Enforcing Upstream: Australian Health and Safety Inspectors and Upstream Duty Holders

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The ‘new style’ occupational health and safety legislation implemented in Australia from the late 1970s changed the character of OHS legal obligations, establishing general duties supported by process, performance and, more rarely, specification standards, and extending obligations to those who propagate risks as designers, manufacturers, importers or suppliers — the ‘upstream duty holders’. This article examines how OHS agencies inspect and enforce OHS legislation upstream, drawing on empirical research in four Australian states and relevant case law. We argue that upstream duty holders are an increasing area of attention for OHS inspectorates but these inspectorates have not yet risen to the challenge of harnessing these parties to help stem, at the source, the flow of risks into workplaces.

Introduction

Until 30 years ago Australian occupational health and safety (OHS) legislation focused almost exclusively on the obligations of employers and occupiers of industrial premises, construction sites and shops to protect workers employed or engaged at those workplaces. There were also some requirements relating to plant design, manufacture and supply in specific legislation for boilers and pressure vessels, lifts and cranes, scaffolding and machinery supplied to particular industries. Since that time, the application and scope of the

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2 For discussion of the relevant legislation, its application, obligations and provisions relating to particular hazards and preventive measures, see N Gunningham, Safeguarding the Worker: Job Hazards and the Role of the Law, The Law Book Company, Sydney, 1984, Ch 7.
3 For example, the Lifts and Cranes Act 1967 (Vic), Boilers and Pressure Vessels Act 1970 (Vic) and the Scaffolding Act 1971 (Vic) prescribed minimum standards for these items of
Australian OHS statutes has broadened to cover all workplaces and to encompass obligations for a much wider range of persons, such as individuals or officers of corporate entities. Among other duty holders, the OHS statutes now typically impose obligations on designers, manufacturers, suppliers and importers of plant, and manufacturers, suppliers and importers of substances. In some jurisdictions designers and/or constructors of buildings or structures also have duties.

Collectively, these duty holders are sometimes referred to as ‘upstream duty holders’ because of the potential for their acts or omissions to give rise to risks that flow through to employers, workers or members of the public who encounter their plant, substances, buildings or structures in workplaces downstream. That this impact may be substantial is illustrated by the multiple fatalities and serious injuries involving poorly designed and constructed tractors and all terrain vehicles prone to rolling over, the supply of asbestos containing products without adequate warnings of the fatal health risks, or more generally the high proportion of fatalities and compensable injuries in Australia that are attributable to poor design and manufacture of workplace equipment.

In Australia, for constitutional reasons, the regulation of OHS has predominantly been a matter for state and territory governments rather than the Commonwealth, although the latter has taken a more prominent role in the last 5 years, culminating in efforts to ‘harmonise’ OHS legislation. At the time of this research, the upstream duties differed between the nine general OHS statutes but in broad terms they require duty holders to ensure, so far as is ‘reasonably practicable’ (or equivalent expressions), that the plant, substance, building or structure is safe and without risks to health (or that risks...
are minimised, or persons are not exposed to risks). Designers, manufacturers, importers and suppliers of plant, and manufacturers, importers and suppliers of substances are also required to ensure some form of testing or examination of the plant or substance, and to provide OHS information.

The potential for parties outside the immediate employer/worker relationship to impact on OHS is also growing with the complexity of modern production and service delivery systems, such as the use of elaborate supply chains and leasing arrangements. Important here are the duties imposed on employers, self-employed persons, persons in control of workplaces and/or persons conducting a business or undertaking, to others who are not that person’s direct employees.9 These ‘duties to others’ can cover acts and omissions committed upstream and, in this sense, they may also be considered to be upstream duties. Again, the duties vary between jurisdictions but in broad terms they require the duty holders to ensure, so far as is reasonably practicable,10 that other persons are not exposed to risks arising from the conduct of the business or undertaking (or that others are not adversely affected). Crucially, the duties to others potentially extend legal obligations to persons who design, produce, import or supply business and work systems, equipment or materials that fall outside the scope of the other upstream duties which relate specifically to ‘plant’, ‘substances’, ‘buildings’ or ‘structures’ as defined in OHS legislation.

In the last 30 years then, the Australian OHS statutes have progressively, and to different extents, reflected the principle that all persons whose activities may create a risk at work should bear legal responsibility for minimising that risk. There is, however, little empirical research examining whether or how OHS regulators support compliance by upstream duty holders, or inspect and enforce breaches of OHS legislation involving acts or omissions by parties upstream. These are the issues examined in this article. In the next section we outline the methodology for the empirical study on which this article is based. We then examine the inspectorates’ compliance support, inspection and enforcement with upstream duty holders, and argue that despite increased activity there are weaknesses in the inspectorates’ strategy and practice with this important group of duty holders.

**Methodology for the Research**

Between 2003 and 2007 an Australian Research Council funded Discovery Project was conducted to investigate the Australian OHS inspectorates’ educative, inspection and enforcement activities under the new style OHS legislation. The inspectorates’ responses to the upstream duties were examined

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10 Or equivalent expressions as for the jurisdiction. See Bluff and Johnstone, above n 8, at 201–21.
as part of this larger study. The research focused on four of the nine general
OHS inspectorates (Victoria, Queensland, Tasmania and Western Australia),
these jurisdictions being representative of larger and smaller inspectorates,
geographical area and population size.

A broad definition of the upstream duty holders was adopted to take in parties outside the workplace or parties outside the employer/worker relationship whose activities might impact upon the OHS of third parties downstream. This included the traditional upstream duty holders, as discussed above: designers, manufacturers, suppliers, and importers of plant; manufacturers, suppliers and importers of substances; and designers and/or constructors of buildings or structures. It also included some non-traditional upstream duty holders: employers, self-employed persons and persons conducting a business or undertaking, in relation to the systems, equipment and materials that they design, produce, import or supply, which might impact upon the physical and psychosocial health and safety of persons other than their own workforces.12

The issues examined in the research were the nature and extent of OHS agencies’ efforts to educate upstream duty holders about how to comply with their legal obligations (providing ‘compliance support’), and their inspection and enforcement with upstream duty holders. Also explored were inspectors’ perceptions of the adequacy of existing regulatory requirements and aspects requiring improvement.

The research investigated these issues through a combination of data sources and research methods. The OHS agencies’ publications, documentation and statistical data were analysed, as well as reported cases and agencies’ summaries of OHS prosecutions. For this particular study, in-depth, semi-structured interviews were conducted with 94 current inspectors: 27 from Queensland; 16 from Tasmania; 26 from Victoria; and 25 from Western Australia.13 We also interviewed a senior agency manager in each of these states. The original empirical research project from which this study is developed did not include New South Wales or South Australia. Interviews were supplemented with two rounds of participant observation of inspectors’ activities. In 2004 a researcher spent a day as an observer with each of 42 of the inspectors interviewed, accompanying them on at least one visit to a workplace where the inspector recorded the nature of the inspection, issues raised and actions taken. The workplace visits were a normal part of the inspectors’ tasks and were not influenced by the presence of the researcher. Where possible a researcher then accompanied the same inspector again in

11 That is, inspectorates other than the industry focused inspectorates for the mining, petroleum or maritime industries.
13 Interviews were typically of 40 minutes duration and all were recorded and transcribed verbatim, and then entered into and analysed using the NVivo software program.
2006 on a visit to a similar type of workplace. Where an inspector was no longer available to participate, an additional inspector was recruited for the second round. As a result, a total of 57 inspectors (rather than 42) were accompanied by a researcher over the two rounds of observation. When undertaking the second round of visits, inspectors were interviewed again to determine whether their experiences or perceptions had changed and to explore relevant issues identified in the visits. Table 1 presents a breakdown of the workplace visits by industry sector.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Construction</td>
<td>25</td>
<td>20.8</td>
</tr>
<tr>
<td>Government and human services</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Retail, wholesale &amp; hospitality</td>
<td>23</td>
<td>19.2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>22</td>
<td>18.3</td>
</tr>
<tr>
<td>Transport &amp; storage</td>
<td>14</td>
<td>11.7</td>
</tr>
<tr>
<td>Primary industry &amp; forestry</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

* Includes multiple visits in one day.

As Table 1 shows, workplace visits covered a range of industry sectors (matched as far as possible to similar types of workplaces in each round), and they involved diverse types of workplaces. They included visits to construction sites, factories, hospitals, shops, warehouses, schools, childcare centres, farms, forestry co-operatives and prisons. Visits also included workplaces of different sizes (small and large), and both unionised and non-unionised sites. Over 40% of visits were in regional locations (outside a capital city).

The data gathered from interviews and workplace visits provided a ‘snapshot’ of the inspectorates’ activities and approaches to inspection and enforcement at the time of the study. We sought to follow through each of the upstream issues identified in our workplace visits in our analysis of agencies’ publications, documentation, statistical data and prosecution summaries, but this proved impossible. Apart from information about prosecutions, the agency data did not identify firms that were the subject of enforcement action and none of the ‘upstream’ issues identified in our workplace visits resulted in a prosecution.

**Compliance Support and Upstream Duty Holders**

While some of the upstream duties have been in the Australian OHS statutes for 30 years or more, it has only been in the last decade that OHS agencies have supported implementation of these duties, largely through provision of information and guidance material. For example, OHS regulators have issued guidance material relating to the design of retail work stations, waste collection vehicles, forklift trucks, and workplace buildings and structures.¹⁴

Regulators have also issued ‘alerts’ following a fatality or other serious incidents to warn relevant duty holders, including upstream parties, of specific risks and advise on measures required to minimise them. For example, WorkSafe Victoria issued an alert warning suppliers and operators of the risk of telescopic forklifts (telehandlers) that were not designed to lift freely suspended loads.

Guidance material and alerts often include valuable information on the principles and processes for duty holders to address OHS matters. Substantive initiatives have also been taken by the national OHS agency, which has issued guidelines on safe design principles and collaborated with some tertiary education providers to produce a safe design manual intended for use in engineering studies. Despite this progress, the treatment of upstream duty holders in compliance support initiatives remains piecemeal and principally relies upon duty holders seeking out and taking up such guidance, rather than the inspectorates implementing and/or supporting initiatives to build OHS capacity among upstream duty holders, across the board.

**Inspection and Enforcement with Upstream Duty Holders**

Australian OHS inspectors have broad powers to enter and inspect workplaces and investigate OHS matters. Each of the OHS statutes empowers inspectors to issue improvement and prohibition notices requiring duty holders to remedy breaches of OHS legislation. At the time of data collection for this research, the inspectorates in three of the study states (Queensland, Tasmania and Victoria) were also empowered to accept written, enforceable undertakings from duty holders in relation to OHS matters, and inspectors in two of the jurisdictions studied (Queensland and Tasmania) were able to issue

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15 Now Safe Work Australia but formerly the Australian Safety and Compensation Council (ASCC). The latter’s predecessor was the National Occupational Health and Safety Commission (NOHSC).


17 Johnstone, above n 5, pp 373–91.


infringement notices (also known as penalty notices or on-the-spot fines).\textsuperscript{20} All of the OHS inspectorates could initiate legal proceedings for alleged breaches of their OHS statutes.

In this section we argue that the OHS inspectorates studied exercised their inspection and enforcement powers with upstream duty holders in only a limited way, and did not generally secure more far-reaching improvements in OHS performance by these duty holders. While individual inspectors took an interest in upstream duty holders and considered their contribution to workplace risks, they did not necessarily pursue issues upstream or, if they did, treated them as a lower order consideration. If inspectors did address them, they often determined non-compliance in a specific context and required retrofitting of control measures or remedial measures, or provision of OHS information, rather than seeking to ensure the inherent safety of plant, substances, structures or other workplace items for the benefit of persons who would encounter them in other contexts.

**Inspectors’ dealings with upstream duties in workplace visits**

In the study of four OHS inspectorates, researchers observed that inspectors identified upstream issues in 52 (43.3\%) of accompanied workplace visits. Most commonly, inspectors identified upstream duty holders as sharing in responsibility for an OHS problem, such as the safety of cranes, pressure vessels or other items of plant at the workplace. As shown in Table 2, issues involving upstream duty holders were less likely to be identified than were the more traditional focus of inspector activity, the employers’ duties. The one exception to this pattern were issues to do with manual handling: despite the markedly greater attention given to manual handling by OHS inspectorates in recent years, collectively upstream issues were more commonly identified than employer obligations relating to this area.

Inspectors’ recognition of upstream issues was higher than might be expected in view of the relatively recent and limited policy focus of OHS agencies on upstream duty holders. Nonetheless, due to the multiplicity of issues considered by inspectors during workplace visits, when they identified non-compliance by upstream duty holders it was usually a lower order consideration rather than the primary focus of the visit. Workplace visits in which upstream issues constituted a significant part of the visit were exceptional.

Inspectors who dealt with upstream issues gave priority, while they were on site, to securing preventive action at the workplace. They typically explained to managers or workers the obligations of the relevant upstream duty holders while also indicating measures that workplace parties should take to mitigate the risk. For example, an inspector who identified unguarded dough mixers at a cake manufacturing site advised the employer that the supplier firm had failed to comply with its duty but told the employer that he needed to fit guards to the mixers. In part, inspectors’ limited attention to upstream duty holders during workplace visits was due to the fact that these parties were seldom on site. In these instances the inspector could at most, while on site, determine the relevant upstream duty holder(s), which might require consideration of multiple contributing parties. The inspector would then investigate, track down and determine the feasibility of pursuing the OHS issue with the upstream duty holder(s) which the inspector might not consider warranted, especially if the duty holder’s operations were outside the state.

Whether inspectors addressed issues of upstream duty holder non-compliance while they were on site or followed them up at a later date, their interventions tended to be limited to a specific context, rather than negotiating solutions with wider benefits for those who would encounter particular plant, substances, building or structure designs, or other items in other workplaces. For example, one inspector spent considerable time negotiating a solution for the safe movement of shopping trolleys with upstream duty holders at a particular supermarket but did not seek the implementation of that solution in other settings. A rare example of

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Table 2: Duties and Types of Issues Identified by Inspectors During Workplace Visits

<table>
<thead>
<tr>
<th>Duty and Type of Issue</th>
<th>Number</th>
<th>As percentage of visits (n=120)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer duty and plant</td>
<td>79</td>
<td>65.8</td>
</tr>
<tr>
<td>Employer duty and manual handling</td>
<td>44</td>
<td>36.7</td>
</tr>
<tr>
<td>Employer duty and substances</td>
<td>59</td>
<td>49.2</td>
</tr>
<tr>
<td>Employer duty and work arrangements</td>
<td>60</td>
<td>50.0</td>
</tr>
<tr>
<td>Employer duty and OHSM*</td>
<td>61</td>
<td>50.8</td>
</tr>
<tr>
<td>Employer duty and other issue (includes 37 fall from height)</td>
<td>89</td>
<td>74.2</td>
</tr>
<tr>
<td>Upstream duty holders</td>
<td>52</td>
<td>43.3</td>
</tr>
</tbody>
</table>

*OHS M matters include OHS management components such as risk management and incident reporting systems.
negotiating a solution for wider application was provided by an inspector who had negotiated guarding for a type of forestry equipment in response to a series of incidents involving the plant. The inspector stated:

we had a number of incidents . . . where we had operators injured in the cabins of the excavators that had chainsaws or drop saws fitted to the log grabs. The chains were breaking and parts of the chains were entering the cabin and hitting the operators . . . So we met with the managers of [the overseas manufacturer] and let them know that their guarding wasn’t up to standard and . . . recommended the fitting [named two types of guarding] . . . They carried out extensive tests . . . and subsequently all their machines have [the suggested guarding].

In the 52 visits in which inspectors identified upstream issues, there were 57 upstream parties involved (some issues involved multiple upstream duty holders). As shown in Table 3 below, inspectors most commonly identified suppliers of plant or substances as contributing to breaches of OHS legislation, and less commonly invoked the duties of designers, manufacturers/constructor of plant or workplaces, manufacturers of substances, or the duty to others in relation to these upstream functions. While poor design was a common source of inspectors’ concerns, they tended to identify suppliers as the responsible duty holder, reflecting the fact that suppliers were often the most proximate upstream duty holder, and thus the easiest for the inspector to contact and deal with.

Because of the inspectors’ focus on suppliers, their interventions typically led to the retrofitting of control measures, ‘patch up’ measures to remedy problems or provision of OHS information by suppliers. They rarely sought to secure inherently safe design or development of alternative products, which would have had wider and more lasting benefits for OHS.

<table>
<thead>
<tr>
<th>Duty Holder</th>
<th>2004</th>
<th>2006</th>
<th>Total*/Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designer of plant or workplaces</td>
<td>5</td>
<td>4</td>
<td>9 (15.8%)</td>
</tr>
<tr>
<td>Manufacturer of plant or workplaces</td>
<td>5</td>
<td>3</td>
<td>8 (14.0%)</td>
</tr>
<tr>
<td>Supplier of plant or substances</td>
<td>16</td>
<td>15</td>
<td>31 (54.4%)</td>
</tr>
<tr>
<td>(including hire)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other upstream duty holders (eg</td>
<td>4</td>
<td>5</td>
<td>9 (15.8%)</td>
</tr>
<tr>
<td>employer duty to others)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>27</td>
<td>57 (100%)</td>
</tr>
</tbody>
</table>

*Note: Numbers exceed totals in Table 3, as some visits identified issues with multiple upstream duty-holders

Data reporting on the number of improvement, infringement or prohibition notices issued by Australian OHS inspectors against upstream duty holders are very difficult to find. In the 52 visits in which inspectors identified upstream issues, two involved forklifts which did not comply with regulatory requirements, and resulted in an inspector issuing an improvement notice against the supplier of the forklift. In one instance, when a worker was injured after a forklift hit a bump at speed, a WA OHS inspector issued an improvement notice against the supplier of the forklift for supplying the
forklift without load compliant plates or an operating manual. In the second case, a Tasmanian inspector conducted a blitz on forklifts, and found that a forklift at a service station had inadequate hazard lights. The inspector was informed that the forklift had been supplied without hazard lights, and that the agent for the supplier was located across the road from the service station. The inspector issued improvement notices against both the service station and the supplier.

In another instance a WA OHS inspector found that a grass slasher was inadequately guarded and that the slasher had been supplied without guards. The inspector issued a prohibition notice to the employer to prevent the use of the unguarded slasher and an improvement notice requiring the employer to conduct risk assessments on all plant. The employer was also prosecuted. The inspector considered that he was unable to issue a notice against the supplier because the slasher had been supplied 8 years earlier, and the inspector considered that ‘the statute of limitations’ precluded the issuing of a notice. With respect, this stated reason is erroneous, as limitation periods only restrict prosecution proceedings, and have no effect on statutory notices.

A senior manager in the Queensland OHS regulator noted in an interview that this regulator did not, at the time, have a clear strategy to further investigations of potential upstream issues that arose from workplace inspections, or to develop inspection programs focusing on upstream duty holders. We had similar responses from senior managers in Victoria, Tasmania and Western Australia. In a different study involving empirical research conducted between 2001 and 2003, Bluff demonstrated that the Victorian and SA OHS regulators’ inspection and enforcement with plant designers and manufacturers was strategically weak. She pointed to the lack of a specific, coordinated strategy or program of action to focus inspectorate attention and effort on these upstream duty holders — coupled with the considerable discretion given to inspectors to choose whether and how to interact with particular duty holders, the regulators’ other priorities and targets, and the dominant paradigm of employer-worker enforcement — as key weaknesses.

The present research reinforces the conclusion that enforcement policy and practice in relation to upstream duty holders is weak. Although individual inspectors might recognise that the acts and omissions of these duty holders contribute to workplace OHS problems, the inspectorates have not adopted a strategic approach to securing more far-reaching improvements in OHS performance through upstream duty holders. The inspectorates have only implemented more coordinated initiatives in campaigns targeting specific risks, as we discuss below.

**Campaigns involving upstream duty holders**

When the inspectorates identify an OHS problem applicable to a range of businesses or industry sectors, they sometimes conduct campaigns to focus

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inspection and enforcement on securing measures to address the problem. These campaigns typically incorporate targeted publicity, provision of information, workplace visits, the issuing of notices and other enforcement actions. Some of the regulators’ campaigns have targeted upstream duty holders, including several coordinated nationally through the Heads of Workplace Safety Authorities.\(^{23}\)

For example, in 2005–2006, six state OHS regulators conducted a joint national campaign targeting certain items of farm machinery — tractors and their attachments, grain augers and all terrain vehicles. The regulators held information seminars to advise duty holders about their obligations and to alert them to a forthcoming program of inspections. Around 100 inspectors then audited compliance by 500 suppliers, 114 manufacturers, 47 designers and 16 importers of these types of plant and equipment.\(^{24}\) Several of the observed workplace visits in the current study were to upstream duty holders as part of this national campaign.

An earlier example of a state wide campaign was the Victorian OHS regulator’s program to address fatalities and serious injuries involving forklifts. The regulator commissioned research which revealed that problems previously attributed to unsafe driving by operators were actually caused by the unsafe design of forklifts.\(^{25}\) On the basis of this research, the Victorian regulator produced guidance material to advise both suppliers and employers about the (reasonably) practicable action they should take to minimise risks and comply with their upstream duties in s 24 of the Occupational Health and Safety Act 1985 (Vic) (OHSA 1985 (Vic)).\(^{26}\) The regulator used the guidance material to provide advice in consultative forums with suppliers, and to support negotiations with the Industrial Truck Association\(^ {27}\) and supplier firms for a code of conduct committing suppliers to incorporate safety features in the forklifts they supplied.\(^ {28}\)

Although limited in number, the OHS regulators’ campaign style interventions have certain advantages. Regulators interact with a cross-section of duty holders systematically, thereby reinforcing their regulatory messages through communication between duty holders, and reducing the potential for resistance to compliance by consistent treatment of suppliers who were

\(^{23}\) The Heads of Workplace Safety Authorities is a group comprising the general managers (or their representatives) of the peak bodies responsible for the regulation and administration of OHS in Australia and New Zealand. The group mounts national and trans-Tasman campaigns across all jurisdictions.


\(^{27}\) The industry association representing the interests of forklift truck manufacturers and suppliers.

competitors in the same markets. These campaigns are coordinated and more strategic initiatives, although their focus is limited to targeted risks.

**Prosecution of Upstream Duty Holders**

Our analysis of OHS prosecutions involving non-compliance by upstream duty holders provides further evidence of weaknesses in the OHS inspectorates’ enforcement strategy in relation to upstream duty holders. This indicates again that the agencies hardly ever pursue upstream duty holders and, if they do, they tend not to be proactive and focus on the inherent and ongoing safety of plant, substances, structures or other workplace items. Rather they are reactive and focus on non-compliance in a specific context and failures to provide particular control or remedial measures, or adequate OHS information or testing. There have been a small number of prosecutions invoking the traditional upstream duties relating to plant design, manufacture, import or supply, substance manufacture, import or supply, and design or construction of buildings or structures, most notably where duty holders’ acts or omissions have contributed to deaths or serious injuries at work. There is a larger number of prosecutions invoking the duty to others but these typically concern ‘one off’ breaches relating to particular risks in a specific context. They do not break new ground in demonstrating the potential for the duty to others to extend to upstream issues.

Since the enactment of OHSA 1985 (Vic), and its replacement by the Occupational Health and Safety Act 2004 (Vic) (OHSA 2004 (Vic)), there have only been a few prosecutions of plant designers or manufacturers: the cases of **Hydrapac**,29 **Outdoor Initiatives**,30 **Tornado Pumps and Sprayers**31 and **Jalor Tools**.32 None of these cases established important precedents for the inherent safety of plant. The four prosecutions were reactive and event-focused,33 each following a fatality or serious injury involving the designer’s or manufacturer’s plant. They dealt with the events leading to the incident, basic safeguarding issues, or information provision. In each case sentencing was unremarkable and fines were rather low — although the courts had increased penalties from the lowest fine of $7500 to the highest fine of $40,000 in the **Jalor Tools** case. There have also been a small number of prosecutions of suppliers or importers of plant.34 These cases were also

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29 *Victorian WorkCover Authority v Hydrapac Pty Ltd* (unreported, Magistrates Court of Victoria, McDonald M, 25 October 2001).
30 *Victorian WorkCover Authority v Westrop (t/as Outdoor Initiatives)* (unreported, Magistrates Court of Victoria, Crisp M, 20 February 2006).
31 *Victorian WorkCover Authority v Tornado Pumps and Sprayers Pty Ltd* (unreported, Magistrates Court of Victoria, Wright M, 5 May 2006).
32 *Victorian WorkCover Authority v Jalor Pty Ltd* (unreported, County Court of Victoria, Coish J, 25 January 2010).
34 *Inspector Arnott v Wreckair Pty Ltd* (unreported, Dandenong Magistrates’ Court (Vic), 30 October 1991); *Victorian WorkCover Authority v Anton’s Mouldings Pty Ltd* (unreported, Dandenong Magistrates’ Court (Vic), Harding M, 5 June 2001); *Victorian WorkCover Authority v Melbourne Cranes Imports Pty Ltd* (unreported, Melbourne Magistrates’ Court
event-focused and dealt with basic safeguarding or information provision matters. They are not significant for the safe design and manufacture of plant, or the ongoing self-regulation by firms of OHS in their upstream functions. We are not aware of any Victorian prosecutions of manufacturers, suppliers or importers of substances.

A key reason for the small number of prosecutions of upstream duty holders in Victoria was the regulator’s reluctance to prosecute upstream duty holders if any element of a case could be perceived to involve ‘improper use’. This reluctance followed the unsuccessful prosecution of Chem-Mak Australia in 1999. This case concerned ss 24(1)(a) and (4) of OHSA 1985 (Vic), which required persons who designed, manufactured, imported or supplied plant to ensure, so far as practicable, that plant was safe and without risks to health when properly used. The duty also stated that plant was not to be regarded as properly used where it was used without regard to any relevant information or advice available relating to its use. Chem-Mak, the supplier of a textile brushing machine was prosecuted after an employee of another firm, Diamondquest, had his hand and arm crushed in the unguarded rollers of the machine. The Taiwanese manufacturer had provided advice to management and operators of Diamondquest, including a warning to keep hands away from rollers and to turn the machine off before straightening fabric.

The prosecution in Chem-Mak Australia referred the court to an unreported decision of the President of the NSW Industrial Relations Commission in Callaghan v Thiess Contractors Pty Ltd, which stated that, since the same requirement in the former NSW OHS statute was to make plant safe, the section could not be construed to mean that if machinery is unsafe, liability can be avoided by providing advice or instruction. However, O’Shea J accepted the defence submission that the plant was not properly used and that the instruction provided by the Taiwanese manufacturer constituted relevant information and advice under OHSA 1985 (Vic) s 24(4), even though the injured employee did not receive this instruction. In view of this ruling, the

35 Victorian WorkCover Authority v Chem-Mak Pty Ltd (unreported, County Court of Victoria, O’Shea J, 10 September 1999).
36 OHSA 1985 (Vic) s 24(1)(a).
37 OHSA 1985 (Vic) s 24(4).
38 Unreported, Industrial Court (NSW), Fisher P, 20 December 1990.
39 OHSA 1983 (NSW) ss 18(2), (9).
prosecution did not lead any evidence and O’Shea J ordered a not guilty verdict.

The Victorian regulator had not challenged the interpretation of the duty in s 24 of OHSA 1985 (Vic), unlike the NSW regulator, which successfully challenged the equivalent requirement in the former NSW OHS statute, in the Arbor Products case. In Arbor Products, the manufacturer and supplier of a wood chipping machine was found to have breached s 18(2)(a) of Occupational Health and Safety Act 1983 (NSW) (OHSA 1983 (NSW)), for failing to ensure the plant was safe and without risks to health when properly used. Arbor Products had provided an operating manual and training to some of the customer’s employees, at the time of supply. An employee sustained traumatic amputation to both arms when he was drawn into the chute of the machine and his arms came into contact with the cutting blades. The employee had not received training and did not have access to the manual.

The key finding of the Industrial Relations Commission of New South Wales (IRC) in Full Session (on appeal) was that the statutory duty requires that plant supplied is safe, in the sense that its safety is ensured. The wood chipping machine was inherently unsafe, as the chute for feeding material was too short and permitted contact with rotating blades. The IRC also found that the qualification ‘when properly used’ was intended to limit liability where the plant was safe but became unsafe because of misuse, but not to limit liability where the defendant had not made the machine safe, but had only provided an instruction manual, advice or training in the proper use of the plant at work. The Full Bench concluded that if information or training were an acceptable alternative, ‘it would be open to manufacture and supply plant for use at work that was not safe and posed risks to health’, and that the duty in s 18(2)(a) could not be intended to have been circumscribed in this way. Arbor Products was fined $30,000.

Other NSW cases have subsequently confirmed the principle established in Arbor Products that plant must be designed and manufactured to be safe, and that provision of information or training are not a substitute for this. In particular, in the NSW case of National Hire, the appellant sought to have the decision in Arbor Products reconsidered. The Full Bench of the Industrial Relations Commission of New South Wales refused leave to re-argue Arbor Products, concluding that ‘[t]he decision in Arbor [Products], in our view, is correct and is not one of manifest or demonstrable error that requires reconsideration’.

40 OHSA 1983 (NSW) ss 18(2), (9).
42 Ibid, at [43].
43 Ibid, at [44].
44 Ibid, at [43].
46 Ibid, at [43].
48 Ibid, at [10]. For further NSW cases confirming the approach taken in Arbor Products, see Inspector Wilkie v Batequip Pty Ltd (formerly Bateman Equipment Pty Ltd) (t/as Ditch Witch Australia) [2003] NSWIRComm 111 (14 April 2003); Inspector Batty v Vehicle Inspection Systems Pty Ltd [2004] NSWIRComm 19 (27 February 2004); Inspector Wilkie v Kennards
The principle of ensuring that plant is inherently safe was also endorsed in the WA Viticulture Technologies 49 case. This was a prosecution of a supplier of grape harvesters for breach of the general duty in ss 23(1)(a) and 23(5) of the Occupational Safety and Health Act 1984 (WA), which, like the equivalent provisions in the Victorian and NSW statutes, only required the upstream duty holders to ensure the safety of plant for persons who 'properly use' the plant. The prosecution of Viticulture Technologies followed an incident in which a worker fell from the top of a grape harvesting machine while he was attempting to clear a blockage and sustained serious spinal injuries in the fall. Stipendiary Magistrate Malone concluded that the defendant had failed to design the grape harvester so as not to expose employees to the risk of falling; that it was foreseeable that employees would go to the top of the machine to clear blockages; and that this exposed them to a risk of falling. 50 With regard to the issue of proper use, Malone SM referred to the Arbor Products case, indicating that, while not binding, the case was 'of persuasive value' 51 and 'sets the appropriate boundaries'. 52 He concluded that accessing the harvester to clear blockages, and for maintaining and cleaning the harvester, was within the scope of proper use and that it was practicable for the harvester to be fitted with safety platforms. 53 Viticulture Industries was fined $20,000.

The WA OHS regulator has also prosecuted other plant suppliers in the cases of Ground Support Systems 54 and Nomel Holdings 55 and suppliers of substances in the case of Headfirst International. 56 Like the Victorian prosecutions of suppliers these cases are unremarkable in dealing with basic safeguarding or information provision issues, and imposed small penalties in the range $2000 to $20,000. They are not significant for the design or development of inherently safe plant or substances, or self-regulation of OHS by duty holders.

The upstream obligations in Queensland were also qualified, at the time of this research, by the expression 'when used properly'. 57 We have only been able to find seven prosecutions of upstream obligation holders in Queensland, each resulting in small penalties without conviction or an adjournment without

50 Ibid, at [47]–[50], [53]–[54].
51 Ibid, at [40].
52 Ibid, at [54].
53 Ibid.
55 Nomel Holdings Pty Ltd (unreported, Perth Court of Petty Sessions (WA), 8 November 1999).
56 Headfirst International Pty Ltd (unreported, Narrogin Court of Petty Sessions (WA), 15 October 2003).
57 See Workplace Health and Safety Act 1995 ss 32–34A.
conviction.\textsuperscript{58} Three of these prosecutions were brought against designers of plant (formwork, a guillotine and a mincing machine) and resulted in, respectively, fines of $16,750 and $20,000 without conviction and an adjournment without conviction with a good behaviour bond.\textsuperscript{59} Two of the prosecutions were against erectors and installers of scaffolding,\textsuperscript{60} resulting in a $2500 without conviction and a good behaviour bond. One prosecution was against a manufacturer of plant\textsuperscript{61} (a fine of $22,500 without conviction) and another was against a supplier of a substance\textsuperscript{62} (cleaning products) and resulted in a fine of $5000 without conviction.

The problem of the expression ‘when properly used’ may have been resolved in OHSA 2004 (Vic), which uses the alternative expression ‘when used for a purpose for which it was designed or manufactured’, and does not include any statement to the effect that the plant, substance, building or structure is not to be regarded as properly used where it was used without regard to any relevant information or advice available relating to its use.\textsuperscript{63} The Victorian approach is also adopted in the national Model Work Health and Safety Bill 2011 (Cth), the basis for harmonising the Australian OHS statutes in all jurisdictions from 2012.\textsuperscript{64}

In addition to prosecutions of the traditional upstream duty holders for plant, substances, buildings or structures, there have also been a number of prosecutions around Australia under the duties to others. Many of these concern basic safety issues on construction sites where the acts or omissions of multiple parties may contribute to risks. Examples are prosecutions for breaches concerning unguarded stairwells, unsafe scaffolding or unsafe access/egress to and from different areas of the site. These prosecutions relate to particular risks in a local context rather than wider concerns about designing, constructing, supplying inherently safe workplace structures or plants, and in many respects reflect the inspectorates’ long standing focus on the obligations of employers and occupiers of construction sites and other premises to protect workers employed or engaged at those workplaces. The duties to others have rarely been the basis for legal proceedings against technical specialists such as engineers for their contribution to workplace risks (and not in the jurisdictions studied).

For example, in the case of Inspector Michael Dall v William Caesar Porta (t/as Western Pacific Engineers),\textsuperscript{65} a case involving s 9 of the Occupational Health and Safety Act 2000 (NSW), a consultant engineer for demolition work

\textsuperscript{58} We thank Graham Lee for providing information about these prosecutions.
\textsuperscript{59} Boral Formwork and Scaffolding Pty Ltd (unreported, 1 March 2004); Simville Pty Ltd (unreported, 28 September 2005); and Rodney Charles Sammon (unreported, 5 December 2005).
\textsuperscript{60} Brisbane Scaffolding Hire Pty Ltd (unreported, 2001, specific date unknown) and Ray Anthony White (unreported, 14 January 2006).
\textsuperscript{61} Air Design Pty Ltd (unreported, 16 December 2010).
\textsuperscript{62} Belgold Queensland Pty Ltd (4 September 1998).
\textsuperscript{63} See Occupational Health and Safety Act 2004 (Vic) ss 27–30.
\textsuperscript{64} The Model Work Health and Safety Bill 2011 (Cth) ss 22, 23 makes it clear that designers and manufacturers must address risks to persons who store, inspect, operate, clean, maintain, or carry out any reasonably foreseeable activity relating to decommissioning, dismantling or disposal of plant, or are exposed to plant in the vicinity of a workplace.
\textsuperscript{65} [2006] NSWIRComm 214.
was prosecuted under the duty of self-employed persons in relation to persons who are not employees. In *Workcover Authority of NSW (Inspector Keenan) v Leighton Contractors Pty Ltd and Lindores Crane & Rigging (Aust) Pty Ltd*, Leighton Contractors and Lindores Crane & Rigging were convicted of offences under the employer’s duties to employees and to others (ss 15 and 16 of the OHSA 1983 (NSW)) for failing to safely commission a tower crane at a construction site resulting in the death of two workers. Another well known example was the series of prosecutions arising from the collapse of a 26m high and 95m wide $9.5 million hangar in May 2003 at the Royal Australian Air Force (RAAF) base at Fairbairn in the Australian Capital Territory, as a result of which 12 workers were seriously injured. WorkSafe ACT issued charges for offences under the Occupational Health and Safety Act 1989 (ACT) to four companies and six individuals, including company directors and engineers. Most of the charges were issued for contraventions of the duty of a person in control of a workplace to take reasonable steps to ensure that it is safe and without risks to health (s 29). While charges against the project manager, Construction Control, were dropped after the Magistrates’ Court found there was insufficient evidence for conviction, the company responsible for designing and constructing the hangar, Strarch International Pty Ltd (in liquidation), was successfully prosecuted under the employer’s general duty provision, for deviating from the original proven method to erect the hangar roof, and for failing to undertake new engineering calculations to ensure that the new method was safe. The company was fined $97,750, and in separate proceedings two directors were convicted and fined $18,000 each for breaching s 29.

In summary, OHS inspectorates have made some progress in recognising that multiple duty holders, including those upstream, may contribute to particular instances of non-compliance. However prosecutions such as *Arbor Products*, which highlight upstream duty holders’ role in ensuring the inherent safety of their products at the source, are few and far between.

### The Challenge of Jurisdiction in Enforcing Upstream

So far in this article we have argued that while OHS inspectors in the agencies studied may recognise upstream issues and take some action to address them, and the agencies have conducted some campaigns targeting particular upstream duty holders and initiated some legal proceedings, the treatment of upstream duty holders in the inspectorates’ compliance support, inspection and enforcement activities is generally under-developed, ad hoc in character and lacking in strategy. Our overarching argument is that the nature and extent of compliance support, inspection and enforcement with upstream duty holders is unlikely to shift further without the inspectorates developing and implementing a specific, coordinated strategy or program of action to focus regulatory attention and effort on securing more far reaching improvements in OHS performance by upstream duty holders. We also acknowledge that inspectors interested in inspecting and enforcing upstream confront particular difficulties. They typically face the need to secure preventive action in a

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particular workplace while upstream duty holders are often off site and might be located in another jurisdiction (elsewhere in Australia or overseas).

We do not, however, accept the point made by many inspectors in this research that the issue of jurisdiction will inevitably limit inspectors to enforcing OHS legal obligations with the most proximate duty holders. The essence of these inspectors’ concern was that they did not have jurisdiction in relation to offences committed wholly or partly outside their respective states. This issue was examined in Bluff’s research.68 Bluff argues that territorial jurisdiction is clearly established where an alleged offender commits all the elements of an offence within a state but it may also be established for offences committed wholly or partly outside the state.

The first avenue for establishing territorial jurisdiction is if there is an express provision in a relevant statute to establish such a nexus. Such a provision exists in New South Wales where s 10C of the Crimes Act 1900 (NSW) provides that an offence is committed if all elements necessary to constitute the offence exist and the offence is committed wholly or partly in the state, or if wholly outside the state, that the offence has an effect in the state. An earlier version of this provision was considered in the appeal case of Lyco Industries.69 In the Industrial Relations Commission of New South Wales, Walton and Backman JJ found that there were two elements of the offence under s 18(1) of the OHSA 1983 (NSW) which had a nexus with New South Wales.70 The Victorian based manufacturer-supplier, Lyco, had supplied a post driving machine for use by persons at work, and Lyco had failed to ensure that the machine was safe and without risks to health when properly used.

A relevant statutory provision exists in Tasmania where the Criminal Law (Territorial Application) Act 1995 (Tas) s 4 establishes that a crime against the law of the state is committed if all elements necessary to constitute the crime exist and a territorial nexus exists between the state and at least one element of the crime. Similarly, in Western Australia the Criminal Code Act Compilation Act 1913 (WA) s 12 establishes that an offence under that Code or any other law of Western Australia is committed if all elements necessary to constitute the offence exist and at least one of the acts, omissions, events, circumstances or states of affairs that make up those elements occurs in Western Australia. Section 12(2) of the Criminal Code 1899 (Qld) provides that where acts or omissions occur which would constitute an offence if they all occurred in Queensland and where any of these acts or omissions occur in Queensland, the person who does the acts or makes the omissions is guilty of an offence of the same kind and is liable to the same punishment as if all of the acts or omissions had occurred in Queensland.71

In South Australia, the Criminal Law Consolidation Act 1935 (SA) was amended in November 2002 to establish that a territorial nexus sufficient to justify the assertion of jurisdiction in SA courts exists if a relevant act

68 Bluff, above n 21, Ch 4.
70 Ibid, at [23].
71 See also Criminal Code 1899 (Qld) ss 12(3) and (4).
occurred wholly or partly in the state, or the alleged offence caused harm or a threat of harm in the state.\textsuperscript{72} 
There is no relevant statutory provision in Victoria to establish precisely what territorial nexus would suffice.\textsuperscript{73} In the absence of such a provision it is likely that a real connection between a crime and the state would be sufficient grounds for enforcement with parties outside the state. In the 1997 High Court case of Lipohar \textit{v} \textit{R},\textsuperscript{74} which dealt with a common law offence of conspiracy to defraud, Gleeson CJ determined that there was a real connection between the conspiracy, committed in Victoria, and the state of South Australia, where the intended victim was located.\textsuperscript{75} Gaudron, Gummow and Hayne J\textsc{f} also considered that the requirement of nexus should be liberally applied, and that a real connection with the jurisdiction would suffice.\textsuperscript{76} 
The Victorian Supreme Court case of \textit{Director of Public Prosecutions (Vic) v Sutcliffe}\textsuperscript{77} in 2001 provides a useful discussion of the issue of territorial nexus in relation to criminal legislation.\textsuperscript{78} Gillard J observed that historically there was a presumption against criminal legislation having an extra-territorial operation but the presumption against extra-territorial effect can be rebutted.\textsuperscript{79} Gillard J also stated that, in determining whether the presumption is rebutted in particular circumstances, it is relevant to consider the nature, scope, subject matter and object of the legislation and whether the legislation would be robbed of much of its purpose by being confined to acts committed within the state.\textsuperscript{80} 
Undoubtedly, complex cross-border and international supply chains pose particular challenges for OHS inspectorates enforcing upstream but the location of an upstream party in another jurisdiction is not automatically a barrier to enforcement as perceived by inspectors. The reasoning of the courts in the High Court case of Lipohar and the Victorian case of Sutcliffe suggests that the OHS inspectorates in this research might, like the NSW regulator, test whether a territorial nexus can be established for OHS offences committed wholly or partly outside of their respective states. We concur with Bluff’s\textsuperscript{81} earlier research in arguing that the jurisdictional impediments to enforcement with upstream duty holders perceived by OHS inspectors, which extend both to issuing improvement and prohibition notices, and initiating legal proceedings, could be resolved if the inspectorates develop

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\item\textsuperscript{72} Criminal Law Consolidation Act 1935 (SA) ss 5E–5L.
\item\textsuperscript{73} The Crimes Act 1958 (Vic) includes such provisions for offences relating to piracy, theft, contamination of goods and some other offences but not for harm against a person.
\item\textsuperscript{74} (1999) 200 CLR 485; 168 ALR 8; [1999] HCA 65; BC9908013.
\item\textsuperscript{75} Ibid, at [38].
\item\textsuperscript{76} Ibid, at [123]. See also the comments of Callinan J at [269], where his Honour agreed that an offence should be regarded as having been committed against the law of a state if the offence, wherever committed, has a real link with that jurisdiction.
\item\textsuperscript{77} [2001] VSC 43; BC200100570 (1 March 2001). This case concerned a stalking offence where the perpetrator acted within Victoria, and the subject of the stalking case was in Canada. The case was prosecuted under the Crimes Act 1958 (Vic). See also \textit{Sutcliffe v DPP (Vic)} [2003] VSCA 34; BC200301881 (7 April 2003) in which leave to appeal was declined without ruling on the issue.
\item\textsuperscript{78} Such as OHSA 1985 (Vic) or OHSWA 1986 (SA).
\item\textsuperscript{79} \textit{Director of Public Prosecutions (Vic) v Sutcliffe} [2001] VSC 43; BC200100570 at [59], [67].
\item\textsuperscript{80} Ibid, at [68], [72].
\item\textsuperscript{81} Bluff, above n 21, Ch 4.
\end{enumerate}
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experience, policy, practice and legal precedents to support inspection and enforcement of OHS legal obligations upstream, through a coordinated strategy or program of action. A greater emphasis on interaction with upstream duty holders proactively would also enable inspectorates to focus on safe design; that is, action to ensure that business and work systems, buildings and structures, substances and materials, plant and other items are inherently safe, at the source.

**Conclusion**

A complex array of parties can influence the design, production and supply of workplaces, and the plant, substances, systems and other items used at work, in ways that affect OHS. Globalised supply chains, remote sourcing and outsourcing have added to the complexity of managing OHS, and inspecting and enforcing OHS legislation. Although some upstream duties were introduced into the Australian OHS statutes 30 or more years ago and OHS inspectorates are mindful of these obligations, the agencies we studied lacked coordinated and ongoing strategies or programs to support upstream duty holders to learn how to comply with their OHS legal obligations, and to focus their inspection and enforcement effort on securing compliance and safety at the source.

In the absence of such a strategic approach, upstream duty holders were a recognised but lower order consideration for inspectors, whose interventions tended to be aimed at localised adjustments involving retrofitting of control measures, ‘patch up’ measures to remedy problems or provision of OHS information, rather than securing inherently safe design solutions or the development of alternative products which would have more wide ranging and enduring benefits for OHS. We conclude that inspection and enforcement with upstream duty holders has been strategically weak in the recent past, but that harmonisation of the upstream duties through the implementation of uniform OHS laws in all jurisdictions in Australia, and supporting nationally harmonised inspection and enforcement policy, provides the opportunity for OHS inspectorates to rethink and reform their strategy and practice.

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82 Johnstone, above n 7.