Playing It Safe

Emerging health and safety trends that could impact your company's solvency and your career

By Richard MacLean

Many, if not most, environmental practitioners have some level of responsibility for health and safety issues, and some are the strategic leaders of the fully integrated EH&S programs for their companies.

This month we examine emerging health and safety issues that are potential destroyers of entire businesses. Everyone knows that asbestos causes cancer and many companies that once used it are now bankrupt — but what is next, who is next, and what can you do about it?

r. Kildare and Ben Casey were popular television medical dramas during the 1960s. Each week the sick and injured would be rolled in and medical miracles would be performed ... without anyone ever asking for an insurance card! The days when medical doctors were unchallenged gods and made all the important decisions are a distant memory; 'twas a period of almost child-like naivete compared to the realities of today's health insurance quandary.

What happened? First, escalating health care costs prompted businesses to work with insurance companies to control costs. The bureaucrats with the green eyeshades took over from physicians who were losing stature as the public (and their malpractice lawyers) discovered that medicine is an imperfect science.

In retrospect, this paradigm shift was predictable, but only by observing the cardinal rule of business and politics spoken by Deep Throat of Watergate fame, "Follow the money!" Companies woke up to the fact that they controlled the money and they were in charge, not the physicians. At the risk of sounding crass and heartless (something I get accused of all the time by my family), let's examine what may be on the health and safety horizon by examining the money dynamics.

Following the Money

There is a strong intuitive tendency to assume that incremental change can be used as a predictor of the future. This is just not so. The health and safety professionals of tomorrow will face a significantly different world than that faced by their colleagues today — a future unpredictable by incremental steps on a graph.

Fatalities and injuries due to "mechanical exposure" dominated safety consciousness at the onset of the industrial revolution. The means to deal with these issues has advanced significantly over the past century and rarely do these issues become a major financial burden. Yes, companies can achieve competitive advantage through safety performance (e.g., through worker compensation claim reduction and increased productivity), but the very existence of the company is not at stake. Yet, this focus on injury statistics still dominates management's thinking and safety professionals' attention.

Extraordinary, catastrophic events are another issue entirely and they give us our first clue as to what the future may hold. Explosions and fires are obvious risks and there now exists an elaborate interlocking relationship between companies, insurance companies, rating agencies and government organizations. If companies want to borrow money, obtain insurance or for that matter, receive licenses to operate, they must function within prescribed limits using specified equipment. In effect, for the serious stuff, it is not left up to the companies to dictate how things will be managed. This oversight goes beyond a regulatory framework such as the Occupational Safety and Health Act (OSHA), but rather entails the intervention of business forces overseeing the company assets.

Applying the "money rules" principle, the dynamics that may shape the future are illustrated by the convoluted path in **Figure**

1. All of the "road markers" are already in play. What will determine future outcomes is the relative influence each factor will have and the impact of the unanticipated major surprises along the way.

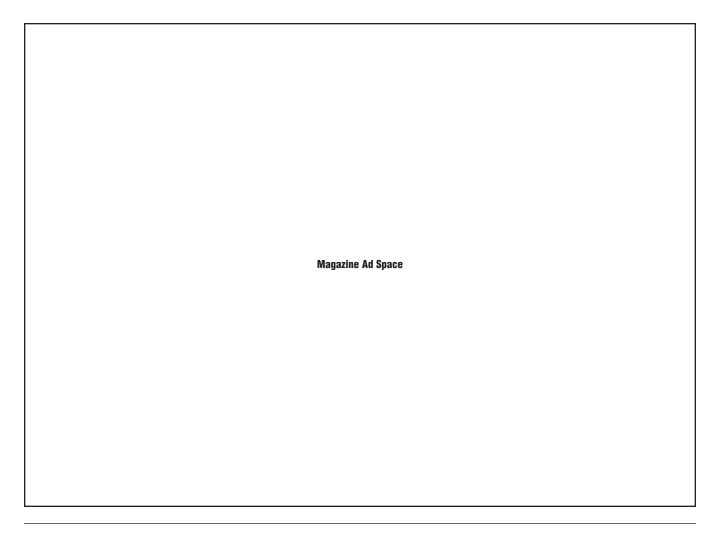
Risk management tools and techniques are becoming more sophisticated. Regulation or insurance requirements may be able to keep abreast of the obvious issues, but as processes grow more complex, the focus will be on assurance that the management systems are in place to continuously screen for major problems. The companies that do not have these systems in place face potential punitive damages in the event of catastrophic loss. Anticipate greater focus on management systems assurance in addition to the existing framework of hardware protection (e.g., mandated fire and explosion suppression systems).

Calling Out

The Firestone/Ford product safety issue is a perfect illustration of the principle that we should anticipate grater focus on management systems assurance in addition to the existing framework of hardware protection. What did the management of these two companies know and when did they know it? Why did they not take earlier preventive action? Why were they not analyzing the statistical trends? The answers to these questions will be played out in the courts over the next several years and the outcome will determine if Firestone will remain a viable business, just as Union Carbide faced its future after the 1984 accidental release of methyl isocyanate from its plant in Bhopal, India, which caused the deaths of more than 2,000 people and adverse health effects in over 170,000 survirors.

Another fundamental shift will be the transition from hard, immediately visible injuries to long-term, cumulative workplace

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illness. Stress and ergonomics are relatively recent examples, but the truly financially devastating issues will be more akin to the health issues faced by the asbestos industry. Twenty-five of the more than 140 businesses that either made or used asbestos products have chosen Chapter 11 bankruptcy protection. Last year four otherwise solvent companies saddled with asbestos litigation — Babcock & Wilcox Co., Pittsburgh Corning Corp., Owens Corning and Armstrong World Industries Inc. — chose this route.1 This year W.R. Grace & Co. is considering seeking bankruptcy protection over escalating lawsuits. To state the obvious, insurance carriers, financial institutions and investors are very unhappy when this happens.

Follow the Money

Road marker two along the money trail — science and technology advancements — will make it all the more likely that a continuing string of new asbestos-type health issues will emerge. For example, in October 2000 Congress agreed to provide \$2 billion to compensate workers in the nuclear weapons industry during the Cold War.² The

environmental remediation costs may reach a staggering multi-hundred billion-dollar figure. The nuclear power industry emerged several decades later when much more was known about the risks. But, the first generation working in this new industry is reaching retirement, as cancer invariably becomes more likely. Will there be an onslaught of class action lawsuits against the power industry akin to tobacco litigation?

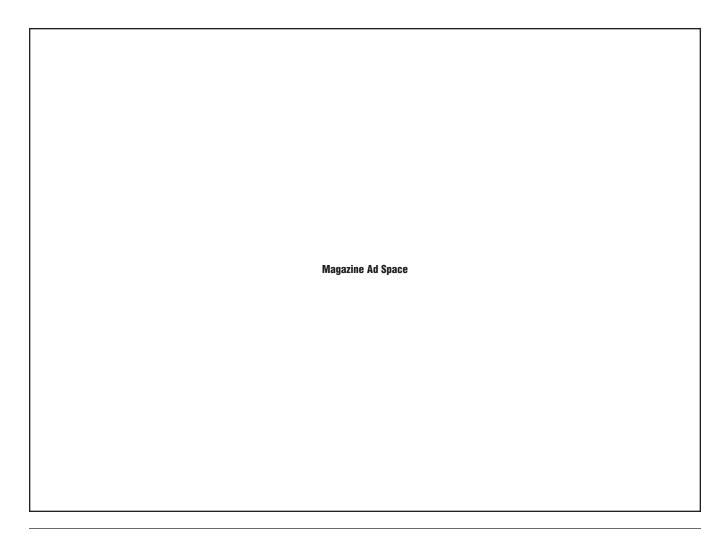
We are working in a virtual soup of new materials in an ever more complex array of interlocking global business systems.

The preceding examples illustrate several dynamics. First, even "safe" materials that were selected as substitutes for other, more risky elements can turn out to be even more dangerous than the originals they replaced

as the science develops. Think polychlorinated biphenyls (PCBs), Freon, carbon tetrachloride. Second, know that even dangerous materials can be improperly handled in the absence of long term studies to define the safe level. Third, workers are being exposed to a greater array of chemicals and physical agents than ever existed in nature. Synergies and other interactions are possible. Fourth, politics can be a wild card. If the industry is being vilified (as the weapons industry has been all along and the power industry is currently experiencing), it is more vulnerable to attack. And finally, in the face of changing demographics it is difficult, if not impossible, to predict the outcome of some health issues.

The tools to provide early warning signs of trouble are also becoming more sensitive. For example, much has been written of late about decoding the basic building blocks of life. Science is exploring the human genome and the impact of all this could be far-reaching. Will the consequences of exposure to "X" now be measured at the molecular level? One of the perverse benefits of the incredibly disfigur-

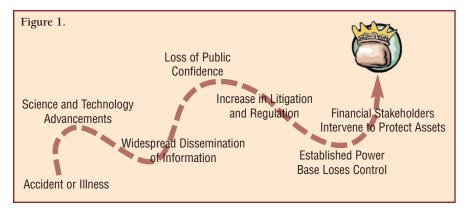
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ing consequences of Thalidomide was that the birth defects it created were massive and immediately identifiable. What if the consequences of this drug were a 10-point drop in IQ at the age of 10 or the onset of cancer at 25?

of the visible damage, if changes are detected, that alone may be sufficient to convince juries that damages are due.

The first step in legal research is to find out who has the deepest pockets among the possible contributing parties. American



Complex Systems

One of the fundamental challenges of epidemiological studies is the difficulty of separating all the possible contributing factors, often called confounders. Some of this ambiguity could be resolved if the science reaches the molecular level. Regardless of the extent

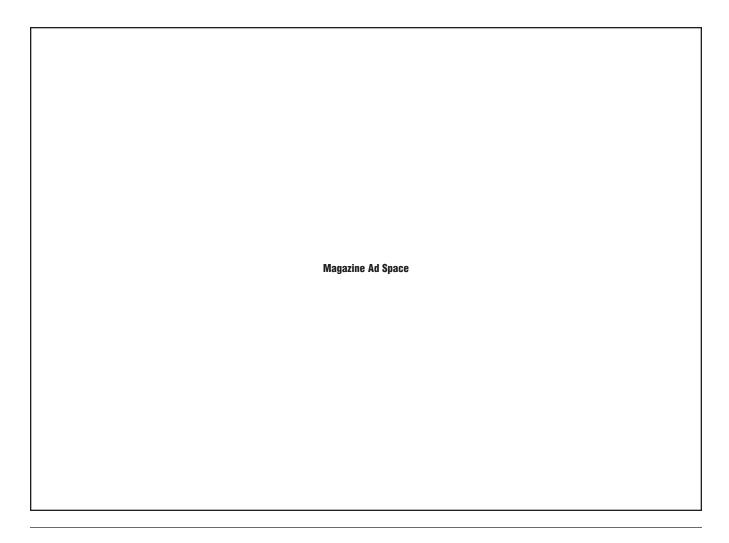
attorneys have grown proficient at these skills and the legal systems (e.g., class action lawsuits, contingency fees, punitive damages) that permit massive lawsuits are spreading internationally. Even a very small company making widgets is assailable if employees get sick and the company has substantial

assets. If the company has no assets but is well insured, attack is all the more likely. If employees in similar widget manufacturing companies around the globe have the same problem, expect a bigger settlement. If they are using materials supplied by global giants ... jackpot!

The purpose of this seemingly paranoid series of examples is to emphasize that the future will not be a linear extrapolation of today's issues and that the fallout can impact any company of any size. We are working in a virtual soup of new materials in an ever more complex array of interlocking global business systems. The effects within this complex system will be determined not just by the activities within individual companies, but by the way the elements in the entire supply chain interact as a whole.

One of these key ingredients in how this will all play out is the changing nature of information exchange (Marker 3 in **Figure 1**). For example, the only reason that nuclear workers had a chance of receiving compensation is that after years of persistent trying, they were able to pick apart the secrecy and sovereign immunity by national

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security concerns. In short, they got the facts. Similarly, the Internet may allow widespread dissemination of worker concerns. The analogous situation is happening in the medical profession. Online medical information is changing the way patients interact with their physicians. If a doctor makes a mistake, it is much more likely now that a patient (or his or her next of kin) will discover the mistake and contact an attorney.

Open sharing of information at a global level will have a profound effect and will lead to, among other things, demands for greater transparency in company safety and health performance. Intertwined with this is the growing corporate social responsibility movement. Those companies that cannot demonstrate their commitment towards community and employee safety and health will lose public confidence (Marker 4 in Figure 1). The impact of this loss of trust may first appear in the form of a tarnished brand, reduced market share or decreased stock value. It could also lead to litigation by plaintiffs' attorneys or direct regulatory intervention (Step 5 in Figure 1).

It's About Money

For companies or industries reaching the extreme stage of public distrust and regulatory intervention, business executives are no longer in charge of the company's destiny: insurance carriers call the shots; lawyers are in charge; the financial community downgrades the credit rating; shareholders unload the stock; and regulatory agencies prescribe solutions (Markers 6 and 7 in Figure 1). Impossible? Re-examine the list of companies associated with the asbestos issue. These are not no-name, mom and pop firms.

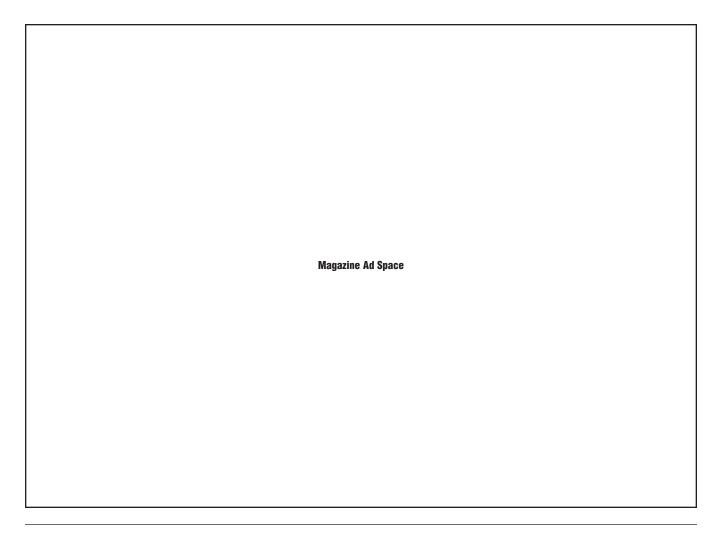
When companies go bankrupt, the financial service industry takes a hard look at the underlying, root cause issues. Environmental and property contamination issues have dominated the agenda for these institutions in the

past. These concerns have led to the due diligence protocols universally in use today. But, even this high level of established scrutiny is ramping up. For example, seven financial service organizations in the UK, supported by the Department of Trade and Industry, have laid out guidelines for the financial industry on managing environmental affairs. The CEO of every insurance company and bank in the country has received a copy.³

In a separate effort in Germany, 11 financial service organizations have developed indicators of environmental performance. The United Nations Environmental Programme (UNEP) is expanding on this effort that will quite likely directly impact the financial rating of companies and, thus their ability to borrow money. These recent events may be an early

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indicator of things to come on the health and safety front, since it entails no major extrapolation to apply these environmental gauges to health and safety concerns.

Conclusion

The bottom line is this: if you are still focused on reporting reductions in lost time injuries to your management, you are not necessarily educating them about the emerging dynamics that may materially (in the financial sense) impact your company or its supply chain. Recognize that many of the companies going bankrupt today were not mining asbestos — they were in the supply chain.

This focus on emerging dynamics should not diminish ongoing, "traditional" efforts aimed at reducing injuries and especially fatalities. From a moral and social responsibility standpoint these efforts retain their primacy. But these efforts are not where the really big bucks may be in the future, and we are talking money here.

Today's state of play is fluid and it is absolutely essential to keep abreast of developments. For technical information I

recommend the National Safety Council.⁴ The American Industrial Hygiene Association is another valuable resource.⁵ If your company does not have a full time certified industrial hygienist, consider establishing an alliance with a strategic consulting firm such as The Dotson Group.⁶ The objective is to have an eye on the 30-year occupational disease horizon for your business.

For networking, I highly recommend Organization Resources Counselors (ORC), a membership-based consulting service that includes 150 of the Fortune 500 companies in its safety, health and environmental practices. A core part of ORC's business is tracking trends that affect EH&S and promoting benchmarking among member companies. Lessons learned from leading companies can save a lot of time and effort and ultimately make the difference between success or failure for those that follow.

And finally, develop a strategic plan and communicate this action plan with management. For guidance in these two areas, refer to the February 2001 and December 2000 Manager's Notebook, respectively (see www.eponline.com under Archives). Your busi-

ness management will appreciate your playing it safe and minding their money matters.



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