Weighing the pig never made it heavier: Auditing OHS, social auditing as verification of process in Australia

Verna Blewett *, Valerie O'Keeffe

Centre for Sleep Research, University of South Australia, GPO Box 2471, Adelaide, SA 5001, Australia

ABSTRACT

South Australian organizations assess their OHSMS through audits as evidence of risk control and to help make workplaces healthy and safe. Auditing is an evaluative process regarded as an important step in the cycle of continuous improvement in OHS. Auditing began with financial audits conducted for reasons of corporate governance: for accountability, to inform management decisions and to provide market confidence. Society expects audits to be a tool of regulation, governance and accountability, but celebrated failures of audits to warn of impending financial collapse in organizations in recent years appears to have led to an increased fervour for auditing, rather than a decline. Social audits, including auditing of OHSMS, are intended to determine that an organization is meeting its corporate social responsibilities; but what is audited is often contested and requires subjective analysis. Financial and social audits are subject to failure: unintentional errors, deliberate fraud, financial interests causing undue influence, and undue influence from personal relationships between the auditor and client. We identify five further categories of failure: lack of worker participation; paperwork for the sake of the audit; goal displacement of audit scoring; confusion of audit criteria; and lack of auditor independence and skill. There has been a shift in focus: the current demand and preparation for auditing distracts organizations from the primary goal of making the workplace healthy and safe. We argue that auditing OHSMS has become a ritual rather than a means of improving workplace health and safety and should at least be treated with caution.

© 2010 Elsevier Ltd. All rights reserved.

Not everything that counts can be counted, and not everything that can be counted counts

(attributed to Albert Einstein).

1. Introduction

'Healthy and safe workplaces' is a clear goal set out in occupational health and safety (OHS) legislation in Australia and this paper draws from and refers to the situation and experiences in Australia. But how is the state of being 'healthy and safe' determined? Outcome measures, such as lost time injury frequency rate, tell us little about performance in health and safety. This failure is well known and has been accepted for many years (Amis and Booth, 1992). Despite this, they continue to be reported in company annual reports as the primary indicator of OHS performance.

As opposed to being an isolated matter, OHS weaves through and pervades an organization's operation, is a legal requirement, and is affected by decision-making at all levels. It is therefore a complex matter to determine and report on. Certifying a level of

OHS performance necessarily requires a complex process to tease out the organizational factors that contribute to it. The features of systematically managing OHS may be relatively easy to enunciate, but difficult to measure or assess. They rely on identifying and analysing not only objective, tangible matters (e.g. is the machine guard on or off, are hazardous substances controlled, do emergency procedures work), but also less tangible matters to do with power and influence, leadership, and relationships in organizations (e.g. is there management commitment, is there effective consultation with the workers, is work organized to minimize risk). It is in this context that auditing health and safety has arisen as a means of determining and certifying the OHS performance of organizations.

What is an audit and what is it for? A simple definition defines the audit as a

. . .management tool used to examine processes and activities and gauge whether they are conforming to standards and procedures and whether there are any opportunities for improvement (Mallen and Collins, 2003, p. 5).

That is, an audit is a systematic check of an organization's activities and arrangements to determine if it is achieving what it defines that it should achieve (the audit criteria). Organizational performance is assessed against specific audit criteria by an internal or external auditor who typically examines documentation and

* Corresponding author. Tel.: +61 (8) 8302 6624; fax: +61 (8) 8302 6623.
E-mail addresses: verna.blewett@unisa.edu.au (V. Blewett), valerie.o'keeffe@unisa.edu.au (V. O'Keeffe).

engages with people at all levels in the organization about the way work is conducted. The evidence is examined and cross-checked to determine its validity.

The process of auditing originated in the domain of finance and accounting where it operates as a tool of regulation; a means of determining compliance with systematic rules to ensure accountability and transparency of financial practice and to ensure confidence in financial markets (The Treasury, 2010). It is intended as a means of protection against fraud and other financial impropriety; and by and large audits have this impact. However, there have been some well-known failures in auditing practice (The Treasury, 2010) in the last few years that have resulted in a reassessment of auditing practice, but they do not seem to have dampened enthusiasm for auditing. Instead, since the late 1980s auditing has been translated from the examination of financial systems to enable auditing of various social systems; indeed as Power suggests, we are in the midst of an 'audit explosion' (Power, 1994, p. xii).

In the domain of OHS the desire or requirement to audit has become a major focus of health and safety managers but, despite the level of audit activity, we have also seen celebrated failures of audited OHS management systems (OHSMS) resulting in death, injury and major property damage; such as the Moura mine disaster and the Longford gas plant disaster in Australia (Hopkins, 1999, 2000).

This paper briefly examines the nature and legacy of financial auditing, its translation into social auditing and into the auditing of OHSMS in particular. The focus is on auditing in South Australia where the early work of developing OHSMS auditing by government agencies in Australia was commenced in the late 1980s and in which the primary author participated. We draw on our experience in auditing and assessing the OHS management systems of Australian organizations (and in South Australia in particular) as well as the experience revealed in the literature.

This conceptual paper describes the history and context for today's OHSMS audit activity. Moreover, it discusses the impediments to the use of auditing as a means of certifying OHSMS due to inherent failures of the social audit process that we have observed in our practice: failure to allow worker participation; paperwork for the sake of the audit; unintended consequences and potential goal displacement of audit scoring; the confusion of audit criteria; and lack of auditor independence and skill. The paper suggests ways of ameliorating this risk and proposes a research agenda.

1.1. Financial auditing

Financial (or company) audits were traditionally conducted for two main reasons associated with corporate governance. Firstly, they were required to ensure that reliable information was used to monitor the decision-makers in an organization. Secondly, they were required to ensure that information given to the decision-makers was reliable (Johnson, 2004, p. 1). Where these conditions are satisfied, the foundations are laid for confidence in financial markets. There is a societal expectation, from shareholders, customers and the general public, that audits should be a tool of regulation, governance and accountability; indeed financial audits were established for these reasons and are a legal requirement (Adams and Evans, 2004). In Australia there is a comprehensive legal framework under the Corporations Act, 2001 (Cth). It covers the registration, appointment, supervision and disciplining of company auditors and the financial reporting requirements of legal entities (a framework that is currently under review following the HIH Royal Commission) (The Treasury, 2010, p. 22). In addition, financial auditing is performed against various Australian Auditing Standards.

There is some debate in the literature about the use of the term "audit" and which activities actually constitute an audit. However, at the heart of financial audits are the checking and cross-checking of documentation and questioning of individuals to determine what, how and when particular operational processes or procedures are robust and conform to established criteria. These methods enable the auditor to determine conformance or non-conformance with established criteria, and to make recommendations about practice and changes to process or procedure. Assuming that the auditor is competent, an auditor should be alert to in-house procedures that are developed to identify, prevent or control fraud, and also be mindful of so-called "red flags" (such as fines imposed by a regulator) that indicate a need to be alert (Power, 1997, p. 24).

Following the conduct of a financial audit the auditor provides a report documenting the areas of conformance and non-conformance with the audit criteria and makes recommendations for action. Typically a certificate is issued with the report verifying the result of the audit and stating that the audit has been conducted against particular audit criteria. This certificate will be included in the financial reports to shareholders and is seen as assurance that the organization is conducting its financial affairs in a manner that complies with the law and that the financial reports are true *within the limits of audit practice*. There is always the caveat. Although audits make fraud more difficult, human ingenuity means it is not impossible. Nevertheless, it seems observers regard an audit as a concrete and verifiable event that assures that an organization's financial practices are as they should be to enable the organization to operate, to protect shareholders' interests and maintain market confidence. From outside the financial world, financial auditing looks to be an established means of verification and assurance of reliability. But as Power wonders,

> The puzzle is that auditing lacks clear output based criteria of performance, despite the fact [...that] it is a practice which has itself been instrumental in helping to define performance for many organizations (Power, 1997, p. 27).

In fact, the development and fine-tuning of financial auditing practice has been, and continues to be, largely in response to failure in which audit criteria or auditing practice have been found wanting—often accompanied by litigation and media attention (Power, 2003), such as the highly visible collapse of Arthur Anderson in response to its auditing of Enron. These failures can be attributed to four broad categories of root cause: unintentional errors of auditors, deliberate fraud by auditors, financial interests from auditors' consulting causing undue influence, and undue influence arising from personal relationships between auditors and their clients (Tackett, 2004). Tackett suggests that some unintentional errors of auditors may well be a result of fatigue when auditors work long hours at the end of the financial year to enable reporting on publicly listed enterprises within regulated timeframes and suggests a range of system and regulatory changes that might mitigate these failures. Other commentators suggest that the free market and self-regulation is the appropriate tool for improved audit function (Arruñada, 2004).

Since the mid-1980s the tools of financial auditing (the establishing of audit criteria and systematic checking against those criteria) have been adapted in order to examine the effectiveness of various social and management systems. Thus we see a rise in the demand for auditing social systems (social audits) such as: fair trade, medicine and health provision, and education. While within organizations attention is given to auditing management systems such as: quality, the environment, and occupational health and safety (Courville et al., 2003). As for financial auditing, the same systematic approach to defining audit criteria, conducting the

audit, and reporting on the result apply to social auditing; but so do the same failures.

1.2. Social auditing

The social audit is intended to determine that an organization is meeting its corporate social responsibility obligations: "the entire environmental and social 'footprint'" (Ascoly et al., 2001) rather than its financial responsibilities. Indeed, there is a "dazzling array of initiatives to integrate social justice issues into business practice" (Courville et al., 2003) such as environmental, quality and labor conditions, including OHS management. But whereas financial audits are required by law, social audits are not generally explicitly legally mandated, What is audited can suffer from a "lack of completeness of reporting, and [a] lack of credibility of reports" (Adams and Evans, 2004). The primary audience of the financial audit is the shareholder, but there may be a wide array of audiences for the social audit. Government agencies, funding bodies, customers, donors, or social action groups may have competing or conflicting interests that may impact on the design of the audit criteria, the manner in which the audit is conducted, the nature of reporting and the availability of the report (Adams and Evans, 2004).

In Australia social auditing has become well organized with the establishment of JAS-ANZ (Joint Accreditation System of Australia and New Zealand) in 1991. JAS-ANZ is a government-appointed, not-for-profit body established to enhance cross-Tasman trade between Australia and New Zealand and provide 'confidence that goods and services certified by accredited bodies meet established standards' (JAS-ANZ, 2010a, p. 5). JAS-ANZ accredits organizations as Conformity Assessment Bodies (CABs). CABs then certify products, processes and systems against specified standards or audit criteria. Depending on the nature of the audit, the audit criteria may be developed internally, may be set by legislation, may be established national or international Standards or may be set by CABs, such as SAI Global, Lloyds Register, or Det Norske Veritas (DNV). CABs also certify people as auditors enabling them to audit against specified standards or audit criteria (JAS-ANZ, 2010b). The principal audit areas are quality management (ISO 9001), environmental management, (ISO 14001), OHS management (AS/NZS 4801, OHSAS 18001), and food safety management (PrimeSafe, ISO 22000) (JAS-ANZ, 2010a, p. 4). That is, in Australia there is a formal process intended to provide quality assurance and standard practice by auditors of social systems.

2. Auditing OHSMS in South Australia

In Australia, the move to auditing OHSMS commenced in South Australia in the late 1980s. It followed the introduction of that State's OHS legislation and related workers' compensation and rehabilitation legislation (in 1986) and the take-over of workers' compensation insurance by the state. At the introduction of the legislation, large employers with significant financial reserves (including State Government agencies) were given the opportunity to be self-insured for workers' compensation (so-called 'exempt employers'). Many took up the opportunity, but before long there was disquiet about their OHS performance because self-insured employers were over-represented in the courts in litigation about OHS and disputed workers' compensation claims. The State insurer took the stance that self-insured organizations should be high performers in OHS, indeed should be exemplary, and began work to define what "exemplary" meant.

Changes in the state insurance arrangements in the early 1990s meant that self-insured employers that did not meet high standards in OHS performance ran the risk of losing their self-insured status and their actuarial liability being passed to the state. They would then be forced into the State Government workers' compensation system and would pay a levy commensurate to their actuarial risk. For many large self-insured organizations this would have been cost-prohibitive, meaning an immediate increase in annual costs of millions of dollars. So the scene was set for self-insured organizations to prove to the workers' compensation agency that they were high performers in OHS management, and for the workers' compensation agency to establish a measure of risk through an audit of their OHSMS. The initial strong driver for good OHSMS audit performance was thus financial, and minimizing workers' compensation costs was seen as a proxy measure for OHS performance.

The workers' compensation agency developed its own audit criteria based on an early publication (WorkCover Corporation South Australia, 1989)[1] and began to audit self-insured organizations, organizations seeking self-insurance, and those seeking a reduction in levy (insurance premium) based on their OHS performance. The conundrum in OHS was that while low rates of workplace injury and ill health could be expected in workplaces that were healthy and safe, low or declining rates of workplace injury and ill health were not, on their own, sufficient to tell that an organization was healthy and safe (Shaw and Blewett, 1995). Thus the audit of OHS could not be restricted to an examination of the veracity of injury and illness reports. A broader examination of the processes for managing health and safety was needed. So the first audit criteria in the early 1990s covered the areas of: management commitment, consultation, policies and procedures, training, risk management, planning, and incident investigation and reporting.

Subsequently, in 1997, the Australian/New Zealand Standard on OHS Management Systems (AS/NZS 4804) was released (Standards Australia and Standards New Zealand, 2001a) to provide guidelines on what constitutes evidence for an audit of an OHSMS. In 2001[2], it was followed by a second document (AS/NZS 4801) that defined the auditing criteria, using the quality systems continuous improvement model (Standards Australia and Standards New Zealand, 2001b). The Australian/New Zealand Standard (AS/NZS 4801) defined an audit in this context as,

> A systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the organization's policy and objectives (Standards Australia and Standards New Zealand, 2001b, p. 3).

Two years later the Australian/New Zealand Standard on auditing quality and environmental systems gave a more detailed definition:

> ...an audit is a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled. Internal audits...may form the basis for an organization's self-declaration of conformity...independence can be demonstrated by the freedom from responsibility for the activity being audited. Audit evidence consists of records, statements of fact or other information, which are relevant to the audit criteria and verifiable; they may be qualitative or quantitative. The audit criteria are the policies, procedures or requirements...used as a reference against which audit evidence is

---

[1] The primary author of this paper was the principal author of the document, the first guide for OHS management in South Australia. In 1991 she researched and wrote the first drafts of the audit criteria for OHS based on this guide, aimed at organizations wishing to self-insure for workers' compensation.

[2] The AS/NZS 4801 was originally released in 2000. It was re-released in 2001 with a minor amendment on consultation processes required by New Zealand stakeholders.

compared (Standards Australia and Standards New Zealand, 2003, pp. 1–2).

An organization related to Standards Australia trained and certified auditors, began to conduct external audits against the audit criteria, and then fostered a network of consultants to provide advice on meeting compliance. Thus, a new marketplace in OHSMS auditing was born; as a means of verification, certification and as a step in continuous improvement and the move towards best practice.

In the intervening years other Australian State Government agencies have developed audits similar in tone to, or refinements of South Australia's, and influenced by AS/NZ 4801/4804, for example *SafetyMap* in Victoria, and the Queensland public sector's *Safer Workplaces Strategy Framework*. Whilst these vary in complexity and detail, they are broadly similar in approach.

2.1. Auditing to meet legal obligations in OHS

Whilst the changes in OHS legislation in the 1980s reflected a performance-based approach, the systems concept of OHS management connoted a more comprehensive and proactive approach to hazard identification and management and a way of increasing employer involvement in OHS. Monitoring systems compliance, rather than a vast array of prescriptive OHS standards, was also seen as an opportunity for more strategic use of resources in meeting the duty of care (Saksvik and Qunilan, 2003). The general duties provisions in the OHS legislation across all nine Australian jurisdictions are broadly similar in that they require employers to manage the risks of work in a systematic way. In South Australia S.19 of the *Occupational Health, Safety and Welfare Act 1986* (OHSW Act) states that,

An employer must …ensure so far as is reasonably practicable that the employee is, while at work, safe from injury and risks to health and, in particular—
(a) must provide and maintain so far as is reasonably practicable—
(i) a safe working environment;
(ii) safe systems of work…

The qualifier "so far as is reasonably practicable" exists in the other jurisdictions in similar forms and acknowledges that life is not risk-free and that the objective of the employer should be to minimize risk as much as possible.

The use of OHSMS in order to manage risk is the practical application of the general duty of care and may be incorporated in the primary Act or in supporting regulations. The expectation (and in some Australian jurisdictions the legal requirement) is for systems with parts that are interconnected and interdependent (Bluff, 2003), documented and auditable. The South Australian OHSW Act requires that every employer must:

…prepare and keep up to date a written statement *setting out with reasonable particularity* the arrangements, practices and procedures at the workplace protecting the health and safety of the employer's employees at the workplace (S.20 – our emphasis).

Reasonable particularity is, in practice, seen to include documentation assuring aspects such as: developing, implementing, maintaining and reviewing policy and procedures, organizational structures, supervision, responsibilities and resources, including consultative and participative processes. It also covers hazard or risk management in the form of monitoring and measuring work processes and work practices; providing information, training and developing competence; the selection, maintenance and safe use of plant, equipment and substances as well as their transport and safe disposal. Monitoring and maintaining records of worker health and safety as well as incidents, injuries and ill health are also included in the legal framework in Australian jurisdictions. The level of sophistication of the OHSMS is expected to be commensurate with the complexity, size and risk of the operation.

An audit of an OHSMS is intended to determine that an organization is meeting its corporate social responsibilities by maintaining a healthy and safe workplace that protects workers, the public and other stakeholders, as evidenced by reduced costs. As JAS-ANZ puts it, "Occupational Health and Safety …management system certification should primarily lead to a reduction of workplace illness and injury, minimizing the costs associated with workplace accidents" (JAS-ANZ, 2010b). The emphasis on costs promotes the view that the primary goal of audits is to produce data that is objective and quantifiable, that is, it suggests what is measured is important and what is not measured is insignificant (Zwetsloot, 2009). It begs the question whether audits do in fact yield more useful information than relying on output measures. In this context, the OHSMS audit can be seen as a tool of regulation, governance and accountability and the rewards for good audit performance may be: eligibility for lower workers' compensation insurance premiums; a lower level of scrutiny by the regulator, the media, unions and boards of management; and being regarded in the market place as an employer of choice. Thus the requirement to audit OHSMS has become an imperative for organizations and regulators alike in Australia. But are there unintended consequences from the audit imperative?

3. Audit frailties?

If the financial audit has its frailties and failures, the social audit, with its greater reliance on qualitative data and the auditor's subjective interpretation, and its sheer numbers of assessment criteria, is likely to be less robust. Tackett (2004), identified four failures of audits: unintentional errors of the auditor, deliberate fraud by the auditor, financial interests from auditor consulting causing undue influence, and undue influence arising from personal relationships between the auditor and client. In our practices we have observed five further categories: failure to allow worker participation; paperwork for the sake of the audit; unintended consequences and potential goal displacement of audit scoring; the confusion of audit criteria; and lack of auditor independence and skill. We have observed that these apply to social audits, but they may also apply to financial audits. We outline these below.

3.1. Failure to allow worker participation

Worker consultation is an underpinning construct in Australian OHS legislation with the duty to consult with workers on matters affecting their health and safety being a requirement of duty holders. Thus it would be reasonable to expect that this tenet would be reflected in audit method when examining OHSMS such that workers have a role to play in all stages of the audit.

The question of audit methodology is an important one because of the need to engage with key internal stakeholders in order to develop a critical and comprehensive view of the organization (Parker, 2003). This does not require an adversarial approach by the auditor, but a questioning that is prepared to be open to the multiplicity of views available within an organization in order to triangulate the audit data and reach an approximation of the truth. It requires the auditor to seek out and talk to people at levels in the organization that are pertinent to the enquiry. For example, if auditing the criterion worker consultation, the auditor would necessarily need to talk independently to management and worker representatives. However, it is our experience from examining

auditors' reports in organizations that interaction with workers is often avoided for a multiplicity of reasons, from lack to time for the audit, through to access to pertinent workers being difficult because of rostering arrangements.

If the views of internal stakeholders are sought, then it could be argued that there is a responsibility on the part of the auditor, or the management of the organization, to invite those who participated to attend the exit interview or at least share the audit report, with them. This might be regarded as a moral responsibility, but pragmatically, not to provide feedback is a disincentive to future participation.

3.2. Paperwork for the sake of the audit

The OHSMS audit is conducted against Standards, but the Standards are written in a generic manner that requires the auditor to reliably and objectively interpret subjective data; that is, data that consist of people's opinions or interpretations of events. Furthermore, because much of the legislation (and consequently the audit criteria) is performance-based, there are multiple ways in which compliance can be achieved. This makes the audit criteria and the evidence subject to auditor interpretation. So both the audit criteria and the adequacy of workplace practices are subject to interpretation. Internal challenges in power, influence and control that the auditor may be unaware of may result in employees and management deliberately under- or over-stating the position when questioned. There is considerable skill required to collect data and conduct the analysis in such circumstances, but there is unlikely to be inter-rater reliability without significant training and testing of individual auditors and their audits. Thus, auditors may prefer to rely solely on the audit of documentation because it is a tangible representation of the formal OHSMS that appears to be less prone to subjective influence (Costella et al., 2009). The result that we have observed in industry is a proliferation of the so-called desktop audit, where only documentation is audited. In turn this drives organizations to generate and retain documentation in order to meet the audit criteria. This may well be documentation that has little impact on the action that is necessary to make the workplace healthy and safe. In the worst cases, it may actually impede actions that keep the workplace healthy and safe, through overly prescribing work activities and making rules that are unworkable, thereby removing worker discretion to flexibly adapt (Dekker, 2003).

These concerns were noted by the primary author as the experience of many enterprises that contributed to the recent *Digging Deeper* research in Australia (Shaw et al., 2007). When asked about a company's OHSMS the researchers were often shown into a (sometimes locked) storeroom of folders that was presented as the company's OHSMS. We were told that access was restricted because the materials could be needed by an auditor (or potentially a court). In such circumstances there was no adequate answer to the question, "what impact does this material have on health and safety at this plant?". Generally we were told that the paperwork was a matter of compliance, that the burden of compliance was great and that they were "drowning in paperwork" (Shaw et al., 2007, p. 158). It was common to hear that considerable energy goes into maintaining and cataloguing paperwork that diluted the safety effort (Shaw et al., 2007, p. 155). We found situations where the OHSMS was the province of a very efficient administrative officer who maintained it and who ensured that the paperwork was in place and constituted an auditable trail. The quality of the information within the paperwork in those circumstances was often a secondary consideration. We observed a disconnect between the purpose of the paperwork and the exercise of collating it. In other organizations, the management system was stored on computer and was inaccessible in real terms to the operational workers whom it was intended to protect.
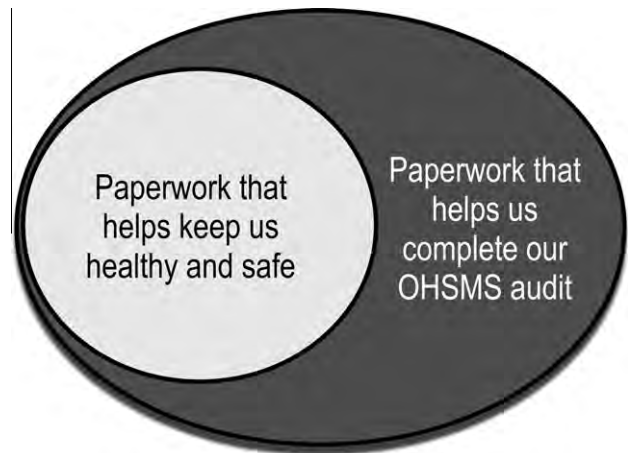

Fig. 1. The overlap in OHS paperwork.

So we see in practice that organizations may be driven by the audit imperative to over-document OHS-related activities. For example, by keeping detailed paperwork trails of such things as: the most minor risk assessments; to show that a hazard has been controlled after the control work has been completed, evaluated and found to be satisfactory; procedures for document control; and by some internal audit practices such as internal audits of meeting minutes. We also see informal practices that are effective because they are informal, bureaucratized for the sake of auditing, for example, by collecting formal minutes of informal toolbox meetings or documenting and signing the brief on-the-spot job safety analyses (JSA). We have observed that workers are less willing to participate in discussion in toolbox meetings when minutes are recorded, believing that they may be held accountable or liable for their views and ideas. Thus we postulate that OHS documentation falls into two overlapping categories as illustrated in Fig. 1.

The category of paperwork that only "helps us complete our OHSMS audit" can build resentment in organizations. The effort required to maintain it may be significant and may divert attention and resources from the effort to make the workplace healthy and safe (Haines and Sutton, 2003).

3.3. Unintended consequences, goal displacement and audit scoring

At best the OHSMS audit may provide a commentary on the state of the OHSMS with respect to compliance/non-compliance, areas of concern, and may identify opportunities for improvement. When this is done well it can provide an organization with a direction for action to improve. However, the same information can have quite a different impact, especially when tallied to produce a score. The very act of scoring is a reductionist activity in which the descriptive outcomes of an audit are reduced to a single number. For example, internal audits often have a scoring system that is used to make comparisons between departments or areas based on numerical scores. While the intention might be to indicate more simply the progress of an organization, it can have unintended consequences.

Reaching for a score may be a form of goal displacement that results in effort and resources being applied to work that may have only ritualistic value and limited or no impact on worker health and safety. There are explicit financial and reputational rewards in achieving a good audit; enough to suggest to employers and workers alike that a highly positive audit result is the appropriate prize to accomplish. On the other hand, the message may be that giving senior management bad news is not appropriate, as is often the case with inconvenient truths (Zwetsloot, 2009). But the prize

may be deceptive and ill conceived if effort is not also put into determining the strategies that are needed in the organization to make it healthy and safe, and then actually taking action to implement those strategies.

The need for a score is not only desired by organizations. It is clear that finding measures to determine that an organization is healthy and safe is a holy grail for some researchers. That this remains a contested domain of research and conjecture is evidenced by the debate in a special issue of this journal in (Volume 47, 2009) in response to Andrew Hopkins' views (Hopkins, 2009).

The potential impact of the demand for OHSMS auditing is that organizations focus on the goal of passing an OHSMS audit at the expense of the more vital goal of making the workplace healthy and safe. The outcomes of such goal displacement can be catastrophic, as the Longford case illustrates. The explosion at the Esso Longford Gas Plant (Victoria, Australia) killed two people, injured many others, resulted in significant damage to plant and equipment, and shut down the supply of gas to the thousands of businesses and residents of Victoria. Six months earlier the site passed, at the highest levels, an audit of the OHSMS conducted by its external owners, Exxon (Hopkins, 2000, p. 81). The managing director was told mainly good news that pointed out the potential for improvement only in "enhancing system documentation and formalising systems" (Hopkins, 2000, p. 82). In the subsequent Royal Commission it was concluded that "the development and maintenance of the [OHSMS] …diverted attention from what was actually happening in the practical functioning of the plants at Longford" (Hopkins, 2000, p. 84).

On the other hand, poor OHSMS audit scores can be used as a weapon to attack organizational actors including management, workers, OHS coordinators, and unions. Thus the OHSMS audit may be a tool of control. Indeed, the actors who are most proximal to the issue are those most likely to become the scapegoats who can be blamed when things go wrong. As Haines and Sutton describe, the audit may be one means by which the organization remains "virtuous" at the expense of organizational members (Haines and Sutton, 2003).

3.4. The confusion of audit criteria

There are several parameters on which audit criteria and the nature of auditing can be confused or cause confusion. The generic nature of audit criteria may be inadequate for individual organizations, reductionist reporting of audit results may oversimplify matters that should cause concern, and the confusion of audit criteria with the OHSMS itself may divert attention away from actions to improve OHS and towards activities that ensure audit success. Each of these is a concern.

Audits of OHSMS are conducted against specified audit criteria and the nature of an audit is to determine if those criteria are or are not met in practice. Necessarily then, audit criteria may require black and white assessment; either what is being assessed meets the standard or it does not. But if the answers are not "yes" or "no", but "maybe", or "it depends", then it is arguable that the audit process may not be adequate to determine clear conformance or non-conformance, whether it be a financial audit or a social audit. An "it depends" answer may be appropriate when looking at the performance on one criterion across a whole organization. For example, the risks associated with manual tasks may be well managed in all but one high-risk area of the organization. How is the auditor to adequately represent this without giving a false positive or false negative report?

As Hopkins observed, audits tend to focus on the OHSMS itself and are not necessarily an effective tool for detecting hazards, which is most important in ensuring safe and healthy workplaces (Hopkins, 2000, p. 85). Instead, audit findings tend to condense important detail into generalized overarching statements about the state of health and safety against audit criteria that are themselves presented in generic terms. Sometimes the classifications used can dilute the seriousness of findings, lessening their impact when presented to senior management (Hopkins, 2000, p. 82) and reducing the likelihood that appropriate action will be taken to improve matters.

OHSMS audit criteria have been standardized in internationally agreed Standards that in turn have led to the standardization of the OHSMS themselves. The ubiquitous nature of OHSMS auditing leads some organizations to define their OHSMS in terms of the OHSMS standards that are used as the audit criteria. This is essentially a cyclical process where the audit criteria become the framework for the system, and the system is built to meet the audit criteria. Such activity is likely to increase the chances of audit success. A highly positive audit result, in turn, may lead the organization to rest on its laurels and withdraw attention and resources from OHS. The OHSMS audit under these circumstances is antithetical to workplace health and safety. What is missing is an unfettered assessment and planning of the strategies and activities that are needed to make the organization healthy and safe; strategies and activities that may not be the primary focus of audit activity; for example planning, resource allocation, fixing hazards at source and participation in OHS. Thus the focus may be shifted. When assessment and planning *are* undertaken, the OHSMS audit may be a useful tool for determining that the OHSMS is functional and effective. But the audit needs to be subservient to the system, not the other way around.

3.5. Lack of auditor independence and skill

Lack of independence and skill of auditors is the final frailty we discuss. This is a serious issue that can lead to false expectations by commissioning firms and confusing or misleading results. It may be overt and intentional or covert—indeed it may be accidental or arise because the auditor is overwhelmed, but whatever its nature, the ramifications can be significant.

External audits may be conducted by auditing firms that will use the OHSMS audit result as the basis for identifying and quoting on further auditing work; following up non-conformances, expanding the scope of the certification or generating second party audits of suppliers to the original auditee company. That is, the audit may operate as a means for auditing firms to generate opportunities for further fee generation. So the fee for determining non-compliance may be followed by a fee for advice on how to reach compliance. While this may be genuine and honest, there is clear capacity for conflict of interest in the search for repeat business. Alternatively the auditor may be deliberately captured if the commissioning employer has no desire to hear the bad news but merely wants the result as a token of OHS compliance. Indeed, some commentators suggest that social audits may be subject to "management capture and the loss of epistemic independence" (Parker, 2003).

Auditors seeking less hassle from within their own organization, or from the auditee organization, may fall victim to providing a superficial audit and a superficial report because they are subject to the commercial pressures of cost, time and interruption to business process. This may be exacerbated if the audit method and report is not subjected to scrutiny by the regulator, workers' compensation agency or employees of the organization. This last matter has its own ramifications. Audit reports are considered commercial-in-confidence, so distribution of an audit report is essentially at the discretion of the management. In some firms scrutiny beyond senior management may be very unlikely.

Independence may be compromised if the auditor is overwhelmed, inefficient or lazy, or where the commercial pressures

of the audit organization dictate shorter timeframes for the conduct of an audit than are necessary in practice. Time is the auditor's enemy. In our experience, common circumstances that pre-dispose to audit errors were insufficient audit time allowed for the scope of the audit, leading to rushing and consciously cutting sampling of activities or records which can dilute the rigour of the audit. This may also arise where sampling of people and processes subject to audit is too narrow or not well focussed because the auditor lacks skill. Unless the right sample is selected, the auditor may not find evidence of a specific problem.

Whilst the OHS and workers' compensation agencies appoint, train and monitor their own auditors in South Australia, there is no regulation of independent audit companies or auditors who are commissioned to conduct OHSMS audits by customer organizations outside accreditation by a CAB. Regulation of auditors might be an unwelcome requirement by some segments of the market, but there may be a role for the regulator in replying to the audit reports of external auditors with the audited organization as well as the auditor (Parker, 2003). This could lead to agreed modifications in the workplace to ensure that action is taken to make the workplace healthy and safe, as well as an informal opinion about the audit method and the audit report as a low-key means of quality control.

Competency of auditors has several components: technical competence related to the industry or process that is being audited; competence in the auditing process; and competence in the relevant legislative framework (e.g. OHS). In the social audit domain, an accomplished auditor (competent in auditing process) who attempts to audit a specialized workplace (say, a high-risk facility) but who does not have the necessary technical competence is likely to make errors of judgement that could have serious implications. For example, we have seen an audit conducted by a skilled environmental management systems auditor on a major hazard facility where a major breach of safety was overlooked because it was outside the technical competence of the auditor. Because of the sheer scope of knowledge required for a comprehensive systems audit of OHS, auditor errors are likely where an auditor is lacking in elements of technical or legislative knowledge (for example dangerous goods that may not technically be part of the OHS legislation).

In our practices we have seen evidence of each of these influences when reviewing the work of auditors in the process of evaluation. We have read inadequate auditors' reports where clear non-conformances were not reported or were minimised, and we have heard evidence from middle managers and workers about the deliberate nature of non-reporting by auditors who make regular visits to their companies. The drivers for this poor auditor behaviour may be any of the influences discussed, but workers nearly always lay the blame at the unwillingness of senior management to hear bad news. This may not be accurate, but these audit failures can seriously compromise health and safety at work as well as workers' perception of management commitment to OHS.

4. Conclusions

In South Australia, auditing OHSMS has become an imperative for the regulator, the workers' compensation agency and organizations. The initial driver was the desire to reduce the costs of workers' compensation levies (premiums) by making workplaces healthy and safe and providing evidence of this. More latterly, it has also been used as a means of determining the legislative qualifier for accountability, "as far as is reasonably practicable". Although developing and maintaining a healthy and safe workplace is a legal obligation, it is also a social obligation to keep people safe and healthy at work, and as such lends itself to the same sort of scrutiny as found in other forms of social audit.

However, auditing has led to confusion between the concept of systematically managing OHS and OHS management systems (Saksvik and Qunilan, 2003). The existence of formal, documented OHSMS should be differentiated from the sequence of steps that is logically ordered to make up a systematic approach to the management of OHS (Frick et al., 2000). Assessment (as opposed to audit) of the way less formal steps are taken in organizations – the steps that lead to *systematic* management of OHS that makes a difference to the way OHS is perceived and conducted in organizations – requires considerable skill, time and resources, and is the subject of our current research.

The evidence is that formal OHSMS do not of themselves make workplaces healthy and safe (Gallagher et al., 2001; Hale and Hovden, 1998; Robson et al., 2007). Arguably then, auditing OHSMS may not add value and the research question is "what will?". In Australia there has been nearly 20 years experience in auditing OHSMS; of estimating organizational OHS performance using the OHSMS audit as a proxy. What has been the impact of such a massive undertaking? This is surely an area for research. The OHSMS audit continues to be a major focus for OHS regulators, workers' compensation authorities and organizations alike; perhaps because it is relatively simple and possible to achieve.

The high demand for OHSMS auditing, its use by OHS regulators and workers' compensation agencies in South Australia and Australia more generally suggests that it will remain the primary tool for assessment and the proxy for OHS performance until something better comes along. This might be akin to looking for a lost key where the light falls, rather than where it probably fell—that is, a search for the means of determining OHS performance by regulators, insurers and organizations by using the tools that are available, rather than the tools that are appropriate. The difficulties lie with the complexities of the process of auditing OHSMS. There are many steps where things can go wrong. The fact that audit criteria are one-size fits all, that the skill of the auditor is critical to the process, that participation by internal stakeholders is critical, and that desk-top audits are limited in value but common in practice are examples. We may well have things to learn from recent changes in financial audit practice and the delineation of the skills and knowledge required to conduct financial audits that are designed to overcome audit failures in that domain. There are significant rewards for good audit outcomes, but limited sanctions for poor, thus there is potential for organizations to invent activities that improve the audit outcome that may be at the expense of improving OHS. There is a tension between the OHSMS audit, which is intended to help provide people at the work-face with a healthy and safe working environment, but which is undertaken for and delivered to senior management and may not be revealed to internal stakeholders.

There is a need to re-conceptualize the role of the OHSMS audit and remove it from its central place in the evaluation of OHSMS where the aim is to work towards building a healthy and safe workplace. Weighing the pig does not make it heavier, but it may be an indication of the pig's health; more context and other indicators are needed to make a valid and reliable assessment. For many years the primary author, with other colleagues, has used OHS review systems that rely on workforce participation in order to understand and use the contextual features of organizations. Most recently the empirical findings of the *Digging Deeper* research into mining in New South Wales, Australia (Shaw et al., 2007) identified the features that differentiate high performing organizations from poor performers, such as: mindfulness, work group cohesion, trust in management, organizational justice, supervisor support, and role clarity – all features that beg careful examination and assessment if the organization is to be well understood. Costella and colleagues in Brazil report similar findings (Costella et al., 2009).

Auditing is an inherently mechanistic process that, even when conducted well, is essentially binary—in or out, done or not done, good or bad. Thus, the OHSMS audit, *on its own*, is inadequate and lacks the nuances necessary for the evaluation of systematic approaches to OHS management. Such approaches are variable, organic, bound to individual organizational culture and have the most to tell us about achieving health and safety at work. Instead of auditing, review processes that rely on wide participation, that place emphasis on qualitative data, and that encourage qualified assessment statements, are more likely to bring into focus the features of the workplace that make it healthy and safe.

No matter how much measurement, auditing, verification or certification is done the act of auditing cannot in and of itself make an organization healthy and safe. In fact, it may lead to a false sense of security. A good result on an audit may make organizational members believe that the organization is performing well, that it *is* healthy and safe. But as we have seen, a good audit result may be achieved by means other than *actually* performing well and should at least be treated with caution.

Acknowledgments

References

Adams, C.A., Evans, R., 2004. Accountability, completeness, credibility and the audit expectations gap. Journal of Corporate Citizenship 97, 115.

Amis, R.H., Booth, R.T., 1992. Monitoring health and safety management. The Safety and Health Practitioner 43, 46.

Arruñada, B., 2004. Audit failure and the crisis of auditing. European Business Organization Law Review 5, 635–643.

Ascoly, N., Oldenziel, J., Zeldenrust, I., 2001. Overview of Recent Developments on Monitoring and Verification in the Garment and Sportswear Industry in Europe. SOMO: Centre for Research on Multinational Corporations, Amsterdam.

Bluff, L., 2003. Systematic management of occupational health and safety: Working Paper 20. National Research Centre for Occupational Health and Safety Regulation, Canberra.

Costella, M.F., Saurin, T.A., de Macedo Guimarães, L.B., 2009. A method for assessing health and safety management systems from the resilience engineering perspective. Safety Science 47, 1056–1067.

Courville, S., Parker, C., Watchirs, H., 2003. Introduction: auditing in regulatory perspective. Law & Policy 25, 179–184.

Dekker, S., 2003. Failure to adapt or adaptations that fail: contrasting models on procedures and safety. Applied Ergonomics 34, 233–238.

Frick, K., Jensen, P.L., Quinlan, M., Wilthagen, T., 2000. Systematic occupational health and safety management–an introduction to a new strategy for occupational safety, health and well-being. In: Frick, K., Jensen, P.L., Quinlan, M., Wilthagen, T. (Eds.), Systematic Occupational Health and Safety Management: Perspectives on an International Development. Pergamon, Amsterdam, pp. 1–14.

Gallagher, C., Underhill, E., Rimmer, M., 2001. Occupational Health and Safety Management Systems: A Review of the Effectiveness of OHS Management Systems in Securing Healthy and Safe Workplaces. National Occupational Health and Safety Commission.

Haines, F., Sutton, A., 2003. The engineer's dilemma: a sociological perspective on juridification and regulation. Crime, Law & Social Change 39, 1–23.

Hale, A.R., Hovden, J., 1998. Management and culture: the third age of safety. A review of approaches to organizational aspects of safety, health and environment. In: Feyer, A.-M., Williamson, A. (Eds.), Occupational Injury: Risk, Prevention and Intervention. Taylor & Francis, London, pp. 129–165.

Hopkins, A., 1999. Managing Major Hazards: The Lessons of the Moura Mine Disaster. Allen & Unwin, St. Leonards NSW Australia.

Hopkins, A., 2000. Lessons from Longford: The Esso Gas Plant Explosion. CCH Australia, Sydney.

Hopkins, A., 2009. Thinking about process safety indicators. Safety Science 47, 460–465.

JAS-ANZ, 2010a. Statement of corporate intent for the period 1 July 2010–30 June 2013. Joint Accreditation System of Australia and New Zealand, Sydney.

JAS-ANZ, 2010b. JAS-ANZ website. <http://www.jas-anz.org>.

Johnson, R., 2004. Readings in Auditing. John Wiley & Sons Australia Ltd, Milton, Qld.

Mallen, D., Collins, C., 2003. The Audit Skills Handbook; A Basic Introduction to Planning and Performing Business Management System Audits. Consensus Books (Standards Australia International Ltd), Sydney.

Parker, C., 2003. Regulator-required corporate compliance program audits. Law & Policy 25, 221–244.

Power, M., 1994. The Audit Explosion. Demos, London.

Power, M., 1997. The Audit Society: Rituals of Verification. Oxford University Press, Oxford.

Power, M., 2003. Evaluating the audit explosion. Law & Policy 25, 185–202.

Robson, L.S., Clarke, J.A., Cullen, K., Bielecky, A., Severin, C., Bigelow, P.L., Irvin, E., Culyer, A., Mahood, Q., 2007. The effectiveness of occupational health and safety management system interventions: a systematic review. Safety Science 45, 329–353.

Saksvik, P.Ø., Qunilan, M., 2003. Regulating systematic occupational health and safety management: comparing the Australian and Norwegian experience. Industrial Relations 58, 33–59.

Shaw, A.J., Blewett, V.L., 1995. Measuring performance in OHS: using positive performance indicators. Journal of Occupational Health and Safety – Australia and New Zealand 11, 353–358.

Shaw, A., Blewett, V., Stiller, L., Aickin, C., Cox, S., Ferguson, S., Frick, K., 2007. Digging Deeper: Wran Consultancy Project Final Report, vol. 1. NSW Mine Safety Advisory Council, Sydney.

Standards Australia, Standards New Zealand, 2001a. AS/NZS 4804:2001, Occupational Health and Safety Management Systems—General Guidelines on Principles, Systems and Supporting Techniques. Standards Australia/Standards New Zealand, Sydney.

Standards Australia, Standards New Zealand, 2001b. AS/NZS ISO 4801:2001 – Occupational Health and Safety Management Systems—Specification with Guidance for Use. Standards Australia/Standards New Zealand, Sydney.

Standards Australia, Standards New Zealand, 2003. AS/NZS ISO 19011:2003 – Guidelines for Quality and/or Environmental Management Systems Auditing. Standards Australia/Standards New Zealand, Sydney.

Tackett, J., 2004. Sarbanes–Oxley and audit failure: a critical examination. Managerial Auditing Journal 19, 340–350.

The Treasury, 2010. Audit Quality in Australia: A Strategic Review. Attorney General's Department, Commonwealth of Australia, Canberra.

WorkCover Corporation South Australia, 1989. Managing Health and Safety at Work. WorkCover Corporation South Australia, Adelaide.

Zwetsloot, G., 2009. Prospects and limitations of process safety performance indicators. Safety Science 47, 495–497.