

22 March 2013

Mr Michael Crandon MP  
Chair  
Finance and Administration Committee  
Parliament House  
George Street  
BRISBANE QLD 4000

Dear Mr Crandon

### **Operation of Queensland's Workers' Compensation Scheme - submission**

I refer to the above inquiry and provide a submission on behalf of the Australian Mines and Metals Association (AMMA).

#### **About AMMA**

AMMA is Australia's resource industry employer group. Our membership is diverse both in terms of geography and coverage of every resources sub-sector and servicing industry. Similarly, AMMA's influence in Queensland is comprehensive. Sixty of our more than 400 member companies are based in Queensland. Many more have active operations in the State.

AMMA members employ 50,000 workers in Queensland. This represents 70% of the State's total mining workforce. Between 2002 and 2012, mining employment in Queensland increased by 242% and the value of advanced major mining projects increased by 1799%.

AMMA has several consultants actively providing industry services to employers operating and involved with the construction of Queensland's four major LNG pipeline projects. During the peak construction demand – until 2016 – these projects are forecast to create around 40,000 new Queensland jobs.

#### **Overview of submission**

This submission:

- a. Outlines the general expectations of AMMA members regarding workers' compensation schemes, which accord substantially with the objectives of the *Workers' Compensation and Rehabilitation Act 2003* (the Act).
- b. Identifies matters regarding the nature of the resource industry, its workplaces and its workers, which should be considered in any examination of the operation of the Queensland scheme.



## Objects under ss 5 and 6 of the Act

AMMA confirms the importance of the statutory objectives of the Act, as stated in ss 5 and 6, including:

- a. s. 5(1) – a fundamental concern of resource industry employers is continuous improvement in workplace health and safety performance.
- b. s. 5(4)(a) – the statutory balance between providing fair and appropriate benefits and reasonable cost levels and compliance obligations must be sustainable.
- c. s. 5(4)(b) to (d) – statutory requirements regarding fair treatment by insurers, rehabilitation and return to work providers should be evidence-based and meet contemporary individual, community and industry expectations.
- d. s. 5(5) – the resource industry faces a variety of competitive challenges, including commodity prices, emerging competition, project delays, cost escalations and declining labour productivity (now nationally at 60% of its peak and at the lowest level in a generation). Accordingly, AMMA affirms the importance of a statutory acknowledgment that it is in Queensland's interests for industry to remain locally, nationally and internationally competitive.
- e. s. 6 – efficient administration of the scheme is an important factor in reducing compliance costs, and focusing on injury prevention and return to work.

## Performance of the existing scheme in meeting statutory objectives

### Encouraging improved health and safety performance by employers

In order to meet s. 5 objectives, the Act should be consistent with contemporary principles regarding risk and risk financing. Any amendments should ensure that premiums are reflective of the many and diverse employer efforts to ensure safe workplaces, and to facilitate effective rehabilitation and return to work.

### Industry competitiveness

In relation to s. 5(5), AMMA notes that:

- a. Employment arrangements within the resources industry can be intricate.
- b. All aspects of the industry are highly regulated by complex and often overlapping legislation.
- c. Workplaces, and the nature of work undertaken in the resource industry, often differ markedly from those of Queensland workers generally. See, for example, the **attached** article, R Guthrie and L Goldacre, "Workers Compensation Issues in the Oil and Gas Industry" (2006).

### Maintaining a balance

First, in relation to s. 5(4)(2), it is suggested that amendment of some definitions in the Act is necessary to ensure that the balance struck is appropriate:

- a. 'worker' (s. 11 and schedule 2);
- b. 'employer' (s. 30);
- c. 'event' (s. 31); and
- d. 'injury' (s. 32).

Clearer drafting and definitions consistent with the nature of contemporary work, workplaces and work arrangements would promote greater certainty as to the legislative intent and better meet the objectives of the scheme. This would result in significant reductions in both compliance burdens and premiums; that is, ensure 'reasonable cost levels for employers', and greater clarity for all users of the system.

Second, the committee's attention is drawn to s. 32(5)(a), excluding 'reasonable management action' from the definition of 'injury'. Information from AMMA members is that substantial resources must be directed to existing review and appeal processes when claims made on the basis of psychiatric injury. Amendments are necessary in two respects:

- a. Clearer and more specific drafting, rather than the broadly-worded and ambiguous 'reasonable management action'.
- b. A higher procedural threshold, requiring provision of medical evidence as to the particulars of the claim.

Therefore, AMMA recommends the amendment of statutory definitions as to:

- a. 'worker', 'employer', 'event' and 'injury'; and
- b. 'reasonable management action'.

Third, AMMA notes the suggestion made by QCOMP in its submission dated September 2012 as to an employer excess for 'medical expense only' claims that cost less than Queensland ordinary time earnings (QOTE). With some concern, AMMA notes the suggestion was then advanced in November 2012 under the heading, "Reducing red tape for employers".

In practice such a proposal would have the opposite effect. While it might appear to be cost-neutral for employers, the net effect would be to burden employers with the onerous implications of managing medical claims. For many AMMA members, this would be an undue regulatory burden and would not maintain an appropriate balance between benefits for injured workers and reasonable costs levels for employers.

### Protection of employer's interests in relation to claims for damages

In relation to proceedings for damages, AMMA members indicate that the Act should be amended in two further respects, to ensure consistency with section 5(4)(c) of the Act:

- a. Employers should be able to participate in all proceedings as of right.
- b. Clear legislative provision should allow employers to be awarded costs.

### **Comparison to scheme arrangements in other Australian jurisdictions**

In relation to ss 35 and 36 and journey claims, it is noted that the Act is out step with legislative schemes in other States. In those jurisdictions, the legislative approach is to limit the application of the scheme, in acknowledgement that generally liability for such injuries should be met in other ways, such as via motor vehicle accident insurance or personal injuries actions.

In this context also, consideration should be given to the nature of employment within the resource industry, including the large number of fly-in, fly-out and drive-in, drive-out workers. The Act should be consistent with contemporary work practices.

Therefore, AMMA recommends the amendment of ss 35 and 36 of the Act to:

- a. Exclude journey claims from the statutory workers' compensation scheme.
- b. Ensure consistency with contemporary work practices in the resource industry.

### **Further matter identified in BAQ submission**

A submission from the Bar Association of Queensland suggested that:

*The mining analogues of the WHSA must be amended to reflect the WHSA abolition of a right of action for damages for breach of statutory duty. The present require [sic] effects inequity between the rights of mining and non-mining employers. That requires urgent amendment. It is long overdue.*

As the matter raised by the BAQ is beyond the committee's terms of reference, AMMA did not consult its members about it, nor has it been addressed in this submission. However, if the committee were to examine the BAQ suggestion, AMMA would request an opportunity to provide additional evidence.

We would be pleased to discuss this submission further. Please contact Julie Copley, Policy Manager on (07) 3210 0313 or via email: [julie.copley@amma.org.au](mailto:julie.copley@amma.org.au).

Yours sincerely



**SCOTT BARKLAMB**  
Executive Director, Industry

# Workers Compensation Issues in the Oil and Gas Industry

**Dr Rob Guthrie and Lisa Goldacre**

School of Business Law

Curtin University

## Abstract

This article examines the provisions of the *Workers Compensation and Injury Management Act 1981* (WA) ('the Act') relevant to the oil and gas industry. The first part of the article outlines a brief history of oil and gas exploration in Australia and identifies working arrangements that are a distinguishing feature of the industry. The second part of the article sets out the criteria for determining who is a worker for the purpose of establishing a claim for compensation. In particular, the article will address issues that are relevant to oil and gas workers engaged as contractors, situated in remote offshore sea based floating locations and subject to fly-in/fly-out arrangements. The aim of this article is to raise awareness of specific issues arising under the Act for workers in the oil and gas industry. The article also identifies areas of risk in relation to employment arrangements and insurance coverage for oil and gas workers that may require attention by employers.

## History and features of the oil and gas industry in Australia

Oil and gas exploration activities in Australia are conducted by a number of small, medium and large companies, many of which operate on the international scene.<sup>1</sup> The oil and gas industry is often seen as a high-risk investment area.<sup>2</sup> Exploration is undertaken by the private sector in conjunction with State and Federal governments. State governments grant mining licenses and leases. The Federal Government is responsible for petroleum activities in Commonwealth waters. The Australian petroleum industry is entrepreneurial, innovative and has achieved significant success.

In 1953 the first significant flow of Australian oil was found at the Rough Range No. 1 well in the north west of Western Australia, although no commercial field developed from this find. In the late 1950s the Federal Government created a subsidy scheme which was active from 1957 to 1974 under the *Petroleum Search Subsidy Act 1957* (Cth) and which encouraged discovery of many onshore and offshore sedimentary basins in Australia.

The first commercial oil field in Australia was discovered at Moonie in Queensland in 1961. In 1964-65, important discoveries of oil were made at Barrow Island, Western Australia and oil and gas in northeast South Australia and the adjoining part of south west Queensland. Discovery of gas at Barracouta off the Gippsland Coast of Queensland led to exploration of Australia's extensive continental shelf. The huge gas fields of the North West Shelf of Western Australia first discovered in 1971 began a liquefied natural gas export project in 1989. The oil shortages of 1973 and 1979 led to

---

<sup>1</sup> This part of the paper is summarised from the paper by W. McKay, I. Lambert and S. Miyazaki, *An Overview of the Development of the Australian Mining Industry* (2000) Australian Bureau of Statistics <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/94713ad445ff1425ca25682000192af2/93136e734ff62aa2ca2569de00271b10!OpenDocument>> at 18 March 2006, and *An Overview for Investors* (2004) [http://www1.industry.gov.au/acreagereleases2004/Overview/o\\_page02.htm](http://www1.industry.gov.au/acreagereleases2004/Overview/o_page02.htm) at 18 March 2006.

<sup>2</sup> See generally M. T. Bradshaw, C. B. Foster, M. E. Fellows, D. C. Rowland (1999) 'Patterns of Discovery in Australian Oil and Gas Exploration' 97(24) *Oil & Gas Journal* 111 at 115-117.

significant increases in exploration expenditure.<sup>3</sup> Consequently, many new fields were discovered, especially in south west Queensland and the adjoining part of South Australia. Later petroleum exploration in the 1980s resulted in the discovery of large resources of natural gas.<sup>4</sup>

From 1983 petroleum was discovered in the Jabiru oil field in the Timor Sea, which after 1986 became Australia's first production project based on floating production, storage and off-loading technology. Woodside Consortium's \$1.37 billion Laminaria-Corallina oilfield development in the Timor Sea was completed in 1999. There have been continuing discoveries of both oil and gas in offshore Australia. About 95.7% of Australia's oil and 79.3% of gas production is from offshore resources located in Bass Strait, the North West Shelf (NWS) and the Timor Sea.

A common feature of mining exploration is that in its early stages it has required large workforces and consequently supporting infrastructures for those communities. For land-based oil and gas exploration this can include transport infrastructures such as roads, rail and pipelines, and social infrastructures such as schools, hospitals and recreation facilities. Governments have frequently made it a condition of granting exploration licences and leases that private sector oil and gas exploration companies provide these facilities for their workforces. Given that most exploration is, almost by definition, taking place in remote regions of Australia and in offshore locations, a number of features distinguish the oil and gas industry.

First, the industry engages a range of contractors to perform particular specialized work. Second, the industry operates in remote offshore sea-based floating locations. Third, the industry workforce has unique features that include fly-in/fly-out arrangements. Many companies have adopted fly-in/fly-out arrangements for various reasons which include the ability to attract a higher quality workforce to remote areas and the ability to control shift start-times of employees when on site and also to reduce absenteeism by providing accommodation close to the worksite.<sup>5</sup>

### **Modes of work in the oil and gas industry**

The oil and gas industry employs a huge range of expertise and in varied locations, from city office blocks to remote locations, including workers located on oil rigs and platforms. In order to take account of these complexities there are a number of ways in which workers are engaged. Traditional modes of employment include direct engagement of workers as employees. There will also be other modes of work, such as contracting between the producer or exploration company as principal, and other companies or entities as contractors who provide services to producer or exploration company. Other arrangements typically include the provision of a service by employees of a labour hire company. It should also be remembered that whilst the oil and gas industry is characterised by some very large participants, such as Woodside Petroleum Ltd, it also includes some small operations involved in exploration.

---

<sup>3</sup> See generally M. T. Bradshaw, C. B. Foster, M. E. Fellows, D. C. Rowland (1999) 'Search for Petroleum; Patterns of Discovery' 97(23) *Oil & Gas Journal* 37-44.

<sup>4</sup> See generally M. T. Bradshaw, C. B. Foster, M. E. Fellows, D. C. Rowland (1999) 'Patterns of Discovery in Australia Part 2' 97(24) *Oil & Gas Journal* 111-117.

<sup>5</sup> A.D.S. Gilles, H.W. Wu and S. J. Jones 'The increasing acceptance of fly-in/fly-out within the Australian mining industry', in *Resourcing the 21st Century*. Paper presented at the AusIMM Annual Conference, Ballarat, Victoria, March 1999) 87-95, cited in W. McKay, I. Lambert and S. Miyazaki, above n 1. See also M. Pinnock and D. Cliff *Working Time Arrangements in the Resources Sector in the 21st Century – The Employer Perspective* <[http://www.mishc.uq.edu.au/publications/DC\\_Managing\\_Paper.pdf](http://www.mishc.uq.edu.au/publications/DC_Managing_Paper.pdf)> at 18 March 2006 and R. Beach (2004) *Resource instability in the mining sector: Is fly in fly out the real culprit?* Brisbane Institute <[http://www.brisinst.org.au/resources/brisbane\\_institute\\_beach\\_mining.html](http://www.brisinst.org.au/resources/brisbane_institute_beach_mining.html)> at 18 March 2006.

## **Injury profile of the oil and gas industry in Australia**

Although the profile of the oil and gas industry indicates that its safety record has improved over time, it is often highlighted as a dangerous industry because of the sometimes spectacular incidents that give rise to injury. These include explosions, fires and helicopter crashes that often attract media attention.<sup>6</sup> However, this is not the overall picture of the industry. Australian oil and gas industry fatalities have not been numerous. There have been significant events such as the Longford disaster in Victoria, which caused death, injury and widespread disruption. This was a land-based incident. There have been only a small number of offshore platform incidents in the late 1980s, one involving a helicopter crash, remarkably without loss of life, and one explosion causing loss of life.<sup>7</sup> It must also be remembered that many of the workers engaged in the industry do not work on oil rigs and platforms but live on site or are situated at various head office locations in urban areas.

## **Features of the oil and gas industry particular to Western Australia**

The injury/accident data in relation to oil and gas operations in Western Australia is collected as part of the mining industry. Over the last decade, there has been a demonstrated decline in the accident rate in the mining industry. Some of this decline may be a statistical aberration due to the heavy contracting out of labour in the industry. Contract labour accident statistics are not collected as part of the workers compensation system. There is still a tendency for the mining industry to feature heavily in relation to workplace fatalities, however these fatalities are almost always related to below ground level mineral extraction and not directly related to oil and gas production.

This article will not comment on the various legislative requirements in relation to workplace health and safety that arise under Western Australian legislation such as the *Occupational Safety and Health Act 1984* or the *Mines Safety and Inspection Act 1994*. Obviously, the significant obligations arising under these Acts affect the rate of injury occurring in the oil and gas industry. This article focuses on the circumstances in which compensation is to be paid to injured oil and gas workers and the issues peculiar to those workers.

---

<sup>6</sup> See accident data at *Workers Compensation Statistical Report 1999/00 – 2002/03* (2004) WorkCover Western Australia <<http://www.workcover.wa.gov.au/NR/rdonlyres/530DF07B-C654-409E-B9B0-2C5AE367E77B/0/Report9900to0203.pdf>> at 29 May 2006. Australian oil and gas operations have not been seriously plagued with disasters, but there have been some significant incidents on land and at sea. See A. Hopkins *Lessons From Longford: The Esso Gas Plant Explosion* (2000) and W. Marshall (1998) *Safety inspections slashed at Australian gas plant* <<http://www.wsws.org/news/1998/oct1998/gas-o13.shtml>> at 18 March 2006, Anonymous 'Longford gas plant blast effects still felt' (1998) 96(50) *Oil & Gas Journal* 34-37, in relation to the Longford explosion in Victoria. An earlier incident had occurred in the Bass Strait in 1986 involving Esso (reported extensively in the *Financial Review*) where one worker was killed and another severely burnt in a fire – See P. Gill, 'Esso/BHP Platform Safety Lapses Alleged', *Financial Review*, 22 March 1988, 8; P. Gill, 'Police Raid Esso after Big Rig Death', *Financial Review*, 8 May 1989, 1; and P. Gill and M. Lynch, 'Esso Faces Govt Wrath over Rig Fire', *Financial Review*, 21 June 1989, 1. In relation to helicopter crashes there are few recorded crashes in relation to Australian operations; see AP Reuters 'Copter Crashes Off Australia', *The New York Times*, 30 December 1986, 6, which reported that 17 people had survived a crash when the helicopter was carrying workers from the Woodside Offshore Petroleum North Rankin oil rig. *The Age*, 23 Mar 1968 reported - 'Copter blades cut down 10 press men. Two journalists were killed and eight others were injured, three critically, when a helicopter crash landed on the Barracouta natural gas platform 15 miles off-shore from Sale yesterday.' <[http://150.theage.com.au/view\\_bestofarticle.asp?straction=update&inttype=1&intid=967](http://150.theage.com.au/view_bestofarticle.asp?straction=update&inttype=1&intid=967)> at 18 March 2006. There have been some significant disasters in other jurisdictions such as the Piper Alpha disaster in the North Sea *DOCEP Resources Safety - Piper Alpha Incident* <[http://www.docep.wa.gov.au/resourcessafety/Sections/Petroleum\\_Hazard\\_Facilities/Legislation\\_and\\_policy/Piper\\_Alpha\\_Incident.html](http://www.docep.wa.gov.au/resourcessafety/Sections/Petroleum_Hazard_Facilities/Legislation_and_policy/Piper_Alpha_Incident.html)> at 18 March 2006. Helicopter crashes in connection with oil rigs and platforms are not uncommon. For example; 'Oil Rig Copters Crash', *Boston Globe*, 4 September 1980, 1 (three persons injured in the Gulf of Mexico); AP Reuters '2 Die, 7 Hurt as Copter Crashed into Gulf Oil Rig', *New York Times*, 25 October 1986, 16; 'Too Early for clue to Tragedy; Azizan', *Business Times Kuala Lumpur*, 4 December 1995, 20 (2 die in helicopter crash near Samarang oil rig); I. Shishlov, 'One Killed, three missing in Iranian oil helicopter crash', *ITAR – TASS News Wire New York*, 11 May 2002, 1, (1 killed and 5 passengers injured in crash into Gulf); 'Flights suspended after fatal helicopter crash', (2002) 27(28) *Harts European Offshore Petroleum*, 1.

<sup>7</sup> See footnote 6 above.

## Issues arising under the Act for claims made by workers in the oil and gas industry

### Who is a worker entitled to make a claim under the Act?

It is a requirement under the Act that employers insure all *workers* in their employ.<sup>8</sup> Insurance premiums are in general terms calculated having regard to the nature of the industry and the number of workers engaged by that employer. Another factor taken into account is the employer's safety record.

It follows that it is important to establish who is a *worker* for the purposes of the Act. Section 5 of the Act defines, among other things, who is a worker for the purposes of the Act. A worker includes, a person under a *contract of service*; a casual worker who is employed in the employer's trade or business; a person covered by an industrial award or industrial agreement; and a person employed under a *contract for service* whose remuneration, by whatever means, is in substance for their manual labour or services.

It can be seen that the definition of worker is broad, and covers in the first instance those people who are normally regarded as employees, persons engaged under a contract of service. The term contract of service has been subject to considerable litigation. The courts are frequently asked to determine whether a claimant is an employee or an independent contractor. The High Court in *Stevens v. Brodribb Sawmilling Co. Pty Ltd*<sup>9</sup> determined that, in order to establish whether a person was an employee, it was necessary to consider a number of indicators. Those indicators are generally used to determine the level of control that the purported employer has over the employee. Some of the determinants of the level of control were noted by the High Court in *Stevens* to include the method of remuneration and the hours of work. Other indicators include the specific terms of the contract, and whether one of the parties supplied materials and equipment. The Court also found that the right to hire and fire, the provision of uniforms and the deduction of taxation should be considered in assessing the level of control.

In *Stevens*, it was observed that even if a person is engaged under a contract stating that a person is to be regarded as an independent contractor, that provision may be disregarded where other factors point to the level of control being sufficient to amount to a contract of service. In other words, even where the contract says that a person is an independent contractor, the courts may find on the facts presented that the person is an employee.

More recently, the High Court reconsidered its decision in *Stevens* in a case that has some impact for the oil and gas industry and in particular, the engagement of workers such as engineers. In *Hollis v Vabu Pty Ltd*,<sup>10</sup> the Court considered the work practices and engagement procedures of Vabu Pty Ltd. Vabu Pty Ltd was a company involved in the provision of courier services. Previous decisions involving the same company had determined that the couriers engaged by it were to be regarded as independent contractors.<sup>11</sup> However, the High Court in *Hollis*, consistent with its decision in *Stevens*, held that the couriers were employees, not independent contractors. The Court took this view based largely on the fact that the couriers were dependent on the company for their supply of work and were given direction sufficient to amount to a level of control that would satisfy the requirements of an employer-employee relationship, notwithstanding the fact that the couriers owned their own equipment.

---

<sup>8</sup> See section 160 of the Act.

<sup>9</sup> (1986) 63 ALR 513.

<sup>10</sup> [2001] HCA 44.

<sup>11</sup> See *Vabu Pty Ltd v Commissioner of Taxation* (1995) 30 ATR 303; overturned on appeal by the full court of the Supreme Court of NSW *Vabu Pty Ltd v FCT* (1996) 33 ATR 537.



The importance of *Vabu* in the oil and gas sphere is that, despite the best efforts of some companies to contract out labour so as to reduce exposure to employment laws and regulations, without a change in the level of control exerted over the worker, the courts are still likely to find the employer-employee relationship exists. The enduring significance of *Stevens* and now *Vabu*, is that it is the Court which determines the status of the relationship and that the contractual terms are only one factor in that consideration.

#### *Risk associated with engaging oil and gas industry workers as independent contractors*

In the oil and gas industry a range of workers will be engaged. Many oil and gas businesses seek to engage contractors as a normal part of business practice. Establishing whether that contractor has any rights under the Act is critical. One of the chief incentives for contracting out labour is to avoid employment on-costs such as workers compensation insurance. *Hollis* and *Stevens* suggest that some care needs to be taken when embarking on this course.

Significantly the Act also provides an extended definition of worker to cover persons who may not be regarded as working under a contract of service, but who are working under a *contract for service* where they are providing 'in substance their manual labour or services'.<sup>12</sup> This is often referred to as the *extended definition* of worker for the purposes of the Act. In most instances, workers such as engineers are providing their manual labour in the broad sense, or at least their skills and services they may not be providing materials and equipment. In other words, even if a court were to determine that the level of control over such a person was not sufficient to establish a contract of service, it is almost certain that for the purposes of the Act many contracted workers such as engineers would be regarded as workers within the extended definition.

The implications of the application of the extended definition are that oil and gas businesses may not be properly insured for workers compensation purposes if they do not include in their premium calculations contract workers who are not providing materials and equipment as part of their contract and who because they essentially supply in substance their labour and skills would fall within the extended definition of worker. More importantly, if such a worker was to make a claim, the end result might be that the company has to pay the claim out of its own resources or at least pay considerable litigation costs in defending a claim.

#### *Oil and gas producers as principal contractors*

The use of independent contractors to provide services may also result in the principal contractor, the oil and gas producer being 'deemed' an employer under the Act and therefore liable to pay workers compensation to an injured contractor.

Under section 175 of the Act a worker may bring a claim against their employer, or if the employer is engaged by a principal contractor the worker may also bring the claim against that principal if the injury to the worker is sustained on the principal's premises<sup>13</sup> whilst carrying out work in the trade or business<sup>14</sup> of the principal. The principal in turn has a

---

<sup>12</sup> Section 5, and for a full discussion of the operation of this section *Australian Institute of Management v Rossi* [2004] WASCA 302; *Summit Homes v Lucev* (1996) 16 WAR 566. *Humberstone v Northern Timber Mills* (1949) 79 CLR 389; *Marshall v Whittaker's Building Supply Co* (1963) 109 CLR 210; *Tolchard v Mansard Homes* (WASC, SCL 4522, 26 May 1982, unreported); *Multi Develop & Construct WA Pty Ltd v Pearce* (CM(WA), 14/00, 10 November 2000, unreported) and *La Macchia v Spera* (1980) WAR 224.

<sup>13</sup> Section 175(7) requires that the injury that is the subject of an application under s 175 must occur in respect of premises on which the principal has undertaken work. In *Jones v Wesfarmers Ltd* [2003] WASCA 225, the Supreme Court considered the phrase

right to recover any compensation paid to the injured worker from the employer. For the purposes of the worker's claim, the principal is deemed to be the employer. Businesses which operate by engaging contractors to perform work and who in turn engage workers need to be aware of the requirement to contractually protect themselves from claims by their contractor's workers. This may be done by indemnity<sup>15</sup> clauses which require, among other things, that the employer provide a current certificate of insurance for all workers to the principal before work commences. It should be noted that indemnity clauses are often the subject of litigation and the contractual terms are heavily scrutinised by the courts.

Given the complexity of work arrangements within the oil and gas industry the question of the liability of a principal contractor is highly relevant. As noted above, the range of tasks which are to be performed within the industry are huge and no single organisation is likely to be able to muster all the expertise to carry out all necessary functions. The use of contractors and contracting entities will be a significant part of the oil and gas industry. Importantly, as from November 2005 section 175AA of the Act makes it *unlawful for a principal to insist that a worker will only be engaged if they perform their work through an incorporated entity*. The amendment thwarts attempts by employers or principals who seek to avoid insurance obligations under the Act by insisting on incorporation of workers who would otherwise supply services as a sole trader or partnership.

#### *Working directors in the oil and gas industry*

Some oil and gas operations will be small and the proprietors may choose to establish their own business by making themselves a working director of a small company. In the past this style of business has been used as a vehicle to obtain contract work where many principal contract engineering firms require a contractor to be incorporated before they are engaged. As noted above, section 175AA now prevents an employer or principal from insisting upon incorporation as a condition of engagement. Nevertheless many small businesses operate on this basis by choice as it may have taxation advantages.<sup>16</sup>

The importance of structuring arrangements so as to be sure to obtain insurance coverage is illustrated in *Alana Holdings Pty Ltd v Findlay* where it was held that a director could not recover compensation as she was not engaged by the company at the time of the injury in the capacity of a *worker*. In other words, even though Alana Holdings Pty Ltd had taken out insurance to cover its working directors, the directors were effectively not engaged by the company in the capacity of workers, but had, because of various trust arrangements been effectively engaged and paid out of a trust as

---

'in respect of premises' holding that there must be demonstrated a real connection or relationship between the premises and the injury (see Malcolm CJ at [52]–[53] and Parker J at [62]–[63]). Malcolm CJ held that a chattel may also constitute premises.

<sup>14</sup> In *Marsden v Unimin Australia Ltd* [2004] WASCA 143 the Supreme Court commented on the meaning of this phrase generally adopting the observations of Windeyer J in *Frauenfelder v Reid* (1963) 109 CLR 42 at 50 where it was noted that a similar phrase 'work undertaken by the principal' had been interpreted to include not only the work which the principal has contracted to do but also any work the doing of which is part and parcel of the business undertaken by the principal. Justice Windeyer considered this to be a question of fact. In *Marsden*, a case which could be relevant to the oil and gas industry, on the facts, it was held that the maintenance of the plant and equipment of a mine site, including the accommodation, was part and parcel of the trade or business of the operation of a mine site.

<sup>15</sup> Indemnity clauses generally involve making good the loss suffered by one person as a consequence of the act or omission (negligence) of another. In practice this means that often a principal will require a contractor to indemnify the principal against any claims which arise out of particular work or construction arrangement. For example *Jennings Constructions Pty Ltd v Workers Rehabilitation and Compensation Commission* [1998] SASC 6748 *Rehabilitation & Compensation Corporation v J R Engineering Service Pty Ltd and Western Mining Corporation (Olympic Dam Operations) Pty Ltd and Ball* (1995) 180 LSJS 276; *Findlay v Westfield Development Corporation Ltd* [1972] 1 NSWLR 422; *Employers' Mutual Indemnity Association Ltd v K B Hutcherson Pty Ltd* [1976] 1 NSWLR 103; *Mahony v J Kruschich* (1985) 156 CLR 527; *Unsworth v Commissioner for Railways* (1958) 101 CLR 73.

<sup>16</sup> (unreported CM (WA) 87/99 8 February 2000).

workers of the trust. Section 10A of the Act was amended in November 2005 to make special provision to ensure some certainty in insurance coverage for working directors. It now effectively provides that working directors may seek a declaration from an insurer as to whether they are covered. If the insurer accepts the payment of insurance on the basis that the director is a worker then the insurer cannot later deny the claim on this basis, so long as the relationship between the company and director has not changed.

### **Workers based at remote offshore sea based floating locations**

#### *Jurisdictional issues - does the Act apply to these workers?*

One specific issue which arises in relation to the location of oil rigs and platforms is the question of legal jurisdiction in event of claims or disputes. This article is written on the assumption that the Western Australian workers compensation legislation will apply to claims made by offshore workers. Prior to December 2004, section 15 of the Act generally limited claims to workers who were employed under a contract of employment entered into within Western Australia. As a result a worker who was injured offshore but who had entered into the contract of employment in Western Australia was entitled to claim under the Act. This protection might be particularly useful if the worker was engaged in work outside Western Australia or other Australian jurisdictions where the entitlement for a worker under other legislation might not be as generous as under the Act. The Act therefore had extraterritorial reach, that is, it was within the power of the Western Australian Government to legislate to protect workers offshore so long as they had sufficient connection with the Western Australian jurisdiction.

Section 15 of the Act was repealed in December 2004 and does not appear to have been replaced with any specific territorial limitations or extensions. It may be that the definition of worker discussed above under section 5 still allows coverage for workers offshore under the Western Australian legislation on the grounds that the concept of worker is grounded in contract law. If this is the case the courts usually look to where the contract of employment was entered into to decide the issue of jurisdiction. However it is likely that the High Court decision in *John Pfeiffer Pty Ltd v Rogerson*<sup>17</sup> will apply to situations where accidents occur outside of Western Australia and a tortious as opposed to statutory claim is made. In that case the worker, Rogerson, was injured whilst working in New South Wales. The employer had its principal office in the Australian Capital Territory and Rogerson was also resident in ACT, where he had been employed to work as a carpenter. When Rogerson was injured he sued the employer in the ACT and the question arose as to whether this was the appropriate jurisdiction in which to bring the claim. The High Court held that the law of the place of the commission of the tort (where the injury occurred) is the law to be applied when determining questions of substance. In other words *John Pfeiffer Pty Ltd v Rogerson* has the effect that where the injury takes place within Australia, in the absence of express provisions to the contrary, the jurisdiction to be applied is the jurisdiction of the State in which the injury occurred. This is referred to as the *lex loci delicti*.

*Rogerson* does not address the issue of what law applies where the accident occurs outside of Australia. However, there is some recent authority which suggests the rule in *Rogerson* has some application in respect of offshore or international accidents. In *Neilson v Overseas Projects Corporation of Victoria Ltd*<sup>18</sup> the appellant issued proceeding in the Western Australian Supreme Court for damages for injuries she sustained whilst she was resident in China. The High Court ultimately held that the principle of *lex loci delicti* was relevant and that the law of China should be applied. *Neilson*

---

<sup>17</sup> (2000) 172 ALR 625.

<sup>18</sup> (2005) 79 ALJR 1736.

was referred to in *O'Driscoll v J Ray McDermott SA*.<sup>19</sup> In *O'Driscoll* the worker entered into a contract of employment in Singapore and was working on a barge in Indonesian waters when he was injured. He bought a claim for damages for breach of an implied term of contract to provide a safe place of work. The Supreme Court of Western Australia referred to *Neilson* but held that the law of Singapore applied because the appellant had sued the respondent in contract and the contract had been made in Singapore. A different result might have been reached if the action had been one in tort for breach of duty of care, because applying the *lex loci delicti* principle the jurisdiction would have been Indonesia. It is likely that these particular issues are of considerable interest in the oil and gas industry given that most exploration and production takes place in offshore locations in ambiguous jurisdictional circumstances.

The question arises, how best to deal with such ambiguities? One remedy is for the provision of alternative forms of insurance for workers which apply regardless of jurisdiction, with the worker and employer agreeing to apply the particular terms of that insurance. Alternatively, the parties may nominate in the contract of employment which legal jurisdiction will apply. In such cases this would amount to workers contracting to obtain benefits under an insurance policy rather than contracting out of the Act. The latter is unlawful, so that where it is established that the worker did in fact have rights under the Act these would prevail over contractual rights agreed to between the employer and worker.

*When are workers 'working' for the purpose of the Act?*

Broadly speaking, the Act covers two forms of injury. First, the Act covers 'personal injury by accident arising out of or in the course of the employment, or whilst the worker is acting under the employer's instructions'.<sup>20</sup> This limb of the definition of injury provides coverage for workers who can establish that the injury from which they suffer arose out of an unexpected or unintended event, which brought about a sudden physiological change for the worse. In simple terms, injury by accident occurs where a specific traumatic event can be identified, such as a bruise, a bump, a cut or a broken bone. Such an injury must occur whilst the worker is actively engaged in their work activity, or when the worker is engaged in some activity which is incidental to the employment. The phrase 'in the course of the employment'<sup>21</sup> has been determined by the courts to cover a range of circumstances. For instance, it covers situations where the employer has encouraged, sponsored or promoted a particular activity which may not even be directly related to the business of the employer, but which is beneficial to employers and workers in terms of morale, corporate promotion or public relations. It will also include such events as Christmas parties, sporting events and staff retreats.<sup>22</sup>

The sea based floating locations in the oil and gas industry give rise to a number of legal issues in this context. One feature of the floating locations is that workers are confined to oil rigs or platforms not just for the purposes of work but also for recreation and for all other purposes. As a consequence, a range of activities which take place on oil rigs and platforms are not work activities, although they may be regarded as part of the employment relationship. The High Court decision in relation to the scope of employment in relation to workers compensation matters which is significant

---

<sup>19</sup> [2006] WASCA 25.

<sup>20</sup> Section 5 of the Act.

<sup>21</sup> Section 5 definition of injury.

<sup>22</sup> What is 'in the course of the employment' will vary having regard to the facts and circumstances of the case, and will depend on the nature of the employer's business and the employer's relationship with the worker. Given the breadth of the concept it is not surprising that there is now a large volume of case authority which supports claims by workers as being in the course of their employment when they are engaged in employer sponsored or encouraged events. For example in *Woolmar v Travelodge Australia Ltd* (1975) 26 FLR 249 a worker who was injured at a Christmas party put on by the employer was entitled to compensation as the injuries had been caused whilst she was in the course of her employment. The employer had invited and encouraged the workers to attend although there was no compulsion to do so. This principle would apply generally to most employer sponsored events where workers are encouraged to attend.

in this respect is *Hatzimanolis v ANI Corp Ltd*.<sup>23</sup> In that case, the worker had sustained injuries whilst visiting a scenic area in the Pilbara region of Western Australia in the company of his supervisor and in vehicles provided by the employer. The High Court found that the expression ‘*arising out of or in the course of the employment*’ included intervals or interludes which occur in the course of employment, where the employer had induced or encouraged the employee to spend that interval or interlude at a particular place or in a particular way. After conducting an extensive survey of the authorities Mason CJ, Deane, Dawson and McHugh JJ noted that since *Commonwealth v Oliver*.<sup>24</sup> and in the cases which followed, an interval or interlude in an overall period or episode of work will ordinarily be seen as part of the course of the employment. Toohey J at 491 commented:

But when regard is had to the terms of the appellant’s employment, what was said at the time of the engagement, the location where he was working, the hours and days worked, the use made of the respondent’s vehicles for the convenience of its employees and the role of the respondent’s supervisor in organising the trip to Wittenoom Gorge for the appellant and his fellow employees, the conclusion is inevitable that the appellant was, at the time of the accident, doing something which was ‘reasonably ... authorised to do in order to carry out his duties’, that is, an activity which the respondent saw as making the working conditions more attractive than they otherwise would be.

Applying this principle to the situation of workers who are engaged on oil rigs or platforms it is possible to assert that workers in these circumstances will be in the course of their employment for the whole period in which they are residing on the rig or platform notwithstanding that they may not actively be working. Based on *Hatzimanolis v ANI Corp Ltd* workers would be in the course of their employment during periods of leisure, ablutions and in fact whilst asleep.<sup>25</sup>

#### *Do work activities include acts undertaken in emergencies?*

It is natural that in the course of activities on oil and gas platforms there will be emergency circumstances. This might include emergencies caused by mechanical breakdowns, fire or even explosions and helicopter crashes. It might be necessary for a worker to come to the aid of another in such circumstance and in turn suffer injury. *McKenzie v William Holyman and Sons Pty Ltd*<sup>26</sup> establishes the principle that a worker who is injured whilst acting in the course of

---

<sup>23</sup> (1992) 173 CLR 473; 106 ALR 611.

<sup>24</sup> (1962) 107 CLR 353.

<sup>25</sup> See also Dixon J in the case of *Henderson v Commissioner of Railways (WA)* (1937) 58 CLR 281 293–95. See also *Gagliardi v Oreskovich* (1979) 1 WCR (WA) 46 where a worker sustained injuries when he fell in the shower at an accommodation camp arranged for him by the first respondent. It was held that the circumstances were within the range of cases described as ‘camping cases’ and that the injury sustained in the course of the employment. Compare this result with *Napier v MRSA Earthmoving Contractors* (1987) 8 WCR(WA) 269 where the WA Workers Compensation Board considered the above authorities and found that a worker, following a pre-Christmas party and in a state of intoxication, was burnt to death when he went to bed with a cigarette and fell asleep. The Board considered that in line with the above authorities the deceased had taken himself outside the course of his employment. Likewise support for the proposition that workers on oil rigs and platforms will be covered under the Act where injuries occur in non work circumstances can be gained from *Carruthers v Metropolitan Meat Industry Commissioner* (1938) 38 SR (NSW) 116 where Jordan CJ held that a worker was entitled to compensation when he sustained injury whilst walking from the shower to a drying room. It was emphasised in *Carruthers* that where the employer provides special facilities on the premises and encourages the employees to use those facilities and in fact the facilities were being used in a permitted manner, then any injury arising would occur in the course of the employment. See also Barwick CJ dealing with a case of worker who lived in a van provided by his employer whilst engaged in the construction of a railway, in *Danvers v Commissioner for Railways (NSW)* (1969 122 CLR 529). This might also extend to workers who are injured whilst engaged on union business as in *Bignell v Hammersley Iron Pty Ltd* (1989) 10 WCR(WA) 48 where the WA Workers Compensation Board considered an application by a worker who had attended a union meeting and following the meeting sustained injuries when he fell from his motorcycle. Citing a number of authorities the WA Workers Compensation Board found that the worker was entitled to compensation payments. Although the contrary result occurred in *Re Kennedy and Aust Telecommunications Commission* (1983) 5 ALD 293 where the worker was held not to be in the course of his employment whilst attending a union meeting pursuant to his interest as a union member. Arguably if the union meeting takes place on an oil rig and is related to work matters it could be regarded as being in course of the employment.

<sup>26</sup> (1939) 61 CLR 584, which was noted in *Blacktown City Council v Smith* (NSWSC, 40807/95, 12 December 1996, unreported). In *Blacktown* the workers’ place of employment was an office on the floor of a building on which two other offices were located. These

emergency at work, performing activities not necessarily part of his normal duties will be entitled to compensation. In that case Latham CJ at 591 said:

Without attempting to lay down an exhaustive rule, I think it may be said, consistently with all the authorities that, if the act out of which the injury arose is sufficiently connected with the business of the employer to entitle the employer to direct the particular employee to do the act in question if the emergency had arisen in the presence of the employer, then the fact that the act is done voluntarily by the employee without any order or direction from the employer does not remove the act from the course of employment of the employee.

Support for emergency actions in case of fire and explosion on an oil rig can be found in *Hayes v Hordern*<sup>27</sup> where a worker was held to be acting in the course of his employment when attempting to save his employer's property and in doing so sustained injury. In *Rodgers v Marshall*<sup>28</sup> a tractor driver was held to be in the course of his employment in attempting to put out a fire even though this was not his normal duty.<sup>29</sup>

The second form of injury covered by the Act relates to gradual onset conditions, usually regarded as *disease* conditions. The Act requires that the employment be a significant but not the only contributing factor to the disease. This means that workers in the Oil and Gas industry may have claims where they develop a gradual onset condition contributed to by work. This can include such conditions as so-called repetition strain or over-use conditions, stress related conditions<sup>30</sup> and conditions developed through the inhalation of fumes and gases etc.

*Can the very structure of a workplace contribute to a worker's injury?*

The very nature of the physical environment may be enough for a court to find that the worker's injury is materially contributed to by the employment, even when the injury is related to a pre-existing condition. Thus in *Smith v Australian Woollen Mills Ltd*<sup>31</sup> the High Court considered the case of a worker who sustained injuries from a fall which occurred because of the worker's pre-existing, unrelated diabetic condition. At 515–16 the Court commented:

We think that if an additional element or consideration is needed before it can be said that a workman's injury arises out of his employment when the injury is occasioned by his falling, through causes personal to himself, against some physical object where he is at work, that additional element or consideration is to be found, not necessarily in risks of injury inherent in the place, but also in the character of the thing, physical contact with which causes the injury. If the workman's fall brings him into contact with something which, like plant or machinery, is peculiar to the work or occupation, and is not common both to industrial and private life, then the reason for his suffering includes the important circumstance that but for doing the particular piece of work which he was in fact performing he would not have experienced that particular sort of injury. We think that the reasoning disclosed by the citations

---

offices were unconnected. The worker heard a woman scream in a nearby office and ran out of her office to investigate. In the course of her investigations she observed that the receptionist in the adjoining office was being assaulted by a man. The worker ran into the office and in an attempt to prevent the assault she was thrown to the ground and kicked. Nevertheless despite differences to McKenzie the court held that the worker's injuries were sustained in the course of her employment.

<sup>27</sup> (1927) 44 WN (NSW) 63.

<sup>28</sup> (1969) 43 WCR(NSW) 119.

<sup>29</sup> See by contrast *Drury v Industrial Roofing Contractors Pty Ltd* (1979) 1 WCR (WA) 30 where a worker was found not to have been in the course of his employment when he alerted a truck driver to the fact that the load carried by the truck was unsafe but in addition assisted the truck driver in rearranging the load and in doing so sustained injury to his fingers. It was found that although the worker's action in assisting the driver was understandable and indeed laudable it was not in any way serving the interests of the employer. Likewise in *Graham v Davies Bros* (1927) 1 WCR(NSW) 271 where the New South Wales Workers Compensation Commission took a less sympathetic view to a worker who assisted in extinguishing a fire on a day (Sunday) when the worker was not normally expected to work. In *Ostergaard v MacDiarmid* (1959) 33 WCR(NSW) 211 a taxi driver was held not to be in the course of his employment when he assisted a driver who was trapped in a car and in doing so sustained injuries to his fingers.

<sup>30</sup> Special conditions apply to stress claims. Space does not permit a full discussion of stress claims.

<sup>31</sup> (1933) 50 CLR 504.

we have made from Lord Sumner (1917) AC at 372, Lord Haldane; (1924) AC at 308 and Lord Atkin (1933) AC at 676–77 requires the conclusion that, because the form, nature and extent of the injury sustained when the appellant fell were determined by a characteristic feature of the premises where he was obliged to work, a feature, in this case, characteristic of the conditions of employment and not to be found in ordinary life, the employment materially contributed to the injury, which accordingly arose out of it.

On this reasoning, even where a worker might fall or collapse due to a pre-existing condition, if the injury is peculiar to the physical circumstances (such as the location of machinery and tools, etc.) of the oil rig or platform, then the worker would be covered by the Act as the circumstances would arise out of the employment.

### **Fly-in/fly-out employment arrangements**

As discussed, gas and oil exploration takes place in remote regions of Australia and in off-shore locations based on floating production. In relation to those workers engaged on a fly-in/fly-out basis for remote land base locations, the comments made at paragraph 2.2 will apply equally to those workers. This part of the article considers the particular issues raised by fly-in/fly-out arrangements for all remote locations, whether land or sea based.

In most cases, oil rigs and platforms are accessed by helicopter. It is often the case that workers remain on the rig or platform for an extended period – usually 3 or 4 weeks with one week off for rest. There may be other arrangements, but in general the industry is characterised by the constant movement of workforce and goods to and from the oil rig or platform and other remote land based sites. As noted above, the cases support the proposition that the breadth of the concept ‘in the course of the employment’ has a particularly wide application in the oil and gas industry. It is possible to assert that workers are in the course of their employment for almost the entire period in which they are present on an oil rig or platform or other remote location.

### *Workers ‘on-call’ or ‘standby’*

In some cases, workers are on call so as to be on hand for specific tasks to attend to at a remote location. Often workers will be considered to be ‘in the course of their employment’ whilst on call. In *Rowe v Flinders Medical Centre*<sup>32</sup> the South Australian Industrial Court considered whether a worker was entitled to compensation whilst *on call* when the worker sustained injuries at home. The Court found that it was unnecessary for the claimant to establish any causal connection between the work of the worker and the activity upon which she was engaged at the precise moment she sustained injury. The Court held that because the worker was on call she was in the course of her employment. In the seemingly unrelated industry of banking in the case of *Commonwealth Bank of Australia v Wark*<sup>33</sup> the claimant was employed as a bank officer. She was rostered on duty as a member of one of the Commonwealth Bank’s automatic teller machine (ATM) repair teams. While on call she carried a pager and was required, within a specified time of receiving notice of a breakdown to attend the machine and repair it. Whilst at home in her kitchen, she injured her finger at a time when she was rostered on call. Barbour SM of the Administrative Appeals Tribunal found at 701:

These matters, the ‘general nature, circumstances and conditions’ of Ms Wark’s on-call employment, lead me to the conclusion that the entire on-call period was an overall period of work, as opposed to discrete periods of work punctuated by intervals. This approach is supported by the artificiality of any attempt to divide the on-call period. If, for example, Ms Wark had answered a page, and then shopped in a department store on her way home, being paged again while she was there, it would be an artificial

---

<sup>32</sup> (1979) 45 (Pt 2) SAIR 285.

<sup>33</sup> (1995) 37 ALD 697.

exercise to attempt to divide those circumstances between periods of work and intervals between work rather than regarding the whole on-call time as one period of work.

Barbour SM relied principally on a reformulation of principles in *Hatzimanolis*, namely that the employer encouraged or induced her (or perhaps even required her), to spend the time on-call, between periods of actual work, in a manner that was not inconsistent with her being available to service ATMs. This finding was supported by the employer's payment of an on-call allowance, the issuing of a pager, and the use of a roster. Oil and gas industry workers who are on call on a fly-in/fly-out basis would also be in a similar situation and would in all likelihood be in the course of their employment whilst at home awaiting notification.

#### *Travel to and from the place of work*

A further extension of the principles outlined above in relation to the scope of the employment will occur in relation to the issue of travel to and from the place of work. Section 19 of the Act excludes claims by workers traveling to and from work, but includes travel claims where the travel is at the employers request or is authorised by the employer. The latter is clearly the case in relation to travel to and from an oil rig or remote location and there seems little doubt that any accident in transit would be in the course of the employment. It is also likely, based on the authorities above, that workers would be covered for the preliminary travel to the rig or platform or other remote land-based location. This would include air or land travel to a helicopter for transit to a rig or platform. This probably means that as soon as a worker commences a journey to the airport or helicopter they are in the course of their employment.

#### **Conclusions**

This article has detailed a number of issues of relevance to the oil and gas industry. First, the industry must, by reason of its diverse nature and locations, engage a range of contractors to perform particular specialized work. The provisions of the Act, particularly the recent amendments, may place constraints on the method of engagement of some workers. The provisions may have the effect of deeming the oil or gas company an employer for the purpose of the Act and as such, liable to pay compensation to injured contractors. Further, a principal is no longer able to insist on incorporation as a pre-requisite for the supply of work. For smaller operators in the industry, the relief now provided in section 10A allows some certainty in relation to insurance coverage for working directors. It is recommended that businesses involved in the oil and gas industry undertake a review of current and proposed contractual arrangements with independent contractors to determine whether the issues raised in this article regarding the engagement of workers as independent contractors require attention.

Second, in relation to remote offshore sea based floating locations a number of key issues arise, including the threshold jurisdictional issue in relation to what law will apply to injuries suffered by workers offshore. This is a complex area and despite the recent decisions of the High Court, there is unlikely to be any clear cut answer to the problem of injuries to workers engaged in offshore operations. Contractual terms and insurance arrangements need to be carefully considered to provide certainty and reduce the risk of costly litigation.

Third, the fly-in/fly-out arrangements give rise to several issues relating to the scope of employment. It is safe to assert that the scope of employment for workers on oil rigs and platforms and other remote land based locations is very broad. In all probability it includes coverage from the time the workers commence a journey to the place of employment until they return. It will also include almost all time periods in between including intervals, standby leisure time and social



engagements. This raises insurance coverage issues and in practical terms means that this industry requires more extensive coverage than most industries.

