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A Contested Workplace: Situating New Zealand's OHSM Regulatory Practice within the Literature – an Introduction to the Policy History and Regulatory Debates

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Abstract

The implementation of New Zealand's Occupational Health and Safety Management (OHSM) regulatory regime has been subjected to sustained critique by the National Occupational Health and Safety Advisory Committee (NOHSAC). The most recent critique focuses upon the perceived inadequacies of current standards and guidance documents about what occupational health and safety management systems (OHSM systems) best practice means for employers. This paper provides an introduction to the literature, history, and policy debates about occupational health and safety (OHS) regulatory practice in advanced western nations. New insights in the recent literature pointing to the importance of understanding 'regulatory character' and the overlapping and often conflicting regulatory nature of the workplace space are identified. The insights raise questions about the role of a workers'' compensation scheme in promoting workplace safety, and suggest that in order to implement a best practice OHS regulatory regime in New Zealand action on a number of fronts is required.

Keywords: OHSM regulation, OHS management systems, policy, best practice, literature, history, regulator, workers' compensation scheme

Introduction

The functioning of New Zealand's occupational health and safety regulatory system has been under scrutiny by the National Occupational Health and Safety Advisory Committee (NOHSAC) since 2003 (Pearce, Dryson,Gander, Langley and Watsatffe, 2007, 2008; Allen and Clarke et al 2006; Kendall, 2005, 2006; Access Economics et al 2006; Pearce et al. 2005; VIOSH et al, 2006; Driscoll, 2006; Driscoll et al. 2004; Pearce et al. 2006; Driscoll et al. 2005; Health Outcomes International Pty Ltd, 2005). NOHSAC members represent a range of expertise within the broad fields of occupational health and safety, and provide independent advice to the Minister of Labour on occupational health and safety in New Zealand. The most recent advice to the Minister of Labour is critical of the failure of the Department of Labour to develop adequate standards and guidance documents about what occupational health and safety management systems (OHSM systems) best practice means for employers (Pearce et al. 2008).

This paper provides an introduction to the literature, history, and policy debates about occupational health and safety (OHS) regulatory practice in advanced western nations. New insights in the recent literature pointing to the importance of understanding 'regulatory character'

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and the overlapping and often conflicting regulatory nature of the workplace space are identified. These insights suggest that in order to implement a best practice OHS regulatory regime in New Zealand requires action on a number of fronts.
The review is organised around the following themes:

1. Contours of the OHS policy literature and policy issues;
2. Outline of the current dominant regulatory approach to OHS regulation in advanced western nations;
3. Issues relating to current regulatory approach in advanced western nations, and evidence for effectiveness of the approach;
4. New Zealand specific issues within the current regulatory regime;
5. Based on the proceeding evidence, identification of questions about the possible the role of workers' compensation authority.

An inductive approach was also used to inform this literature review. The approach serves three purposes:

1. The identification of the range of theories and methods that have been used to describe and explain the process of OHS regulatory change, and the outcomes that have occurred in various countries.
2. The identification of "enduring patterns and relationships" (Hakim, 1987) across time and cultures about the origins of OHS regulatory change, the factors that commonly determine the final outcome, the policy issues commonly debated, and the policy positions taken by participants in the debates.
3. The development of a cumulative and critically aware body of evidence that can be used to inform the discussion of New Zealand's occupational safety and health policy as expressed in its current regulatory form.

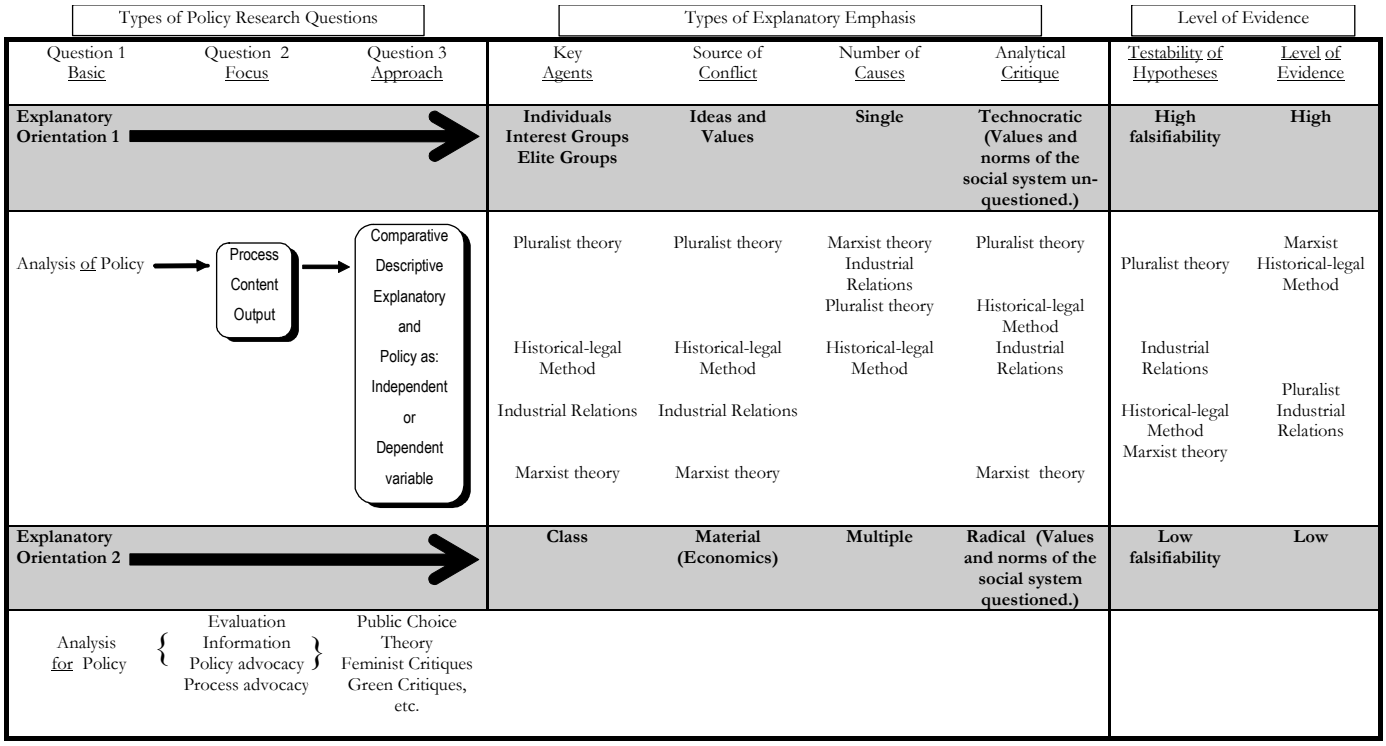
Wren (1997; 2002) argues that the literature can be classified into approaches informed by Pluralist theory, Marxist theory, Industrial relations, Historic-legal method, Public choice theory, and Critical theory (Wren 1997; 2002). This review summarises and updates Wren's original analysis.

Contours of the OHS Policy Literature and Policy Issues

Over the last 30 years a sizable and diverse body of literature has developed describing and exploring the origins, causes of change, and policy debates around OHS regulation in many advanced western nations (Wren 1997; 2002). The general shape of this literature is characterised in Figure 1.

Figure 1: Types of occupational safety and health policy research and their explanatory orientation

Spectrum of Research Orientation



Source: Adapted from Wren (1997).

The taxonomy suggests that there a number of types of OHS regulatory policy literature each of which have a predominant explanatory orientation. The orientations are towards:

- Either 'analysis of policy' or 'analysis for policy;
- A foci upon process, content, output type research questions, or towards evaluation; information, policy advocacy or policy process type questions
- Particular sets of explanatory emphasis;
- Different types of research evidence to support the conclusions reached.

Analysis '*of*' policy refers to analyses aimed at achieving understanding of the policy change process and the issues involved. Analysis '*for*' policy is concerned with solving the policy issues, and advocating for a particular solution (Ham and Hill, 1993; Hogwood and Gunn, 1981). This distinction has also been referred to as 'writing about public policy' and "referring to public policy" (Ilchman and Uphoff 1983). In contrast, the problem of research orientation has been phrased as a 'unit of analysis question', is the unit of analysis the policy 'process' or the policy 'network', or is it the policy 'program' (Rainey and Milward, 1983).

Theoretically inclined Marxist accounts of occupational safety and health policy change are predominantly found within the sociology of health and illness and the sociology of law literature respectively (Wren 1997; 2002). The accounts emphasise class conflict, and that the content of any policy is determined by who has control of the legitimate core decision-making apparatus. Countries studied include the United States (Berman, 1977; 1978; Craig, 2007; Curran, 1984; Navarro, 1983; Wysong 1992; 1993; Calavita, 1983; Navarro 1978; 1980; Coye, 1979), Canada (Sass, 1986; 1989; 1993; 1995; Walters, 1983; 1985; 1991), United Kingdom (Clutterbuck, 1983; Dalton 1992), Italy (Assennato and Navarro, 1983; Navarro, 1983), Mexico (Laurell, 1979), India (Vilanilam, 1980), and Australia (Pearse and Refshauge, 1982; Carson, 1985; 1989; Carson and Henenberg, 1988). Cross-national surveys looking at the reasons for the various forms of government occupational health service provision that can be found in some capitalist countries and former east-European socialist states have also been undertaken (Elling, 1977; 1980; 1989; Greenlund and Elling, 1995).

In Marxist analyses the origins of change in OHS policy in the 1970s are attributed to pressure from rank and file trade union members upon organised union leadership for more attention to be paid to health and safety at work. The advent of this pressure has been linked to the perception that the then existing arrangements were not working, and were incapable of controlling new hazards arising out of new technologies and production methods. In explaining the change outcomes, emphasis is placed upon the historical conflict between workers' and employers over control of the means of production. In addition, where change has been deemed favourable to workers', this has only occurred where labour has had the political and or economic advantage. The policy issue of particular attention is the workers' right to know about the hazards of the job, the right to be informed about the results of any monitoring of their health or the work environment, and the right to refuse dangerous work.

Within this stream of literature a diversity of opinion exists about how to explain the changes. A number of writers for example, emphasise the determining influence of the level of political power that can be mobilised by the representatives of labour. Other authors highlight the functional role played by the state in maintaining the economic system. Some researchers focus upon the role of ideology in constraining the way OHS policy is thought about by policy makers, academics, practitioners, and managers. Still more authors have argued that much OHS law is only of symbolic value, while others have commented that even symbolic law can come to have a positive effect in the longer term.

In contrast, pluralist analyses, argue that often a particular policy reflects the current level of knowledge, values and beliefs of decision-makers, and emphasise the role of conflict over different values and ideas as the motivation behind change. The influence of different institutional political arrangements in the United States, Canada, United Kingdom and Germany are highlighted as explanations for different policy outcomes (Ashford, 1976; 1988 ; Kelman, 1981; Singleton, 1983; Wilson, 1985; Doern, 1977; 1978; Doern and Wilson, 1974; Kelman, 1980; Mendeloff, 1979; Grabe, 1991; Boehringer and Pearse, 1986). Political science perspectives put emphasis upon the contingent and incremental nature of much policy change, and highlight the role of organisational behaviour and power (Lindblom, 1959; 1979; Lindblom and Woodhouse, 1993; Mendeloff, 1979).

Historical-legal studies represent a large part of the literature on OHS policy in western nations. The studies tend to highlight four factors. First, as pointing to the existence of a combination of state and society centred technological, economic and industrial factors as influencing change. Second, there is an inclination towards emphasising the historical specifics and contingency of legislative developments. Third, a focus upon changes in the 'legal interpretation' of the law pertaining to health and safety and accident compensation, which is particularly applicable to studies that appear in the legal literature on changes in British health and safety law. The last is the use of comparative social-historical narrative for explanation. The literature draws attention to the importance of understanding how different legal systems and terms reflect differences in values and ideas about the role of law in controlling safety at work, the economy, and efficiency in government intervention. Studies have been undertaken on change in the United States (Altman, 1976; Levenstein, 1988; Orloff and Skocpol, 1984; Szasz, 1984; Brodeur, 1974; Davidson, 1970; Moss, 1994; Page and O'Brien, 1973; Donnelly, 1982; Heath, 1986; Peters, 1986; Muraskin, 1995), Australia (Biggins, 1993; Creighton and Gunningham, 1985; Gunn, 1990; Gunningham, 1984; 1987; James, 1993), France (Cassou and Pissarro, 1988), Germany (Hauss and Rosenbrock 1984), Italy (Bagnara, Bioca and Mazzonis, 1981), United Kingdom (Hutchins and Harrison, 1966; Steemson, 1983; Thomas, 1970; Woolf, 1973; Baldwin, 1990; Barrett and James, 1988; Eberlie, 1990; Harrison, 1995; Barrett, 1977; Howells, 1972; 1974; Lewis, 1974). Other authors have undertaken similar studies that combine an element of social history with an emphasis on legal interpretation (Burrows and Mair, 1996; Dawson, Willman, Bamford and Clinton, 1988; Drake and Wright, 1983; Fitzpatrick, 1992; Friedman and Ladinsky, 1967; Hepple and Byre, 1989; Barrett and Howells, 1995; Holgate, 1994; James, 1992; Miller, 1991). Cross-national comparative studies of the development of factory legislation in advanced western economies have also been done (Gordon, 1988; Singleton, 1982;1983; Weindling, 1985).

Public choice theorists and economic rationalists though, argue that decisions about OHS policy should be determined by economic rationalist models of the behaviour of organisations and individuals in a free market. Rationalist models conceive of the policy process as analytically separable components or 'boxes' that form a sequence of events called the policy process, and that policy-making is about maximising social gain and policy-making should be about the rational consideration of all alternatives, including competing values, costs, and benefits (Dye, 1987; Pierson, 1991). Rationalist approaches to occupational safety and health policy fit within the area "analyses *for* policy" in Figure 1, and uniformly present economic arguments about the degree to which government should or should not intervene in occupational safety and health (Diehl and Ayob, 1980; Smith, 1974; Steigler, 1971; Viscusi, 1979; 1983; 1996; Coase, 1960; Dorman, 1996; Oi, 1973; 1974; Rinefort, 1980).

While it can be seen that the literature is quite diverse in the explanations put forward, there is a remarkable consistency across all the studies and countries about what the core policy issues are in advanced industrialised nations irrespective of the dominant political ideology, type of legal system, the particular experience of industrialisation, or country examined (Wren, 1997; 2002; Frick, Jensen, Quinlan and Wilthagen, 2000; Bohle and Quinlan, 2000). The first issue, around which there is extensive debate, concerns what is the appropriate role for workers' and their representatives in promoting workplace safety? Another important issue, in recent years, is the debate about the extent to which the state should intervene in regulating occupational safety and health. The question of 'extent' means the degree to which government should be involved in

health and safety. In other words, what level and type of resources should government commit to the control of injuries and illnesses in the workplace?

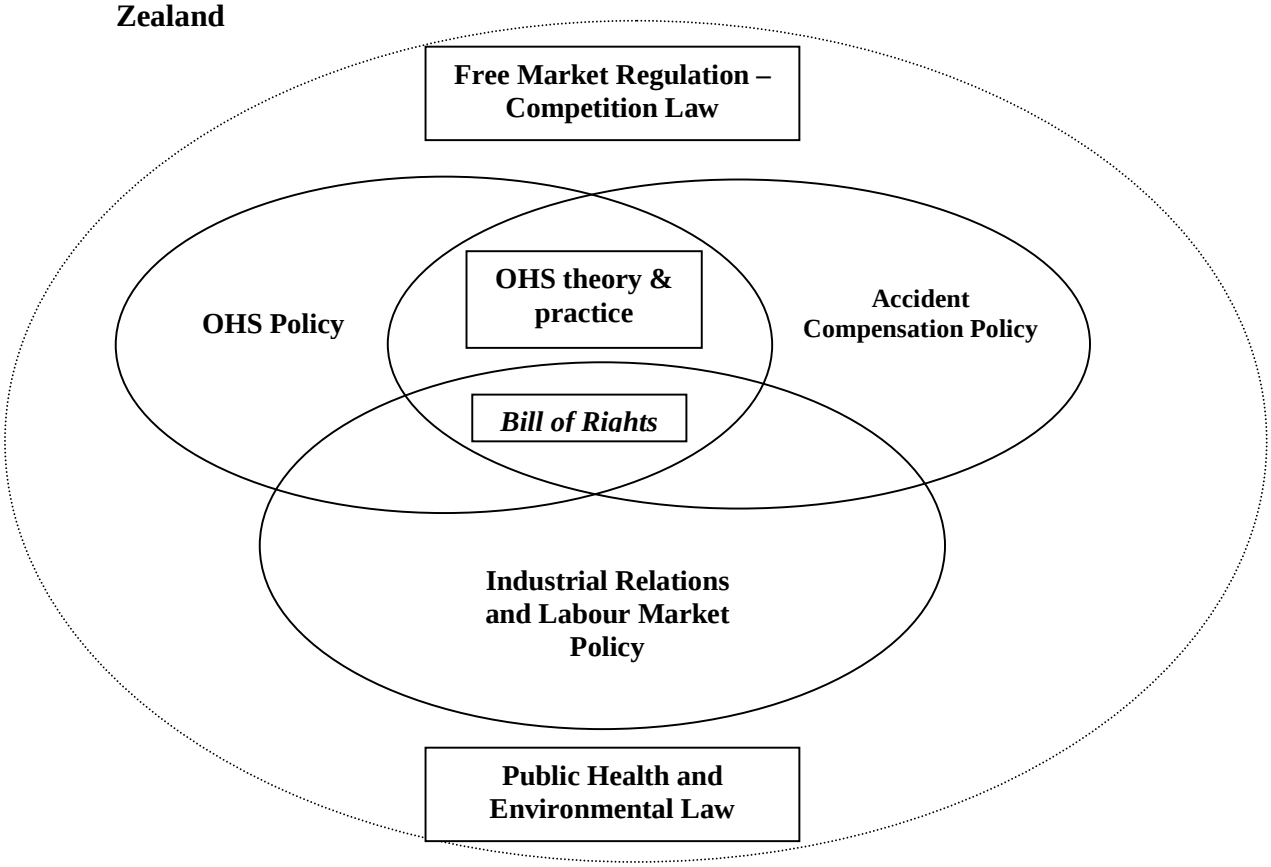
Closely related to the issue of the 'extent' to which government should intervene, is the question of *how* government should intervene and it is at this point in the discussion that the question about which prevention system to use returns. For instance, should government have nothing to do with health and safety at work and leave employers and employees to work it out between themselves? Or should the state set specific criteria in statute by which the performance of employers and employees would be measured? Alternatively, the state could intervene by promulgating highly detailed sets of prescriptive technical regulations that would be rigorously enforced. The state could also intervene, by empowering workers' and or their representatives to act on their own behalf. Another issue implicit in these debates, of particular relevance in countries with a British legal heritage, are debates about the legal "standard of care" that should be imposed upon employers and employees. Should the standard of care be an "absolute" standard, or a lesser one of a "strict" duty of care that provides for a defence of "all reasonably practicable"? Another issue concerns what is an appropriate level of resource allocation by government for implementation of the OHS policy regime?

The research clearly highlights the contested and connected nature of OHS policy to industrial relations and workers'' compensation policy. However recent Australian research has argued that not only is OHS policy connected, its effectiveness is compromised because of inherent philosophical conflicts between regulatory regimes working in the same space (Haines and Gurney, 2003; Johnstone and Sarre, 2002). In their analysis Haines and Gurney (2003) argue that while there may appear to be a superficial congruence at a high level between regulatory regimes operating in the same or overlapping space, in fact because the regimes originate from different philosophical perspectives and are designed for different policy outcomes/agenda, they in fact compete with each other. The example they give is between competition law and health and safety law in Australia. Both competition and health and safety law regulate business behaviour, however competition law operates in a paradigm of promoting a free market while health and safety operates from a welfare paradigm. Consequently, private enforcement behaviour aimed at improving the safety behaviour of a subsidiary or supplier company can be challenged on the basis that it is restricting trade and is consequently illegal behaviour.

Using Haines and Gurney's (2003) analysis, it could be argued that the same situation applies in New Zealand. On one hand we have a workers'' compensation regulatory regime that is a no-fault welfare system, on the other the OHS regime is a substantially a punitive fault based one that prioritises the responsibility of employers to manage workplace health and safety. The difference in approach has implications for how accident investigations take place and where one thinks prevention should focus. The former approach might encourage a systems thinking and avoidance of laying blame, while the latter could focus more upon individual behaviour and blame. Another good example of the tension between regulatory regimes operating in the same space is the obligation of employers to respect on one hand individual worker's rights while on the other having to actively promote health and safety in the workplace. In this context, employers may wish to impose drug testing upon their workforce, although this may be resisted by unions on the basis that it breeches individual workers' rights. Consequently, it can be argued that the regulatory regime protecting individual rights compromises the ability of the OHS regulatory regime to promote improved worker safety.

Based upon the review, Figure 2 below presents a contextual framework for considering the overlaps between regulatory regimes and OHS regulation in New Zealand operating in the workplace space.

Figure 2: A Contested Workplace: A Policy Framework of OHSM Regulation in New Zealand



Source: Adapted from Wren, 1997

Current dominant regulatory approach to OHS management and regulation in advanced western nations

The previous section presented an overview of the general debates about OHS regulation. However, it has been argued that how OHS is regulated is closely tied to dominant theories about the causes of workplace injuries (Frick et al. 2000). The theories are important because they significantly influence the way OHS practitioners and researchers think about the causes and prevention of workplace injuries and ill-health.

While there are many injury causation and prevention theories, the dominant theories originate within the following schools of thought: Medicine, Industrial Hygiene, Occupational epidemiology, Individual and Organisational Psychology, and Ergonomics, Systems theory

(Quinlan, 1993; Quinlan and Bohle, 1991). In New Zealand, Domino theory and Loss Causation theory which originated in the early psychological literature, Epidemiology and more recently Interactive/Systems theory are seen as being the dominant perspectives (Slappendel, 1995; Wren, 1995). It is interesting to note that Slappendel attributes the prominence of these theoretical approaches to the "endorsing role of three key organisations": 1). the National Safety Association in the 1950 and 1960s; 2). ACC particularly during the late 1970s and early 1980s; and, 3). the Department of Labour (Slappendel 1995; Wren 1995).

Associated with these dominant paradigms was a general regulatory approach that emphasised prescribing in some detail "what" work hazards should be controlled, and "who" should control them (Bluff and Gunningham, 2003). However, during the 1970s it became increasingly accepted that prescriptive technical regulation was failing to deliver better workplace health and safety. The 1972 British Roben's Report with its call for a shift towards employer self regulation was particularly influential agent for guiding change, as was the Scandinavian work environment law reforms that introduced concepts around worker's rights to participation in OHS decision-making and seeing OHS as a systemic part of the total workplace environment. These reforms began an international process throughout the 1980s of seeing OHS regulatory regimes shift towards a regulatory emphasis upon encouraging employers to proactively adopt a systematic management approach to controlling their workplace hazards (Frick et al. 2000). By the 1990s the process of transition had resulted in a general acceptance by OHS practitioners and regulators of a new dominant paradigm in advanced industrialised nations called Occupational Health and Safety Management Systems (OHSM Systems). OHSM Systems are premised on the logic that argues:

- OHS is an integral part of the production process;
- senior management is responsible of the production process and consequently OHS;
- to minimise work place health and safety, decisions about OHS have to be integrated into decisions about production;
- an essential pre-requisite to making OHS management decisions is the systematic assessment of work hazards; and
- prevention requires adequate distribution of tasks and resources across the whole organisation, (Frick and Wren 2000).

Frick et al (2000) argue that accompanying the development of the OHSM Systems paradigm have been the introduction of new Occupational Health and Safety Management (OHSM) regulatory regimes in many advanced industrial nations. The OHSM regimes are characterised by:

- active promotion by government agencies and private consultants of the voluntary adoption by employer's of OHSM Systems into their workplaces;
- an international debate on what constitutes minimum OHSM Systems standards, and whether there should be an international OHSM Systems standard promulgated by international organisations – such as CEN and the ILO;
- the introduction of national guidelines, particularly in EU member countries, on the implementation of OHSM Systems, which is extending to making such standards mandatory for all employers;

- the development of a mixed ("hybrid") regulatory approach in Australasia and the USA that both promotes industry self-regulation / adoption of OHSM Systems and targeted compliance forcing the adoption of OHSM Systems on high risk groups;
- a growing international literature debate about what does OHSM as a regulatory approach really represents: is it a "sham", or a "paper tiger" or is it a "success story"?

Within the overall OHSM regulatory framework, Frick et al (2000) have discerned a number of contrasting points of emphasis in its implementation by western nations:

- Quality control approach that places emphasis upon the use of production engineering and safety design rather than controlling worker behaviour to improve safety.
- Safety behaviour approaches that emphasise controlling behaviour rather than relying upon engineering solutions to maintain safety and quality.
- A emphasis upon either:
    - encouraging voluntary adoption of OHSM Systems through the promotion of OHSM Systems by the private sector including workers'' compensation organisations; or
    - forcing compliance with a set of national or international standards for OHSM Systems similar to the ISO standards for product quality (ISO 9000 series) or the environment (ISO 14000 series).

These differences have meant that in practice how OHSM is implemented in law, and enforced, varies between countries making comparisons of effectiveness problematic.

Issues relating to the Current Dominant OHSM Regulatory Approach, and Recommendations to Promote Effectiveness

The OHSM regulatory approach represents one end of the regulatory spectrum (Bohle and Quinlan, 2000; Dwyer, 1991; Frick et al. 2000; Hopkins, 2005; Johnstone and Sarre, 2002; Quinlan, 1993; Quinlan and Bohle, 1991; Wilpert, 2008). At one extreme are approaches that are described as 'prescriptive or norm / rule compliance orientated', at the other are approaches such as OHSM that are characterised as 'performance or goal' orientated (Hopkins, 2005; Wilpert, 2008).

What does Compliance Mean?

Hopkins argues that a significance issue with the performance approach is that it has created a situation where "the very concept of compliance has to some extent lost its meaning" (2005:7). In the absence of technical standards, both employers and regulators have to make more informed decisions about what the level of risk is in a workplace and how to best control them. However both parties may not have the necessary level of information to make the decision, or there may be significant disagreement about the best way to manage the risk or what the level of risk actually is. Consequently, uncertainty arises for both parties as to whether compliance has been achieved. Hopkins (2005) suggests that the best way to achieve compliance is for regulators to "go beyond compliance monitoring" with regulatory rules, to also undertake activities involving:

- auditing the auditors;
- being more proactive about undertaking investigation of injury / health events;
- supporting company staff by advising on organisational design;
- exposing poor performance and creating a environment of regulatory 'crisis' in an organisation.

The issue of what does compliance mean in a performance framework is also reflected in other studies. Wilpert, (2008) observes that "the concrete design options of goal-orientated regulation are still somewhat vague". Furthermore, the focus upon OHSM Systems as the means to achieving compliance are not readily amenable to observation and control through traditional enforcement mechanisms such as inspections. A new approach is needed that requires both the regulator and the employer to first negotiate agreement about what is an acceptable level of performance for the workplace and associated indicators to measure performance, and then to build a culture of organisational self-learning and minimising errors. Others have argued that the "overall effectiveness" of OHSM regime is determined by the adequacy of the OHS Standards that may take a variety of forms and which inform the regime (Bluff and Gunningham 2003; Frick et al. 2000). Bluff and Gunningham, (2003) suggest that Australian '21st century OHS regulation' should consist of regime where:

> (1) the OHS statutes comprise general duties and systematic process-based standards, covering each of the principal relationships between risk producers and risk exposed;
> (2) OHS regulations provide comprehensive coverage of hazards encountered in contemporary working life, by achieving the right balance between carefully defined performance outcomes and performance targets, and specification standards for significant risks; and
> (3) evidentiary standards are the vehicle for industry and sector specific guidance, as well as for some technical standards, where both a clear benchmark of compliance and flexibility are desirable features (Bluff and Gunningham, 2003:30).

Existence of a Sufficient OHS Infrastructure

Another significant issue raised in the literature is whether there is a sufficient OHS infrastructure available to support the implementation of an OHSM regime (Bohle and Quinlan, 2000; Frick et al. 2000; Quinlan, 1993; Quinlan and Bohle, 1991). A sufficient infrastructure is one where:

- the private and government workforce is large enough to provide timely advice and undertake inspections / audits;
- the OHS work force is educated enough to fulfil the roles and functions required in an advanced economy;
- competency standards for the OHS workforce are promulgated and promoted;
- regulators are supported by a judiciary that enforces compliance;
- information in the form of standards and guidance documents is readily available about what 'best practice' means.

Changing nature of the workplace and globalisation

Other issues that have been identified as currently posing major challenges to the regulation of OHS in advanced industrialised nations include (Bohle and Quinlan, 2000; Quinlan, 1993; Weil, 2008; Quinlan and Mayhew, 2000):

- the changing composition of industry;
- the arrival of new technology and associated risks – many of which are unknown;
- an increasingly diverse range of workplace employment relationships and increasingly internationally mobile workforce, which makes OHS management more difficult;
- debate over the role and adequacy of International Standards versus local standards;
- a reduced unionised workforce that contributes to monitoring and enforcing compliance.

In response to these challenges, Weil (2008) suggests that effective regulatory workplace enforcement should:

- prioritise resources on those industries and workplaces with the most vulnerable workers';
- undertake enforcement actions that have a deterrent effect beyond the immediate workplace;
- promote and introduce measures that require sustainable behaviour change in the employer beyond the immediacy of an inspection;
- undertake activities that have strategic systemic effects at the industry, geographic or technical level.

The Problem of Small and Medium Sized Workplaces (SMEs)

Small and medium sized businesses (defined as less than 50 employees) pose extra challenges for the implementation of OHSM in many countries, yet they are responsible for the employment of significant levels of the total employment in a country. In many industrialised nations SME's are responsible for employing 30 to 50% of the total workforce. Consequently, improving the effectiveness of OHSM in these workplaces is critical to achieving an effective OHSM regulatory regime and ultimately reducing injury rates and improving the health of the workforce.

In OHS terms, SME's are seen as particularly at risk workplaces because they often lack management expertise, operate in more hazardous environments, have higher rates of injury and lower rates of return to work for injured workers', and they are often hard to reach to promote OHSM Systems and to monitor compliance (Eakin, Lamm and Limborg, 2000).

Internationally, three approaches to promoting OHSM Systems in small workplaces have been trialled. In Denmark the approach has focussed upon OHS professionals' actively engaging in dialogue and providing consultancy with SME owners and managers. The approach has been shown to significantly increase the uptake of OHS services, however it requires a well trained OHS workforce who are supported by education tools directly relevant to the needs of SME's and tailored to specific industrial settings. The Swedish approach has been to empower and support workers' to have an active role in monitoring compliance. A different approach based upon a community development model has been used in Ontario Canada, with support from Workplace Safety and Insurance Board. This approach builds upon the work and expertise of the

Canadian Safe Communities Foundation, which is associated with the international Safe Communities network. The approach focuses upon building a local community network of people with an interest in promoting health and safety in the geographic area, who are supported by a mix of private and government agency resources (Eakin et al. 2000). New Zealand specific research has shown how problematic managing OHS is for SME's; many of whom who view OHS with "indifference" and "hostility" (Lamm, 1999). Lamm suggests that to overcome the barriers that exist, one useful approach to reach SME's is for OHS professionals and regulators to target the business advisors, such as accountants, who advise most SMEs (Eakin et al. 2000; Lamm 1992; 1997; 1999). Similar results and recommendations have been reported by Lansdown et al, to the United Kingdom Health and Safety Executive (Lansdown, Deighan and Brotherton, 2007).

Evidence for Effectiveness

Evidence for the effectiveness of various OHS regulatory approaches is of perennial interest to all those affected by it (Frick et al. 2000; Haines, 2002).

While a commonality in approach to OHSM can be seen, in practice evaluation of effectiveness is highly problematic because of differences in the how the approach has been implemented in law, change over time between countries, differences in type and extent of regulatory activity between countries, and differences in data collections systems (Kendall 2006). Frick et al (2000) have also commented that because of the long causal chain between types of OHS management and workers' safety and health it is virtually impossible to establish with any certainty which OHSM regime or OHSM system is more effective than another.

In spite of the difficulties, Frick et al (2000) have suggested that there three general points of view about the effects of the OHMS approach, and evidence for all three can be found. The views are that OHSM is a:

- "sham" in that it is represents an exercise in deregulation rather than an effective method for improving standards;
- "paper tiger" in that the while the standards are in theory high, the implementation of the approach is difficult, tends to focus upon documenting a management process which directs resources away from more useful activities, and does not fundamentally represent that much of a change from how OHS is traditionally managed in the workplace;
- "success story" in that it significantly raises the goal for what is deemed acceptable practice.

Kendall (2006) in her comparative study for NOHSAC, of the OHSM regimes in Australia, UK, Finland, Canada, US and New Zealand concludes that effectiveness "is hard to quantify for a number of reasons" and that there is no "reliable evidence as to which compliance or enforcement system is most effective". Kendall is left with recommending the "embracing (of) a mixture of methods" that reflect a "congruence of underlying philosophy for OHS between the five countries studied.

However, the generation of such generic observations and desire for "best practice" is not without its critics. Haines (2002) argues that such approaches tends to emphasise the importance of "technocratic management" that does not adequately engage with the local political and economic environment, nor the effects of globalisation on local regulation. Consequently, understanding regulatory effectiveness requires understanding the interaction between cultural, economic and political elements that produce a local "regulatory character", which informs the behaviour of regulatee and regulator. Eakin et al (2000) also caution that in regard to SME's in particular, we need to know more about which aspects of generic models are tightly integrated into the local economic, political and social conditions – the regulatory character – and those which are not and consequently may be applicable in other environments. In this context, it could be argued that the Ontario Safe Communities Foundation workplace initiative may be more appropriate for New Zealand to consider promoting than either the Danish or Swedish examples identified earlier.

NZ Specific Issues - Achieving Better Regulatory Compliance

In 2006, Allan and Clarke undertook, on behalf of NOHSAC a comprehensive review of New Zealand's regulatory approach (Allen and Clarke et al. 2006). The study involved in-depth interviews with key stakeholders, reviewing New Zealand focussed research on the subject, and analysis of documents supplied by agencies. In their report Allan and Clarke identified a wide range of issues with the performance on New Zealand's regulatory approach, many of which have been identified and described in the literature reviewed.

The authors concluded that New Zealand's OHSM regulatory regime represents a significant change in philosophy from the previous approach and that duty holders need support to assist their compliance with the performance focussed approach of the regime. However guidance material currently available is limited, not up-to-date, often inconsistent with current best practice, and inappropriate for the target audiences. In addition there are interface issues between the Health and Safety in Employment Act and the Hazardous Substances and Noxious Organisms Acts, particularly in relation to differing applications of the performance approach, and to duplication of material that assists duty holders to comply under both Acts. Compliance costs associated with the performance-based framework do not fall equally on all businesses, with small businesses likely to bear greater costs per person than larger businesses.

Other issues identified include arguing that the resourcing available to government agencies has not kept pace with economic growth, inflation, and changes in the composition of the economy. There is an insufficiently, trained workforce to implement and support the regulatory regime, nor is there an adequate educational and technical infrastructure to develop and support the existing workforce. It is also not clear who should lead work to ensure the development and delivery of various types of guidance documents to support compliance with the regulatory regime and the adoption of best practices. Furthermore, the problems associated with New Zealand's surveillance system for occupational health and safety has been clearly articulated by NOHSAC in previous reports, however agencies do not appear to have addressed the issues. Another issue concerns the nature and extent of the interface between the rehabilitation and compensation scheme and the compliance and enforcement system. The issue is that liaison and collaboration between the enforcement and compliance system and the compensation and rehabilitation system

is required to ensure that the overall health and safety system operates effectively. It can be argued that it is important that the health and safety regulator know about incidents of serious harm occurring in businesses that are part of a workers'' compensation scheme incentive programme so that it can ensure that the workplace is safe. Similarly, the workers'' compensation scheme needs to know if the regulator is investigating a workplace or organisation of a member that it is insuring. However, to what degree is there a responsibility for organisations to share information if one party considers the information to be confidential to the organisation and its release may undermine its working relationship with the client?

Conclusions

The review and analysis presented suggests the following conclusions about where New Zealand's current OHSM regulatory regime fits within international experience as described in the literature, and how it could be improved. First, New Zealand's OHSM regulatory regime fits within a internationally accepted generic model of OHSM best practice. Second, generic models do not adequately describe national differences, and this makes undertaking international comparisons of effectiveness highly problematic. Because of the national differences in how OHSM is implemented there is no real evidence on the effectiveness of different OHSM regimes from which policy makers can learn. Third, it has been argued that the effectiveness of any particular OHSM regulatory regime requires acknowledging that the OHSM regime fits within a wider workplace regulatory environment that is likely to include other regulatory regimes counter productive to effective compliance with the OHSM one. Moreover instead of focussing upon 'technocratic management' mechanisms to understand compliance behaviour, a focus upon understanding and shaping the 'regulatory character' may provide useful insights into how to develop new enforcement strategies and compliance promoting behaviours by agencies. Fourth, there is agreement that effective implementation of an OHSM regulatory regime requires the existence of an adequate OHS infrastructure. In particular, it requires a workforce able to implement, advise and monitor compliance within the framework that sits in a complex and changing environment. It is necessary that the workforce will have to assess different levels of risk; provide advice about a range of options to manage the risk, and advocate for the implementation of management systems that are 'self-learning' and promote 'continuous improvement. Other requirements are:

- A legislative environment where the judiciary is willing to enforce compliance.
- The development and promulgation of a range of types of Standards and Guidance documents that inform employers what OHSM Systems performance means in terms of outcomes and indicators, and how OHSM Systems can be incorporated within their everyday practice.
- Adequate resourcing of OHSM at the government level that is appropriate for the size and complexity of the industry being regulated.
- Development and implementation of enforcement strategies that move 'beyond monitoring' to include targeting resources and activities toward:
    - protecting the most vulnerable workers';
    - focus upon the most hazardous and at risk workplaces; and

    - achieving deterrence effects beyond the immediate in time and local workplace.
- Acknowledging that in many countries small and medium sized businesses (defined as less than 50 employees) pose extra challenges for the implementation of OHSM, and they are responsible for the employment of significant levels of the total employment in a country. Improving the effectiveness of OHSM in these workplaces requires responses that are appropriate to the 'regulatory character' in which they operate.

Given the conclusions, the evidence from the literature suggests that in order to implement a best practice OHSM regulatory regime in New Zealand action on a number of fronts is required as outlined above in fourth point. The analysis also suggests that it could be useful to clarify the interface between the workers' compensation scheme and regulator activities. In order to improve the performance of New Zealand OHSM regulatory regime, a number of questions need to be resolved. First, is there a role for a workers' compensation scheme in developing and promoting a range of OHSM Standards and Guidance documents that would aim to promote the adoption of best practice by employers such as those described by Bluff and Gunningham (2003)? To answer this question some work would be required to clarify the respective functions and roles of the workers' compensation scheme agency and regulators in disseminating information about what represents 'best practice' (conceivably an workers' compensation scheme role) versus information about expectations about what represents minimum compliance requirements (a regulator role).

Second, is there a role for the workers' compensation scheme in building/supporting an OHS infrastructure, in particular a workforce capable of implementing, advising and monitoring compliance with the New Zealand's OHSM regulatory regime? If yes, then what are the limits of the role? When thinking about this question it may be useful to review the experience of the late 1970s and early 1980s where the workers' compensation scheme actively employed workplace safety advisors to work alongside employers. Third, to what extent should a workers' compensation scheme acting as an insurer with a privileged client relationship and possibly confidential information be obligated to provide the regulator with information about non-compliance with regulatory standards? Fourth, is there a role for a workers' compensation scheme to use its influence as 'insurer' to promote higher standards of OHSM Systems practice, and to reward best practice through an enhanced incentives programme? Finally, what is the role of a workers' compensation scheme in facilitating the development of better data collection systems and dissemination of information about what is happening in the workplace, given that other government agencies also collect information in this workspace?

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