know what can go wrong and how that risk might be reduced. The facts of this case demonstrate both points.

Further, a safety alert might have recommended reviewing safe working procedures and encouraged the application of risk assessments in high-risk activities such as slashing in an urban setting.

Also, WHSQ might have also reviewed the NSW publication and considered the adequacy of its content in light of this incident. On review, it might have concluded, in the event of a new edition, greater emphasis should be given to the risk management process and how the manufacturer's safety information might better inform and guide the application of that process.

The operator and employer will have reflected on the matters that arose in the course of the inquest and come to their own views about how this job might have been better managed. The employer will have reflected on what more he could do to guide his employees in better managing such situations.

Recommendation

WHS consider issuing a safety alert targeting contractors and organisations that might engage contractors in slashing operations with objective of raising awareness about:

- The limits to personal experience, however much experience an individual operator might have;
- The availability of collective knowledge and experience of the industry in various publications such as that in the NSW WorkCover guidelines on slashing;
- A reminder about the need to use, and demonstrate the use of, manufacturer's safety information in the development and implementation of operating procedures; and
- A reminder about the application of a basic risk management process in deciding on what mix of control measures is necessary.

Coroner Kevin Priestly

Appendix

Map showing location of the Incident

Photograph showing the vacant block being slashed – section of remaining steel pipe visible just beyond the footpath

Photograph showing the section of metal pipe found on the road

Photograph showing the general location – pipe in the foreground – tractor in background

Photograph of tractor and slasher – a curtain of chains across the rear opening of the slasher

Photograph showing the section of remaining section of pipe