
Occupational Safety and Health Laws that Apply to Agricultural Machinery that can Kill or Maim, and Which is Used in the Western Australian Viticulture Industry

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Abstract

An examination of the application of the *Occupational Safety and Health Act 1984* (WA) and the *Occupational Safety and Health Regulations 1996* (WA) to the viticulture industry. The paper places an emphasis on agricultural machinery accidents in the agriculture industry and their application to the viticulture industry, and highlights s 19 and regs 4.37 and 4.44 of this legislation. It gives consideration to the unreported Western Australian Supreme Court case of *Green v Mabey*, as well as the prosecutions in the magistrates' courts in the cases *Re Jackson*; *Re Grainger*; *Re Golden Miles Orchards Pty Ltd*; *Re Evans & Tate Ltd*; *Re Evans & Tate Ltd (No 2)*; *Re Ernest Lee-Steere Pty Ltd*; *Re Seatown Holdings Pty Ltd*; *Re Crystal Brook Vineyards Pty Ltd*; *Re Viticulture Technologies (Aust) Pty Ltd* and *Re Conqueror Corp Pty Ltd*, which are pertinent to this topic.

Introduction

The viticulture industry contemplated in this article encompasses the agricultural aspect of grape growing and the production of wine in Western Australia ('WA'). The *Occupational Safety and Health Act 1994* (WA) ('the *OSH Act*') is currently¹ the predominant legislation that imposes obligations on a variety of people who are involved in the workplace aspect of this growing and production process.

The legal framework set up by the *OSH Act* has been discussed in detail in other articles published in previous editions of this journal.² It is sufficient to

reassert here that the legislation has imposed general duties of care upon a variety of categories of persons at the workplace, including employers, employees, self-employed persons, manufacturers and suppliers. Under each of the general duties is an obligation to take reasonable practicable care towards others who are affected by their actions or omissions. A failure to take care may result in a prosecution being mounted through the criminal court process. Other avenues open to inspectors from WorkSafe WA,³ either as an alternative or in conjunction to the prosecution process, are the issuing of improvement notices⁴ or prohibition notices.⁵

¹ At the time of writing, all states except Western Australia had decided to reform their legislation and adopt a national approach to legislation dealing with occupational health and safety. It has been agreed that they will adopt a model legislation to be known as the *Work Health and Safety Act 2010*. The Western Australian government has indicated they will adopt some but not all aspects of this national approach: Troy Buswell, 'Western Australia Maintains its Opposition to Full OHS Harmonisation' (Media Statement, 11 December 2009).

² E.g. R Guthrie, Lisa Goldacre and Jennifer Westaway, 'Workers Compensation and Occupational Health and Safety

in the Australian Agricultural Industry' (2007) 9 *Legal Issues in Business* 23, 27; Kevin G Brown, 'Occupational Safety and Health Legislation: What Allied Health Professionals in Western Australia Need to Know' (2003) 5 *Legal Issues in Business* 31.

³ WorkSafe WA is the abbreviated name given to the government agency WorkSafe Western Australia, which is charged with administering the *Occupational Safety and Health Act 1984* and its regulations.

⁴ A targeted inspection program of the Margaret River area, including wineries, resulted in inspectors issuing 197 improvement notices: Department of Commerce, 'Margaret River Campaign Meets with Positive Response from Workplaces' (Media Statement, 25 May 2009).

In addition to the general duty obligations enshrined in the *OSH Act* are a number of regulations known as the *Occupational Safety and Health Regulations 1996* (WA) ('the *OSH Regulations*') that apply to particular work activities or processes.

Both the *OSH Act* and the *OSH Regulations* impact on operators in the viticulture industry. There are a variety of safety and health issues that arise in the viticulture industry, such as dangers associated with overhead electricity lines,⁶ exposure to the sun,⁷ vineyard towers collapsing,⁸ or working in confined spaces such as a wine vat.⁹ However, the focus of this paper is to identify the reports of incidents and prosecutions that relate to the agricultural machinery that is used in the wine industry. This paper highlights the pertinent sections of the *Occupational Safety and Health Act 1984* (WA) and the regulations that apply to those reported incidents and prosecutions that have occurred in Western Australia.

The literature examined relates to reports of prosecutions and significant incidents in Western Australia that either apply specifically to viticulture situations or to situations in the agricultural industry that are readily applicable to the viticulture industry. The article focuses on machinery that is likely to be

used in the viticulture industry and examines many of those reported incidents where people have been maimed or killed. It identifies the probable source of the legal obligations in the legislation, a focus which is sometimes missing from the safety and health alerts produced by WorkSafe WA.¹⁰

The paper commences by examining the specific obligations imposed on the use of tractors; the guarding requirements of both 'power take-offs' and other moving parts of machinery. It then examines the use of all-terrain vehicles, cleaning machinery, lifting machinery and starting machinery, and other incidents relating to machinery that is used in the wine industry. It explains the incidents and prosecutions that have occurred in relation to these matters, and concludes by identifying pertinent publications and resources that can assist those operating in the viticulture industry to meet the legal obligations that are identified in this paper.

Relevance of These Incidents to the Wine Industry

The various accidents, incidents and prosecutions that are described below nearly all had a connection with machinery in an agricultural setting. Some of the prosecutions that are discussed, such as *Re Evans & Tate Ltd*,¹¹ *Re Evans & Tate Ltd (No 2)*,¹² *Re Crystal Brook Vineyards Pty Ltd*,¹³ and *Re Viticulture*

⁵ In 2001, it was reported that 150 prohibition notices were issued after the death of a worker in 1998: M Shardlow, 'Death Sparks Drive For Improved Safety', *Countryman* (Perth), 3 May 2001, 5.

⁶ See: WorkSafe WA, 'Guidelines for Work in the Vicinity of Overhead Power Lines' (Publication No 093265, Department of Consumer and Employment Protection, October 2006).

⁷ See: Department of Health, Western Australia & WorkSafe WA, 'Skin Cancer and Outdoor Work: A Guide for Working Safely in the Sun' (2006).

⁸ See in South Australia: 'Wirra Wirra Tank Collapse Case in Court', *ABC News* (online), 31 March 2010 <<http://www.abc.net.au/news/stories/2010/03/31/2860779.htm>>.

⁹ See: WorkSafe WA, 'Confined Space Work' (Safety and Health Alert 50/99, Department of Consumer and Employment Protection, October 1999); W Pryer, 'Winery Death Case Closed', *The West Australian* (Perth), 28 April 1999, 27; D Reed, 'Worker: I Was Injured In Vat', *The West Australian* (Perth), 21 October 1999, 13; D Reed, 'Safety Lack My Fault: Di Cullen', *The West Australian* (Perth), 22 October 1999, 9; D Reed, 'Shake-up For Wineries', *The West Australian* (Perth), 23 October 1999, 12; Shardlow, above n 5.

¹⁰ For example: WorkSafe WA, 'Accidents on Rural Properties', (Safety and Health Alert 41/00, Department of Consumer and Employment Protection, December 2000).

¹¹ (Unreported, Perth Magistrates Court, No BS1591/07, 2 May 2008); Department of Consumer and Employment Protection, 'Winery Fined \$60,000 over Unguarded Machinery' (Media Statement, 2 May 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184.

¹² (Unreported, Busselton and Perth Magistrates Court, No BS1591/07, 2 May 2008); Department of Consumer and Employment Protection, 'Winery Fined \$60,000 over Unguarded Machinery' (Media Statement, 2 May 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184.

¹³ (Unreported, Albany Court of Petty Sessions, No 1940/01, 9 July 2002); Department of Consumer and Employment Protection, *Annual Report 2002-03*, 64; WorkSafe WA, 'Employee Falls from Grape Harvester' (Safety and Health Alert 15/01, October 2001); 'Fine for fall in vineyard', *The West Australian* (Perth), 1 August 2002.

Technologies (Aust) Pty Ltd,¹⁴ specifically relate to the wine industry. There are other cases and incidents outside the wine industry, but nevertheless in the general agriculture industry, that identify real situations that could also potentially occur in relation to the wine industry. They are therefore useful both for identifying the risks involved as well as highlighting the attitude of the WorkSafe WA regulator to such incidents.

Tractor Incidents – Roll Over and Associated Issues

It is common knowledge that tractors are used for a variety of tasks in association with the viticulture industry. The incidents that involve tractors have occurred in a range of agricultural situations and many of them have occurred or could potentially occur in the viticulture industry. One concern about tractors that is identified by WorkSafe WA relates to the risks associated with tractors potentially rolling over and causing crushing injuries.

Reports in 1997 and 2000 from WorkSafe WA indicate that roll over protection was identified by WorkSafe WA as a safety concern to those using tractors. For example, in 1997, a self-employed fencing contractor was fatally injured when he was constructing a fence down a dam wall. As he drove the tractor across a slope of the dam wall, in order to drill a post hole, the tractor rolled sideways, pinning him beneath a rear wheel of the tractor. At the time of the incident there was no roll over protective structure, nor an operator restraining device.¹⁵

In 2000, there was another report of a tractor rollover. On this occasion the farmer driving the tractor was driving on the gravel edge of a bitumen road bordering his property, when he veered onto the bitumen in order

to avoid a white reflector post. After passing the post, the tractor veered to the right side of the road and then, as a result of the farmer's attempt to correct the oversteering, the tractor rolled over. The tractor did not have a roll over protective structure or restraining devices for the driver.¹⁶

The *Re Jackson* case

In 2002, WorkSafe decided that a prosecution was required. In the case *Re Jackson*,¹⁷ proceedings were taken against an orchard grower who had operated a tractor in and around the orchard without a roll over protective structure or seatbelt fitted. On the first occasion that this was identified, an inspector from WorkSafe WA issued an improvement notice under s 48(1) of the *OSH Act*, requiring a roll over protective structure or seatbelt to be fitted. WorkSafe WA subsequently never received notification of compliance pursuant to the requirement in s 48(5) of the *Act*. An inspector made another visit later in 2002 and observed that the tractor had not been fitted with a roll over structure or a seatbelt. A further improvement notice was issued. At no time was there any evidence that the tractor had rolled over.

The defendant in that case was charged with a breach of reg 4.44(1)(a) of the *Occupational Safety and Health Regulations 1996* (WA). That regulation requires a variety of duty holders, including employers, where there is any powered mobile plant, to take various steps. These require the duty holder to provide and maintain an appropriate combination of operator protection devices if there is any risk of the plant overturning or coming into contact with the operator or the operator being ejected from the seat. The defendant pleaded guilty and a penalty of \$400 was imposed.

¹⁴ (Unreported, Albany Court of Petty Sessions, No AL1941/01, 9 May 2003); Department of Consumer and Employment Protection, *Annual Report 2003-04*, 155; WorkSafe WA, 'Employee Falls from Grape Harvester' (Safety and Health Alert 15/01, October 2001).

¹⁵ WorkSafe WA, 'Driver Killed in Tractor Rollover' (Safety and Health Alert 08/97, August 1997).

¹⁶ WorkSafe WA, 'Farmer Escapes Death in Tractor Rollover' (Safety and Health Alert 10/00, April 2000).

¹⁷ (Unreported, Bunbury Court of Sessions, No 2800/03, 18 August 2003); Department of Consumer and Employment Protection, *Annual Report 2003-04*, 156.

In the *Re Jackson* case, it is interesting to note that the inspectorate had previously issued improvement notices in relation to the absence of a roll over protection device or seatbelts, prior to mounting a prosecution for a breach of the regulation. In the 2005 decision in *Re Altinier*,¹⁸ the defendant, who operated an orchard business, was issued with improvement notices in relation to the lack of roll over protection devices or seatbelts. The defendant sought two reviews. The first was through the WorkSafe WA Commissioner under s 51 and after this was refused under s 51(6) but the compliance time extended, a second review was taken to a Safety and Health Magistrate.¹⁹ The magistrate once again extended the period of time in which to comply, but upheld the notice. When the defendant failed to comply with the notice that had been reviewed on the second occasion, the defendant was prosecuted for a breach of s 48(4) for not complying with the improvement notice that required roll over protection equipment and seatbelts to be installed on the tractor concerned. The defendant pleaded guilty and was fined \$2 500.

Other Aspects of Reg 4.44

It is convenient at this point to consider some of the other aspects of reg 4.44 that was the basis of the prosecution in the *Re Jackson* case. The whole regulation deals with power mobile plant and, based on the precedent case of *Re Jackson* discussed above, includes mobile tractors.²⁰ Other cases have identified

that it applies to forklifts²¹ and loaders.²² Presumably the obligation in this regulation also applies to excavators, bulldozers, vine planters, pruners, harvesters or other power mobile plant that may be used in the viticulture industry.

Regulation 4.44(2) imposes duties on suppliers to provide roll over protective structures, while reg 4.44(3) allows duty holders to lower or remove roll over protective structures so as to enable access under trees or places that would otherwise be too low for the plant to operate. Regulation 4.44(4) requires the duty holders to ensure that the roll over protective structures meet specified Australian Standards.

The second half of reg 4.44 moves away from the roll over protection requirements and emphasises the use of seatbelts and seating. Regulation 4.44(5) requires those powered mobile plant that contain seatbelt attaching points to have seatbelts fitted which are to be used by the operator.²³ Regulation 4.44(6) requires the duty holders to ensure that the risk of a collision between the powered mobile plant and people or other plant or things is reduced. Regulation 4.44(7) requires the duty holder to ensure that passengers do not ride on the powered mobile plant unless they have a seat within the protective zone and the passenger uses a seatbelt.²⁴ An

¹⁸ (Unreported, Magistrates Court of WA – Midland Registry, No 2867/05, 19 August 2005); WorkSafe WA, 'Failure to Comply with WorkSafe Notices Leads to Fine' (Media Statement, 30 August 2005); Department of Consumer and Employment Protection, *Annual Report 2005-06*, 156.

¹⁹ Since 2005, reviews of decisions of the WorkSafe WA Commissioner are now taken to the Safety and Health Tribunal under s 51A.

²⁰ See also *Re Franca* (Unreported, Manjimup Court of Petty Sessions, No 3588/01, 26 July 2001), Department of Consumer and Employment Protection, *Annual Report 2001-02*, 68 and *Re Logiudice* (Unreported, Magistrates Court of WA–Bunbury registry, No 3454/05, 12 September 2005), Department of Consumer and Employment Protection, *Annual Report 2005-06*, 156.

²¹ *Re Rojen Nominees Pty Ltd* (Unreported, Perth Court of Petty Sessions, Robbins SM, No 34710/99, 21 January 2000); *Re Alora Holdings Pty Ltd* (Unreported, Rockingham Court of Petty Sessions, No 1762/03, 11 April 2003), Department of Consumer and Employment Protection, *Annual Report 2002-03*, 67.

²² *Re Denville Pty Ltd* (Unreported, Narrogin and Perth Court of Petty Sessions, No 184/01, 7 May 2002), Department of Consumer and Employment Protection, *Annual Report 2001-02*, 74.

²³ The case of *Re Franca* (Unreported, Manjimup Court of Petty Sessions, No 3588/01, 26 July 2001); Department of Consumer and Employment Protection, *Annual Report 2001-02*, 68 is an example of a case where a self-employed person operated a tractor without seatbelts even after previously being issued with an improvement notice over the absence of seatbelts. The defendant was fined \$500.

²⁴ The case of *Re Rojen Nominees Pty Ltd* (Unreported, Perth Court of Petty Sessions, Robbins SM, No 34710/99, 21 January 2000) illustrates reg 44(7) being applied to a situation where an employee caught a lift on a forklift as a passenger

exception to the duty in reg 4.44(7) is provided in reg 4.44(8) to instructors during training, instruction or assessing an operator of the powered mobile plant.

An incident that illustrates a situation where reg 4.44(7) may have been applicable occurred in 1996.²⁵ In that incident, a farm worker who was a passenger in a header leaned against the front cab window and the glass in the window fell out. The passenger fell backwards through the opening and landed on his back in front of the path of the moving header machine. The machine then ran over the employee causing him some injuries. The safety and health alert emphasises reg 4.44(7) on the provision of an adequate seat for such passengers.

Unguarded Machinery – ‘Power take-offs’

One of the frequent uses of tractors is to attach a piece of machinery to the rotating ‘power take-off’ often located on the rear of a tractor. This power take-off is a moving part when the tractor is operating, and safe systems usually require a guard to reduce the opportunity for a person’s loose clothing to become entangled. There is plenty of evidence that rotating power take-offs are frequently used in the wine industry.²⁶

The regulation that appears to be applied by inspectors to this safety concern is reg 4.37(1)(f). That regulation provides that the various duty holders mentioned in the regulation ‘must ensure – that every dangerous part of a fixed, mobile or hand held powered plant, is as far as

without being properly restrained. The defendant employer pleaded guilty and was fined \$1,000.

²⁵ WorkSafe WA, ‘Worker Falls from Header’ (Safety and Health Alert 22/96, March 1996).

²⁶ See *Re Evans & Tate Ltd* (Unreported, Perth Magistrates Court, No BS1591/07, 2 May 2008); Department of Consumer and Employment Protection, ‘Winery Fined \$60,000 over Unguarded Machinery’ (Media Statement, 2 May 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184; *Re Evans & Tate Ltd (No 2)* (Unreported, Busselton and Perth Magistrates Court, No BS1591/07, 2 May 2008); and WorkSafe WA *Wine Industry Fact Sheet* (16 December 2009)

<http://www.commerce.wa.gov.au/WorkSafe/Content/Industries/Agriculture_forestry_and_fish/Further_information/_Wine_industry_fact_sheet.html>.

practicable, securely fenced, or guarded in accordance with regulation 4.29 unless the plant is so positioned or constructed that it as safe as it would be if securely fenced or guarded ...’

Regulation 4.29, which is mentioned above, is a very detailed regulation that explains various ways or reducing risks in relation to plant.

Prosecutions Based on Reg 4.37 and its Predecessor.

In the 1994 Supreme Court of WA case, *Green v Mabey*,²⁷ a 17 year old farm worker was severely injured when a loose Drizabone coat he was wearing was caught in the unguarded rotating drive mechanism of the feeder, which was driven from a tractor coupled to the feeder. At the time of the incident the employee was trying to adjust the rate of flow of feed. As a result of the incident the farm worker’s arm was amputated to approximately five centimetres below the elbow. As a result of the incident the respondent farmer was prosecuted for a breach of reg 402 of the former *Occupational Health Safety and Welfare Regulations 1988* (WA).²⁸ The appellant appealed against the initial sentence handed down by the magistrate and on appeal the sentence for breach of reg 402 was increased to \$2 500.

In 1996 an employee was conducting seeding operations using a tractor-driven air seeder. An unguarded power take-off shaft connected the tractor to the air seeder. While the tractor was still running, the employee was observed by another employee leaning over the power take-off shaft and checking the hydraulic lines. The clothes worn by the employee leaning over became caught in the revolving shaft and the entangled clothing drew him into the shaft. The observing employee turned the tractor motor off. The employee was hospitalised for

²⁷ *Green v Mabey* (Unreported, Supreme Court of Western Australian, Parker J, No 1125 of 1994, 7 December 1994).

²⁸ Regulation 402 of the *Occupational Health Safety and Welfare Regulations 1988* (WA) was later effectively replaced by reg 4.37 of the *Occupational Safety and Health Regulations 1996* (WA). Regulation 402 also dealt with the guarding of machinery.

one week with abrasions to both arms and severe chest pain. As a result of this incident, in *Re Grainger*²⁹ the employer pleaded guilty to failing to report to the WorkSafe WA Commissioner the injury that had occurred to his employee and was fined \$250.³⁰ A second charge of breaching reg 402(1)³¹ dealing with unguarded machinery was defended. The defendant was however found guilty of failing to ensure that every dangerous part of the plant was securely guarded and was fined \$1 000.

In 1999, an employee working on a turf farm received a severe arm injury when his arm was almost amputated just below the shoulder.³² He sustained the injury when he was caught in the rotating power take-off shaft connecting a tractor to a boom-spraying implement. Although the power take-off shaft was guarded, the guard did not extend over the input coupling at the boom-spraying implement end. This incident did not apparently result in a prosecution.

In the 2004 case of *Re Golden Miles Orchards Pty Ltd*,³³ reg 4.37(1)(f) of the *OHS Regulations* was applied to a fruit growing business. An inspector had previously issued prohibition notices in relation to the guarding of a number of tractors at the orchard that had insufficient guards. On a subsequent visit to determine whether the guards had been fitted, it was found that adequate guarding had not in fact been installed on all

²⁹ (Unreported, Perth Court of Petty Sessions, No 97/65267, 17 February 1998).

³⁰ At the time of the incident this notification was required by s 19(3) of the *Act*. Since 2005, the equivalent section is now found in s 21I of the *Act*.

³¹ Subsequently reg 402 of the *Occupational Health Safety and Welfare Regulations 1988* (WA) was effectively replaced by reg 4.37 of the *Occupational Safety and Health Regulations 1996* (WA).

³² WorkSafe WA, 'Employee Injured by Inadequately Guarded PTO Coupling' (Safety and Health Alert 52/99, October 1999). The incident is also identified in Department of Commerce, 'Reminder Issued on Guarding of Power Take-offs' (Media Statement, 25 March 2009).

³³ (Unreported, Bunbury Court of Petty Sessions, 4 November 2004); Department of Consumer and Employment Protection, 'Fine Brings Warning on Machine Guarding and Complying with Notices' (Media Statement, 11 November 2009); Department of Consumer and Employment Protection, *Annual Report 2004-05*, 154 and 157.

machines at the workplace. The power take-off on a spray tank unit was found to be unguarded. The defendant pleaded guilty to a breach of this regulation and was fined \$6 000.

In 2005, in the case of *Re Evans & Tate Ltd*,³⁴ a female was employed as a vineyard hand for a winemaking and winery management business when her clothing became entangled in the power take-off coupling attached to a grass slasher. The employee was using the tractor and slasher to cut grass at the vineyard and on the day in question got off the tractor and walked to the slasher to remove grass which had built up and required clearing. The lower part of her pants became entangled in the unguarded power take-off coupling and pulled her right foot into it. Subsequently the defendant arranged for a guard to be manufactured and fitted over the power input coupling of the slasher. The defendant pleaded guilty to a breach of s 19(1) of the *Act* and was fined \$30 000.

Five weeks after this incident, an inspector observed another employee of the same employer using such a tractor and slasher with an unguarded power take-off coupling. In *Re Evans & Tate Ltd (No 2)*,³⁵ the defendant employer pleaded guilty to this offence and was once again fined \$30 000 for breaching the same section of the *Act*.

In June 2008, WorkSafe WA issued a safety alert after a young female backpacker was operating a feed grain roller mill on a farming property.³⁶ Part of her clothing became entangled in the drive belt and pulley

³⁴ (Unreported, Perth Magistrates Court, No BS1591/07, 2 May 2008); Department of Consumer and Employment Protection, 'Winery Fined \$60,000 over Unguarded Machinery' (Media Statement, 2 May 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184.

³⁵ (Unreported, Busselton and Perth Magistrates Court, No BS1591/07, 2 May 2008); Department of Consumer and Employment Protection, 'Winery Fined \$60,000 over Unguarded Machinery' (Media Statement, 2 May 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184.

³⁶ WorkSafe WA, 'PTO Drive Shaft Injury' (Safety and Health Alert 05/08, June 2008).

arrangement and dragged her into the rotating drive shaft. As a result clothing was torn from her upper body causing amputation of her right arm. The injured female also received significant injuries to both legs including a broken femur. According to the safety and health alert, at the time of the incident the mill did not have adequate guarding on the power take-off drive shaft, nor on the associated uni-couplings, nor on the drive belt and pulley arrangements of the mill. At the time of writing (June 2010), this incident does not appear to have resulted in a prosecution taking place.

The above cases and incidents identify the dangers associated with unguarded power take-offs. These types of incidents continue to be identified by WorkSafe WA as areas of concern. In a media statement issued in March 2009,³⁷ four incidents involving injuries sustained in connection with power take-offs were highlighted. The media statement identified the requirement for three different guards to make all of the moving parts safe. The first is on the output coupling, the second on the implement power input coupling and the last on the power take-off shaft. WorkSafe also produced a bulletin in 2009 that specifically dealt with the type of guards required on power take-off shafts and couplings, as well as emphasising that reg 4.37 is the most specific regulation applicable to the risks associated with unguarded moving parts of plant. It is suggested that operators of all types of powered machinery in the wine industry should be fully conversant with the details of this regulation.

Other Agricultural Machinery – Guards

The reports canvassed above identify that guards are very significant in relation to power take-offs, especially in relation to the connections made between tractors and other machinery. There are however incidents of other types of machinery that also need to comply with the regulations and the general duties in the *Act*.

³⁷ Department of Commerce, 'Reminder Issued on Guarding of Power Take-offs' (Media Statement, 25 March 2009).

The 1993 case *Re Ernest Lee-Steere Pty Ltd*³⁸ involved the prosecution of an employer under s 19(1)(a) of the *Act*, when an employee's hand was caught in a chaff cutter and severed above the wrist. The defendant was found guilty and fined \$4 000.

In 1996 a farm worker at a piggery had his left leg amputated while drilling posts with a mechanical digger.³⁹ The mechanical digger was driven by a tractor power take-off. Fence wire which was to be attached to the fence posts was strung out along the ground near to where the fence post-holes were being dug. The fence wire came into contact with the rotating post-hole digger and the wire became caught up in the rotating digger. The wire in turn dragged the worker's leg onto the rotating digger, resulting in an amputation of the worker's leg below the knee.

In 2002 a safety and health alert was issued by WorkSafe WA after a young farm worker was fatally injured when his jumper became entangled in the exposed rotating shaft of a twin auger.⁴⁰ The auger was being used at the time by the worker to direct grain into the compartments of an air seeding machine.

In 2009, a safety and health alert was issued by WorkSafe WA after a farm worker was seriously injured when his shirt became entangled in the exposed shaft of a twin auger. The auger was being used to direct fertiliser into the compartments of an air seeding cart. The entangled shirt tightened around his neck, causing life-threatening injuries.⁴¹

³⁸ Australian Industrial Safety and Health and Welfare 53-120; 'Farmer Fined over Severed Forearm' 24 (1994) *SafetyLine* 6; WorkSafe WA, *Serious Injury Involving a Chaff Cutter*, Significant Incident Summary No 7/1993.

³⁹ WorkSafe WA, 'Farm Worker Loses Leg' (Safety and Health Alert 02/96, March 1996).

⁴⁰ WorkSafe WA, 'Grain Auger Fatally Injures Young Worker' (Safety and Health Alert 04/02, June 2002).

⁴¹ WorkSafe WA, 'Unguarded Grain and Fertiliser Auger Causes Serious Injury' (Safety and Health Alert 13/09, June 2009).

It is suggested that the 2002 and 2009 auger incidents could be covered by reg 4.37(1) which, as previously discussed, is the requirement to provide guarding to dangerous parts of such machinery, in relation to power take-offs.

All-terrain vehicles

The use of all-terrain vehicles⁴² on farms and the dangers associated with their use has been a cause of concern to WorkSafe WA and has been highlighted in the department's literature.⁴³ At the time of writing, the dangers arising from the use of quad bikes in agriculture has also resulted in a significant fine of \$60 000 arising from a prosecution in Queensland.⁴⁴

In 1999 a safety and health alert was issued by WorkSafe WA identifying that a farmer had received life-threatening injuries when he was thrown from a four wheel all-terrain vehicle in a paddock.⁴⁵ The vehicle was being driven in long grass stubble at the time, when it hit a hidden stump. At the time the driver was not wearing head protection equipment.

In *Re Seatown Holdings Pty Ltd*,⁴⁶ WorkSafe WA prosecuted a labour hire company in circumstances where a worker died after being thrown from the all-terrain vehicle that he was driving in November 2008.

⁴² These are also known as four wheeled motorbikes, agricultural bikes or quad bikes.

⁴³ See: WorkSafe WA, *Spot the hazard: Family Farm Safety* <http://www.commerce.wa.gov.au/workSafe/PDF/Family_Farm/farmhazd0051_c1.pdf>.

⁴⁴ *Re Elrose Enterprises Pty Ltd* (Unreported, Cairns Industrial Magistrates Court, Pinder J, 6 April 2010. See: Department of Justice and Attorney General, *Elrose Enterprises Pty Ltd* (28 July 2010) Queensland Government <<http://www.deir.qld.gov.au/workplace/law/prosecutions/2010/elrose/index.htm>>.

⁴⁵ WorkSafe WA, 'Farmer Injured in All-Terrain Vehicle (ATV) Accident' (Safety and Health Alert 09/99, February 1999).

⁴⁶ Department of Commerce, 'Labour Hire Company Fined \$30,000 Fined [sic] over Farm Death' (Media Statement, 21 May 2010). See also WorkSafe WA, 'Farm Worker Killed in All-Terrain Vehicle Incident' (Safety and Health Alert 02/09, January 2009); Department of Commerce, 'Reminder on Safe Use of All-Terrain Vehicles' (Media Statement, 8 April 2009); Department of Commerce, 'Investigations Prompt Reminder on the Dangers of Working Alone' (Media Statement, 11 June 2009); WorkSafe WA, 'Workers Killed While Working Alone' (Safety and Health Alert 11/09, May 2009).

The worker was working alone and had spoken to the farmer manager at about 2.00pm. Sometime later the worker collided with a wire gate, known as a 'cockies' gate. At the time of the incident the farm worker was not wearing a helmet. The worker was not discovered by co-workers until the next morning. The worker died in hospital the next day from the serious head injuries that he had sustained. The worker had a mobile phone but was unconscious and unable to use it. There was evidence of a previous incident in which someone had driven into a wire gate. The gate supports had been painted to make them more visible after that incident, however the paint had faded over time. The various reports of this incident highlighted the duty to ensure the use of personal protective equipment, the dangers of gates that are difficult to see, and the systems developed to account for workers working alone. In this case the labour hire company was fined \$30 000 after pleading guilty to failing to ensure the provision of a safe workplace as a labour hire provider.⁴⁷

Cleaning Machinery

In the case of *Re Crystal Brook Vineyards Pty Ltd*,⁴⁸ an employee was involved in harvesting grapes with a grape harvester known as a Gregoire G65 HD. One employee drove a tractor pulling the grape harvester. During the harvesting process, the harvester became blocked. The tractor driver stopped the tractor and turned off the harvester. One of the employees, who had previously been an observer, climbed the harvester to clear the blockage. During this process he moved from the top of the harvester that was fitted with a platform with safety rails, to the conveyor belt. In doing so he had to step through the safety hand rails to that part of the machine where the blockage was located. There

⁴⁷ Although the report does not indicate the section used to prosecute the labour hire company, it is likely to be based on an application s 19 by virtue of ss 21D to 21F of the *Occupational Safety and Health Act 1994* (WA).

⁴⁸ (Unreported, Albany Court of Petty Sessions, No 1940/01, 9 July 2002), Department of Consumer and Employment Protection, *Annual Report 2002-03*, 64; WorkSafe WA, 'Employee Falls from Grape Harvester' (Safety and Health Alert 15/01, October 2001); 'Fine for Fall in Vineyard', *The West Australian* (Perth), 1 August 2002.

were no handrails in this area and he lost his balance falling three metres to the ground below. He landed on his head and as a result of severe spinal injuries became a paraplegic. The defendant pleaded guilty to breaching s 19(1) by failing to provide and maintain a working environment in which the employees were not exposed to hazards. A penalty of \$25 000 was imposed under s 19(7).

Arising out of this incident, WorkSafe also pursued a prosecution against the importer and supplier of the grain harvester. In *Re Viticulture Technologies (Aust) Pty Ltd*,⁴⁹ the prosecution claimed that the defendant imported and supplied plant that breached s 23(1)(a) of the *Act*. That section imposes a general duty on suppliers and importers to ensure that the design and construction of the plant is such that a person who uses the plant is not in doing so exposed to hazards. The defendant pleaded not guilty but was found guilty and fined \$20 000.

Lifting or Repairing Machinery

One of the earlier reported incidents found on the WorkSafe WA website relates to the *Re Conqueror Corp Pty Ltd* case which involved a 24 year old farmhand being crushed to death in 1994 beneath the rear wheel hub of a tractor.⁵⁰ At the time the tractor had its wheels off and was raised off the ground with hydraulic jacks. During the replacement of one of the wheels, the tractor slipped sideways off the jacks and the tractor pinned the farmhand to the ground, causing

his death.⁵¹ The incident resulted in the defendant employer being fined what appears to be a fairly modest sum of \$500 for breaching s 19(1)(a) of the *Act*. This provision of the *Act* places a general duty of care on the employer to provide employees with a safe system of work. Presumably the court assessed that a safer system of work would have ensured that the method used to support the tractor, in order to change the wheels, would have not allowed for the lateral movement that occurred.

In 2000, a 69 year old harvesting contractor died from injuries he received when he was crushed under the frame of a light cultivator.⁵² The cultivator had not been used for four years and had previously been damaged but not repaired. There were various problems with the machinery including a missing 'transporting tie down bar' and there had been no servicing or testing, despite evidence of a leakage of hydraulic fluid that had left the hydraulic cylinder empty of fluid. The lack of fluid allowed the cultivator's bed to fall without any restriction. The deceased placed himself at risk while lubricating the machine in the 'transport' configuration rather than the 'operational' configuration during the servicing of the cultivator in a paddock.

In 2001, a harvesting contractor drove his harvester to a remote area of his client's property without advising the client of his arrival.⁵³ His daughter drove a pilot vehicle towing the header comb. The contractor attempted to secure the comb onto the feeder chute of the harvester but encountered some difficulty in doing so. He deployed the harvester's mechanical locking system to prevent the header and comb lowering in the event of a hydraulic failure. He then climbed into the area under comb with some spanners. During this process the comb

⁴⁹ (Unreported, Albany Court of Petty Sessions, No AL1941/01, 9 May 2003); Department of Consumer and Employment Protection, *Annual Report 2003-04*, 155; WorkSafe WA, 'Employee Falls from Grape Harvester' (Safety and Health Alert 15/01, October 2001).

⁵⁰ *Re Conqueror Corp Pty Ltd* (Unreported, Court of Petty Sessions, 2 August 1995); 'Tractor-death Farmer Charged' *Sunday Times* (Perth), 23 July 1995, 5; 'Farmers Told to Give More Heed to Safety' *Sunday Times* (Perth), 6 August 1995, 20; 'Anger as Farmer Fined over Death' *The West Australian* (Perth), 3 August 1995, 30; 'Tractor Maintenance Fatality' 24 (1994) *SafetyLine* 12; WorkSafe WA, 'Fatal Accident – Tractor' (Safety and Health Alert 15/94, October 1994).

⁵¹ WorkSafe WA, 'Fatal Accident – Tractor' (Safety and Health Alert 15/94, October 1994).

⁵² WorkSafe WA, 'Farmer Contractor Crushed Under Cultivator' (Safety and Health Alert 08/01, April 2000).

⁵³ WorkSafe WA, 'Farmer Receives Fatal Injuries from Falling Load' (Safety and Health Alert 19/01, November 2001).

became detached and fell from the header, falling on the contractor and fatally injuring him.

In 2004, a self-employed farmer was working alone underneath a utility vehicle undertaking maintenance and repairs to the vehicle on a service ramp.⁵⁴ During this activity, the utility came off the service ramp and crushed the farmer. The farmer died three months later as a result of the crush injuries. At the time of the incident, vehicle stands were not used and chocking of the wheels to prevent lateral movement was not implemented.

In 2008, another safety and health alert issued by WorkSafe WA reported that a farmer had been fatally injured while working underneath a slasher. Following the incident, an apparently related media report indicated that at the time he had a mobile phone in his vehicle, which was ten yards away, and that he was not found until several days later.⁵⁵ This later media statement again raised the dangers of working alone.

In 2009, a mechanical fitter removed the rear wheel assembly from a back-steer loader using an air impact wrench, and unbeknown to him, the rear wheels were split rims.⁵⁶ The rims were split down the middle and secured by eight nuts. There were no warnings that these were split rims, and while the fitter was removing them, the outer portion of the rim failed under the pressure of the air in the tyre. He took the full force of the explosion on his hands and face and was flung three meters across the workshop. He remained unconscious for some time.⁵⁷

⁵⁴ WorkSafe WA, 'Farmer Crushed by Ute' (Safety and Health Alert 11/05, March 2005).

⁵⁵ Department of Commerce, 'Investigations Prompt Reminder on the Dangers of Working Alone' (Media Statement, 11 June 2009).

⁵⁶ WorkSafe WA, 'Split Rim Wheel Assembly Injury' (Safety and Health Alert 22/09, January 2010).

⁵⁷ It should be noted that there are a number of earlier reports involving either injuries from split rims or exploding tyres. In *Re Vernice Pty Ltd*, a labourer was killed when a tyre was fitted to the incorrect size of wheel rim and the split ring came free, hitting him in the chest. In that case the employer was

Most of the above incidents canvassed above involving lifting or repairing machinery could potentially be prosecuted under the general duty obligations imposed on employers, employees or self-employed persons, found in ss 19, 20 and 21 of the *Act*.

Starting Machinery

In 1997, a farmer died when attempting to jump-start a dozer when the battery was flat.⁵⁸ It appears he was standing on the caterpillar track of the dozer, spraying a distillate into the air intake while attempting to start the engine. The gearstick had apparently been inadvertently knocked into gear, so that when the engine did start, the movement forward dislodged the farmer from the caterpillar track and the dozer ran over him, causing fatal injuries.

In 2001, a person was fatally injured when attempting to recharge the batteries on a truck⁵⁹ using a portable generator and unsafe battery charging leads. At the time, the battery was still connected to the truck's electrical system and the 12 volt charging leads were plugged into the 240 volt outlet of the generator. As a result of this incident a safety warning has been issued by the government agency Electrical Safety regarding the outlets on these generators.⁶⁰

fining \$7 500 for a breach of s 19(1)(a) ((Perth Magistrates Court of Petty Sessions, No 28558/98, 19 August 1998); WorkSafe WA, 'Split Ring Wheel Fatality' (Safety and Health Alert 13/97, September 1997)). In 1999, a young worker received injuries when the tyre he was inflating exploded. See WorkSafe WA, 'Young Worker Injured by Exploding Tyre and Rim' (Safety and Health Alert 19/99, April 1999). In 2008 another employer was fined \$23 000 for a breach of s 19(1) after an incident involving an exploding tyre tube within a wheel rim. See: *Re Mindibungu Aboriginal Corporation* (Unreported, Kununurra Magistrates Court of Western Australia, No KR4/08, 16 June 2008); Department of Consumer and Employment Protection, 'Worker Death at Remote Community Results in \$26,000 Fine' (Media Statement, 20 June 2008); Department of Consumer and Employment Protection, *Annual Report 2007-08*, 184.

⁵⁸ WorkSafe WA, 'Farmer Dies Jump Starting his Plant' (Safety and Health Alert 15/97, October 1997).

⁵⁹ WorkSafe WA, 'Use of Portable Generators' (Safety and Health Alert 07/01, March 2001).

⁶⁰ Energy Safety WA, *Public Safety Warning: Unsafe Battery Charging Leads And Small Portable Generators* <http://www.commerce.wa.gov.au/EnergySafety/PDF/Publications/unsafe_generators.pdf>.

In 2004, a farmer died after being run over by a tractor while either starting the tractor in gear while standing in front of the rear wheels, or falling into the path of the wheels as the tractor moved off.⁶¹ Although no prosecution appears to have taken place in relation to the incident, WorkSafe WA made a variety of recommendations in the safety alert that reported the incident. These related to the risks of making modifications to the way plant is operated and the procedures that should be followed when starting powered mobile plant, including the procedure for jump-starting batteries.

As this paper was going to press, it was reported that the Department of Education in Western Australia had been fined \$50 000 as a result of an incident on 16 May 2007, involving the starting of a tractor.⁶² The incident occurred at an agricultural college when a tractor was started by a student in a situation where faulty 'link arms' were not attached to a hoe. The rotary shaft was fitted before the link arms and the tractor was started in order to manoeuvre the link arms into place. A teacher at the college and another female student stood between the tractor and the hoe to join the link arms on each side of the rotary shaft. When the tractor was started it sent power through to the hoe, moving it forwards. The teacher was knocked to the ground and the female student's foot was pulled into the hoe, dragging her up to the waist into the machine. The female student sustained four severed toes, severe leg injuries and abdominal lacerations.

The Education Department pleaded guilty to two breaches of the *Act* in relation to its employees under s 19 and to a person not its employee, namely a student,

⁶¹ WorkSafe WA, 'Farmer Run Over by Tractor' (Safety and Health Alert 10/04, September 2004).

⁶² *Re Department of Education* (unreported, Geraldton Magistrate's Court, Magistrate Martin Flynn, 14 September 2010); Department of Commerce, 'State Fined Over Agricultural College Incident' (Media Statement, 15 September 2010); I Cutler, '\$50,000 Fine for School Injuries', *The West Australian* (Perth), 15 September 2010, 3.

under s 21. Section 19 was breached in relation to failing to, as far as practicable, provide and maintain a working environment in which its employees were not exposed to hazards. Section 21 was breached in relation to failing to, as far as practicable, ensure the safety and/or health of a person who was not one of its employees, namely the female student, who was not adversely affected as a result of a hazard that arose from a system of work. The Education Department is reported to have apologised to the female student three years after the event.⁶³

As illustrated by the prosecution of the Department of Education discussed above, many of the incidents involving starting machinery could potentially be prosecuted under the general duty obligations imposed on employers, employees or self-employed persons, as found in ss 19, 20 and 21 of the *Act*. The decision whether to mount a prosecution or not is determined by a prosecution policy established in 2008.⁶⁴

Some Practical Solutions

One of the methods encouraged by s 57 of the *Occupational Safety and Health Act 1984* (WA) is for people within an industry to produce a code of practice that provides practical guidance about how the standards of safety and health law can be achieved in a workplace.⁶⁵ In 2000, the Margaret River Wine Industry Association and WorkSafe WA released a code of practice at a safety seminar in January 2000.⁶⁶ In 2002, a Wine Industry Code of Practice developed by the Wine Industry Association of WA was launched by the

⁶³ 'Apology Over Girl's Serious Accident', *ABC News*, 15 September 2010; Cutler, above n 62.

⁶⁴ WorkSafe WA, *Prosecution Policy* (November 2008) <http://www.docep.wa.gov.au/WorkSafe/PDF/General/Prosecution_policy.pdf>.

⁶⁵ See: WorkSafe WA, *Guidelines for the Development of Industry Codes of Practice for Approval under the Occupational Safety and Health Act 1984* (2009) <http://www.commerce.wa.gov.au/WorkSafe/PDF/Guidance_notes/Guide_Code_practice.pdf>.

⁶⁶ C Manley, 'Wineries Fail Safety Check', *The West Australian* (Perth), 27 January 2000, 42; M Shardlow, 'Wine Safety Move', *Countryman* (Perth), 3 February 2000, 3; Shardlow, 'Improved Safety', above n 5.

Employment Protection Minister John Kobelke.⁶⁷ This Code of Practice was revised and updated in 2008.⁶⁸ A much more publicly available code of practice is WorkCover NSW's publication *Wine Industry Code of Practice for Workplace Health and Safety*, published in 1995 (this is currently under review).⁶⁹ In that publication, a wide variety of topics applicable to the wine industry are canvassed, providing a useful source of guidance on safety and health issues for operators in the viticulture industry that includes safety issues relating to plant and machinery.⁷⁰

WorkSafe WA, although not specifically promoting a code of practice for the wine industry on their website, have provided a dedicated set of web pages entitled *Wine Industry Fact Sheet*.⁷¹ Those pages canvas induction training, access to wine fermentation tanks, confined space entry, electrical safety evacuation procedures, gas cylinders, guarding of grape crushers, and machinery hazards. More specific to the issues raised in this paper relating to tractors and attachments is the publication *A Handbook for Workplaces: Safe Use of Tractors with Attachments*, published in 2009.⁷²

A final practical measure often used by people in business (such as the wine industry) in order to review their safety and health practices, is to consult a checklist of health and safety items. In Western Australia, WorkSafe WA has published an *Agricultural Safety and Health Workbook*⁷³ to assist operators in the agricultural industry generally to comply with their legal obligations in relation to occupational safety and health. Associated with that workbook is a checklist that is freely available to assist operators in the viticulture industry to assess the type of hazards and risks associated with this industry, some of which are related to plant and machinery that are identified in this paper.⁷⁴

⁶⁷ J Kobelke, 'Code of Practice to Improve Wine Industry Safety' (Ministerial Media Statement, 27 August 2002).

⁶⁸ 'WIAWA Announces Release of Updated Code of Practice', *Daily Wine News* (online), 2 May 2008 <<http://www.winebiz.com.au/dwn/details.asp?id=1684>>. It appears that this code of practice is only made available to members of the Wine Industry Association.

⁶⁹ WorkCover NSW, *Wine Industry Code of Practice for Workplace Health and Safety* (1995) <http://www.workcover.nsw.gov.au/formspublications/publications/Documents/wine_industry_code_of_practice_0129.pdf>.

⁷⁰ It should be noted that WorkSafe WA promotes a code of practice entitled *Code of Practice: Safeguarding of Machinery and Plant* (2009) <http://www.commerce.wa.gov.au/WorkSafe/PDF/Codes_of_Practice/Safeguarding_of_machinery_and_plant.pdf>.

However, this document deals with machinery and plant generally and does not place any particular emphasis on agricultural machinery and plant.

⁷¹ (16 December 2009) <http://www.commerce.wa.gov.au/WorkSafe/Content/Industries/Agriculture_forestry_and_fish/Further_information_/Wine_industry_fact_sheet.html>.

⁷² WorkSafe WA, *A Handbook for Workplaces: Safe Use of Tractors with Attachments*, (Government of Western Australia, 1st ed, 2009), originally developed by WorkSafe Victoria.

⁷³ <http://www.commerce.wa.gov.au/WorkSafe/PDF/Guides/Agricultural_workboo.pdf>.

⁷⁴ <<http://www.commerce.wa.gov.au/WorkSafe/PDF/Forms/Worddocuments.doc>>.