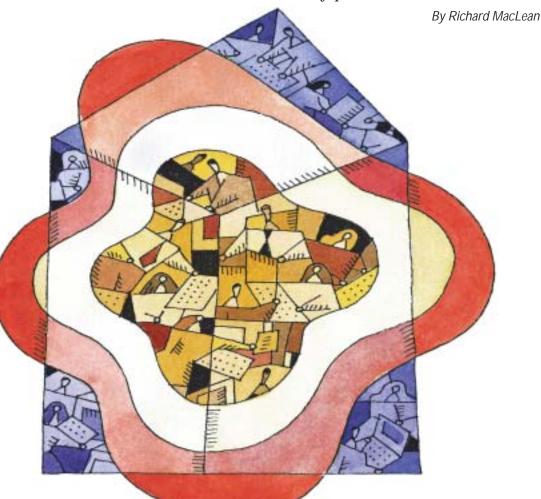
Environmental Management Systems

Do they provide real business value?



The winter meeting of The Auditing Roundtable was a wakeup call to environmental auditors. The keynote speaker did not mince words: Conformance-based environmental management systems, such as International Standard Organization (ISO) 14001, are fundamentally flawed. What is the point of auditing systems that don't bring value? If certification is not on managements must-do checklist to enable entry into certain markets, why are these systems needed? . . . and who needs these auditors?

I have grown numb listening to environ-

mental professionals breathlessly report that things are getting bigger and better at an ever-accelerating pace toward sustainable development. It was refreshing to hear environmental auditors conduct a candid audit of themselves. In her opening remarks, Karen Coyne, president of The Auditing Roundtable, reported that there is "little correlation between environmental management systems and performance." She supported this statement with six recent research studies.¹

For many people in the room, this came as a shock. For others, it was not

news but rather an opportunity to discuss openly "the elephant in the room" (as it was described by a few speakers). The implications are clear to auditors: over the past decade the most senior auditors (especially at the corporate level) have gradually moved from auditing compliance to auditing management systems. Compliance hardware and software improvements have allowed routine compliance audits to migrate to less-skilled individuals who are embedded at the local level. In addition, consultants have staked their incomes on installing and

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certifying these environmental management systems (EMS).

What happens if business management realizes that they are not getting much return from their EMS? This question has, of course, much broader implications affecting all environmental professionals. What is really going on here?

Conformance Systems Take Over

Beginning in the mid 1990s, ISO 14001 and EMAS (the European Union's Eco-Management and Audit Scheme) became very much in vogue as the tool for demonstrating environmental responsibility in the global marketplace. Consultants jumped on ISO and EMAS as the next opportunity in a mature market no longer driven by regulatory dynamics. As a result, EMS has become synonymous with conformance-based management systems such as ISO 14001 and EMAS.

In actual practice, ISO 14001 and EMAS implementation teams start with, and often get mired in, the paperwork. The standard requirement to "go through the process" can make it quite difficult to focus less on the details and develop an EMS with a strategic environmental direction. The standards do not require firms to establish performance improvement goals; they only require that a process is created to facilitate this action. They are procedural standards, not goaldriven standards.

If your company's primary goal is to attain certification for its facilities, ISO 14001 or EMAS may be necessary. The question is whether or not they drive even basic compliance. Not necessarily, as has been proven by compliance problems that have grabbed worldwide headlines.²

Proceduralizing any business activity tends to minimize strategic thinking. In many respects, ISO 14001 and EMAS illustrate one of the worst trends in environmental management. They may create the illusion to executive management that all is well because the process is in place; management's attention may shift from improving performance goals to completing a procedure and getting the box checked. Essentially, environmental concerns are reduced to a binary question, "Are we certified or not?"

This narrow focus has also led to a "gaming of the system"; some companies focus on getting the box checked at lowest cost and with greatest certainty by selectively picking external auditors. This

In many respects, ISO 14001 and EMAS illustrate some of the worst trends in environmental management.

issue was mentioned at The Auditing Roundtable meeting, but has been brewing for years (it is the other elephant in the room). For example, the U.S. Environmental Protection Agency (EPA) raised concerns over third-party auditing of ISO 14001; this prompted the 2001 Registration Practices Report, published by the National Academy of Public Administration.³

Although the two elephants were talked about at the meeting, these problems have been gestating for a long time (even longer than the 22 months needed for actual elephants, one of the longest in the animal kingdom). These issues just never received the widespread recognition that they are now getting. Corporations and consulting firms have invested a lot of money in these conformance systems and early mention of the problems incited the wrath of many people. Riva Krut, co-author of the 1997 book, ISO 14001: A Missed Opportunity for Sustainable Global Industrial Development, told me that she was soundly criticized for saying disparaging words about ISO.⁴

Professor Marc Epstein of Rice University also summarized the situation in 1997, "Although the framework of useful and enhancing environmental management systems is beneficial, the adoption of ISO 14001 alone will not provide maximum company benefits."⁵ There are several others who raised the red flags long before The Auditing Roundtable meeting. I began writing, speaking and conducting media interviews about these issues four years ago.⁶

Consultants to the Rescue

The most amusing part of the meeting was when the CEO of a company that for five years has been certifying these "fundamentally flawed" (his words, not mine) management systems stood before the group to reveal how this could be fixed. The thrust of the message was that his company, and by inference the parent company, a consulting firm, is on top of this issue and has new and improved products to sell. Right, we'll see. Where were you years back, when others were describing the potential problems in graphic detail before they erupted into today's embarrassments for the environmental health and safety (EHS) profession?

To his credit, he did hit on a few of the key issues. The ISO and EMAS approach is not consistent with the way business managers drive performance. Good management systems drive behavioral changes, not an auditable paperwork trail. ISO 14001 and EMAS certification can be resource-intensive activities that yield few performance results other than the box checked. Some experts estimate that, at most, 10 percent of this document-based effort actually generates any form of business value.

A subsequent speaker, colleague and, to his credit, long-standing realist when it comes to systems, Bill Blackburn, cut to the chase on the six key problems:⁷

- Wrong objective for obtaining an EMS
- Over-emphasis on documentation; under-emphasis on field interviews
- Evaluation of what the system is likely to provide without a critical assessment of what it has consistently provided in the past
- Focus on continuous improvement, not absolute performance vs. benchmarks
- Lack of auditor skill and knowledge in judging system performance
- Failure to spot and address overarching root causes of lackluster performance

These points have a direct overlay on the strategy for running a profitable business. For example, just because a company continuously improves performance, it can still be in major trouble (e.g., raising capital and shareholder value), if all the other companies in its sector are performing dramatically better. Continuous improvement is a bogus concept in business, but an essential ingredient in systems like ISO 14001 and EMAS.

I have been in ISO 14001-certified companies that were pathetically inefficient, rife with dysfunctional behavior and that possessed no leadership and no vision of how they could strive to add value. It's not about the paper, it's about good management. Auditing a paper trail is important, of course, but the real value comes in providing strategies to change behavior and improve performance. This creates an interesting dilemma for auditors: the dangers of mixing these services (i.e., auditing and management consulting).

This issue of impartial auditor vs. provider of solutions has grown to epic proportions in the financial audit sector. The jury has reached a verdict: you must separate these functions. Within the environmental auditing profession, the debate continues; meetings like this one by The Auditing Roundtable play a crucial role in providing a forum for debate (see sidebar **Making the Conference Scene**).

Conclusions

Systems alone will not save the day. Enron had a plethora of systems and Arthur Andersen consultants became specialists at identifying loopholes in accounting systems as a way to hide problems. The accounting profession is based on a foundation of voluntary standards (generally accepted accounting principles or GAAP); it is significantly more codified and mature than those representing environmental standards. Conformance-based systems are a good starting point, but they are neither the endpoint nor the substitute for strategic environmental thinking and rigorous governance.

To answer the opening questions: yes, an EMS can provide tremendous real business value, but only if it is focused on key business processes. Next month, "Manager's Notebook" will examine how to review a company's existing system to evaluate if it is delivering value and, if not, determine the root causes.

Richard MacLean is president of Competitive Environment Inc., a management consulting firm established in 1995 in Scottsdale, Ariz.; a principal at Independent Perspectives, a virtual consulting network supporting busi-

Making the Conference Scene

Budget restrictions have slashed travel and conference attendance. No doubt, some of the reduction was sorely needed. There are always those folks who serve as perpetual jet setters, floating from meeting to meeting but not bringing much real value back to the organization. They are similar to Wally, in Dilbert, only instead of wandering the halls of Cubeville with a coffee cup, they frequent the conference circuit with a reception drink.

These eternal meeting-goers are, however, the exception (and now the rarity) to the rule. Most EHS professionals are only allowed one or two out-of-town conferences per year, at most, and then only if they are lucky. Better make good use of the opportunity. My advice is to ask around before you travel. Agendas can be pumped up by promises that would make a Madison Avenue executive blush. A surefire danger signal is when "invited" appears next to some famous person's name. I invite the President of the United States to all my meetings, but he has not showed up yet. Government officials are notorious for canceling at the eleventh hour, and for good reason: they cannot accept payment and the tax payers' priorities come first.

That said, there are some sure bets. The Global Environmental Management Initiative's (GEMI) annual meeting is one. The Conference Board's Chief Environmental, Health and Safety Officers' Council meetings and the National Association for Environmental Management's (NAEM) annual meeting are two others. These are, of course, focused on the management-type issues that I deal with. Generally, you should try to attend the annual professional society meeting for your discipline(s). For example, auditors should attend the winter meeting of The Auditing Roundtable, another sure bet. The Air & Waste Management Association is great for technical issues, but not general EHS management. If you attend your profession's annual conference and it is not up to your expectations, either try to fix the situation or drop your membership.

For managers who can still go to a dozen or more of these meetings each year, spread the wealth. For a real boost in morale in your organization, let your most productive employees go. For a real decrease in productivity, let your suck-ups go. If you cannot differentiate among these individuals, go to a management training seminar. ness management; and the executive director of the Center for Environmental Innovation (CEI), a university-based nonprofit research organization. He can be reached via e-mail at maclean@competitive-e.com. For Adobe Acrobat(electronic files of this and his other writings, visit his Web site at www.Competitive-E.com.

References

- Studies cited include: research by the University Sussex; work by the United Kingdom's Environment Agency; a Swedish research study; University of North Carolina research; Alabama Department of Environmental Management study; and an American Institute of Industrial Hygiene study on audit reliability.
- 2. For example, dioxin compliance problems at Ebara Corp., a Japanese facility certified in 1997, triggered questions about ISO's effectiveness. This was followed by the largest Brazilian pollution incident in 25 years at the certified Petroleo Brasileiro S.A. facility. Again in 2000, two Taiwanese ISO-certified facilities were involved in a hazardous waste dumping scandal.
- 3. National Academy of Public Administration, Third-Party Auditing of Environmental Management Systems: U.S. Registration Practices for ISO 14001, May 2001.
- 4. Riva Krut and Harris Gleckman, ISO 14001, A Missed Opportunity for Sustainable Global Industrial Development, Earthscan Publications Ltd, London, UK, 1997.
- M. Epstein and M-J Roy, "Using ISO 14000 for Improved Organizational Learning and Environmental Management," *Environmental Quality Management*, Autumn 1997, page 21.
- See for example: Interview in Tomorrow Magazine, July/August 2000, pages 36-38; "EHS Management Systems," EM Magazine, February 2000, pages 9-13; "The Value Chase," Environmental Protection magazine, July, 2001, pages 42-46; "Lessons from Enron," Corporate Strategy Today, issue V/VI, June 2002, pages 31-34.
- 7. See www.WBlackburnConsulting.com

Environmental Management Systems — Part 2

Certification may be a requirement for entry into some markets, but aside from the public relations value, what else does a certified environmental management system offer? Not much, according to the results of recent research studies of conformance-based environmental management systems (EMS) such as ISO 14001 and Eco-Management and Audit Scheme (EMAS).

In Part 1 one of this series (which appeared in the February 2004 issue of Environmental Protection and can be accessed online at no charge at www.eponline.com under "Archives") we explored the underlying issues that limit EMS performance and the concerns being raised by the environmental auditors who certify EMS systems. This month, we examine how to review your EMS to find ways to increase performance and deliver business value.

MS consultants have done an incredible job convincing clients that they have a tangible "thing" to deliver, as if they were selling a new software package, a computer or a pollution control device. EMS has become synonymous with standards such as ISO 14001 and EMAS. Environmental managers go to their business executives and request money to install a standards-based EMS. Often, management's reaction is, "Why do we need it?, What is the value in this new thing that we never needed before?," followed by "We cannot afford it."

If environmental health and safety (EHS) managers are successful in receiving approval, it is sometimes because the marketing department needs the certification and/or management is concerned about the company's image and needs a quick demonstration of "environmental responsibility." If there are problems brewing with the regulators, shareholder initiatives on the horizon and/or upset communities,

certification may be just the ticket. Nevertheless, how do you identify the lasting business value in something viewed by management as something the company bought from consultants and independent certifiers to resolve an issue? Once the perceived problem goes away, so will its value (or so it may seem).

What an EMS Really is

An EMS is a way to run environmental activities strategically and efficiently. It is not just about being able to show an auditable paper trail to certifying auditors or regulatory inspectors. It is not a thing. Yes, it includes components such as software and hardware systems to keep track of essential information, but much of a performance-driven EMS is ethereal. It includes such elements as a company culture that supports EHS professionals working in harmony with operations and focusing on what really matters to the business.

Every company has an environmental management system if it is has been legally in operation for any length of time. For a small business it may consist of Jane, the facility manager, following a checklist of compliance obligations supplied by a trade association or regulatory agency and Joe, the janitor, putting the waste in the dumpster instead of throwing it over the back fence. The point is that all companies already have an EMS; the challenge is to make it more efficient and more aligned with business objectives. You may have to purchase certification but never, ever, tell management you want to buy Getting the most from your EMS

By Richard MacLean

and install an EMS; tell them that you want to improve what already exists to make it more cost effective and relevant to the business needs.

There are direct parallels to business management systems. Business executives spend a lot of time and money on improving what they already have. They may buy enterprise resource planning systems like those sold by the software company SAP, but the company's leadership is still focused on improving profitability through a multitude of management strategies. Management gurus, like Peter Drucker, have been advising executives on these essential strategies for decades. More recently, Jim Collins, business analyst and author of the best-selling books Built to Last and Good to Great, has coined terms such as "Level 5 Leadership" (i.e., vital characteristics of top managers) and "First Who . . . Then What" (i.e., getting the "right people on the bus" and then "picking the right direction").

Competitive pressure has required companies to deliver very specific and quantifiable performance results. ISO 9001 and Six Sigma quality programs have been embraced by successful companies focused on customer quality expectations. Continuous improvement is not just a buzzword; it is a survival mantra. Contrast this to ISO 14001 and the European Union's EMAS. The continuous improvement requirement is there, but companies typically establish minimalist goals. Some companies are not even sure which metrics really matter and what goals should be set to make any competitive difference within the marketplace. "Get the certification at minimal cost" is the marching order. Is there any wonder why an EMS,

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implemented the way it so often is, delivers such limited value?

Identifying and Fixing the Weaknesses

The starting point for evaluating an EMS is to define a framework that can be used to assess current activities. It is not important that the company has actually built its system around the particular framework chosen. What is essential is that the evaluation framework needs to be robust and contain all of the critical elements that drive performance. It also helps if this evaluation framework makes sense to management when it comes time to explain the strengths and weaknesses of the company's existing EMS.

This effort is an evaluation of EMS performance; it is not a conformance audit against a particular standard or a detailed regulatory compliance audit. Performance evaluations must be done with senior environmental professionals for reasons that will become apparent later on in this article. It is a waste of time and money to have senior people checking to see if some piece of paperwork minutia has been completed consistently over the past year. Leave that up to the auditors and their checklists.

There are many frameworks that you can use as a starting point. Most readers are familiar with ISO 14001's elements: 4.1 General Requirements; 4.2 Environmental Policy; and so on. The Business Charter for Sustainable Development Principles for Environmental Management has 16 elements. EMAS has six stages. Green Zia, based on the Baldrige Quality Process, has six core values and seven categories. Responsible Care[®], used by the American Chemistry Council's member companies, has 10 guiding principles and five major elements. There are others, but you get the point.

Each of the preceding frameworks has its particular strengths and weaknesses. For this reason, I developed and use the framework outlined in Table 1, which consists of 20 elements in four major categories: Strategic Direction, Organization & Staffing, Systems and Leadership. It contains, in some form or another, the essential elements of the standard systems mentioned previously. This framework is supported by a proprietary database that contains what can best be described as the nitty-gritty: nearly 400 specific items.1

No company truly needs such an elaborate system of items. The challenge is

| Table 1 Core Elements for a Performance Driven EMS | | | |
|--|---------------------------------------|--|--|
| Management Cluster | Core Elements | Objectives | |
| 1. Strategic Direction | 1. Vision & Policy | Formulating a clear vision of where the company is headed and the overriding principles of how it will get there. Establishing specific company objec- tives and policies. | |
| | 2. Strategic Plan | Determine the programs, budget and roadmap for meeting the company's business and environmental objectives. | |
| | 3. Risk Evaluation | Developing an understanding of cur- rent and future issues and their impact on the company. | |
| | 4. Metrics | Developing a measuring process to monitor environmental performance progress against targets. | |
| | 5. Management Reporting | Keeping stakeholders informed of progress and issues along the way. | |
| 2. Organization & Staffing | 6. Environmental Staff Development | Having skilled human resources appro- priately sized to meet business objectives. | |
| | 7. Resource | Effectively using resources across the | |

| | 4. Metrics | Developing a measuring process to |
|-----------------|------------------------------|--|
| | | monitor environmental performance |
| | | progress against targets. |
| | 5. Management | Keeping stakeholders informed of |
| | Reporting | progress and issues along the way. |
| 2. Organization | 6. Environmental Staff | Having skilled human resources appro- |
| & Staffing | Development | priately sized to meet business objectives. |
| 0 | 7. Resource | Effectively using resources across the |
| | Leveraging | company for synergy and cost savings. |
| | 8. Technology | Establishing networks to share informa- |
| | Networks | tion and reduce time and costs. |
| | 9. Interface | Ensuring communication and cooperation |
| | Relationships | at both intra and inter departmental levels. |
| 3. Systems | 10. Core Management | Developing and documenting a systemat- |
| | Systems Elements | ic approach to implement and optimize |
| | | individual activities of the overall EMS. |
| | 11. Review & | Determining progress and implement- |
| | Evaluation | ing Total Quality principles. |
| | 12. Audit & | Evaluating and reporting conformance |
| | Governance | with company policies, objectives and |
| | Systems | regulatory requirements. |
| | 13. Information | Gathering, tracking and analyzing |
| | Systems | information that supports all of the |
| | | core environmental elements. |
| | 14. Training Programs | Keeping skill level at maximum effi- |
| | | ciency. Integrating environment in core |
| | | business practices. |
| | 15. Risk Management | Establishing and maintaining process |
| | & Cost Control | and product programs such as pollu- |
| | | tion prevention, design for the environ- |
| | | ment and life cycle analysis. |
| | 16. Issues | Effectively dealing with major issues such |
| | Management | as remediation, global warming, etc. |
| | 17. Property and | Performing due diligence and minimiz- |
| | Capital Project | ing risk in business transactions. |
| 1 Loodonohim | Reviews 18. External | Influencing enternal stalksholders and |
| 4. Leadership | | Influencing external stakeholders and |
| | Relationships | providing community awareness. |
| | 19. Research 20. Exemplar | Identifying and filling knowledge gaps. Establishing programs that lead the |
| | Programs | industry and build the company's |
| | Tiograms | reputation and brand. |
| | | reputation and brand. |
| | | |

to determine the activities that really matter, based on the company's business objectives. In the real world, these objectives are often blurred by politically correct rhetoric. The first major hurdle in a review of this type is often deciphering what top executives and the board of directors really want. This is particularly challenging when the company is headed in a particular direction, but future trends and the competition are all headed in another. Some probing and education may be in order before a clear set of EMS performance objectives can be established.

Another common problem is that there may not be agreement over what the performance objectives should be. A simple technique can be employed to determine if this is the case. Ask the interviewees to estimate where the company is, on a scale of one to 10 (10 being world class, five being 100 percent in compliance and one being a step away from a felony conviction). Then, ask where they think the company should be in five or 10 years. Finally, ask how they think the board of directors would respond to the same questions.

I have yet to find a company where there is perfect harmony. Business executives often think that the company is a lot further along than it really is. EHS managers sometimes assume that the board of directors wants much less "beyond compliance performance" than it may really desire. In any event, the numerical scores help to graphically highlight certain issues and get them out in the sunshine for discussion. A word of caution in doing this exercise: in interviewing the top executives, one needs to frame the questions in such a way that honest feedback is received, instead of the party line.

No matter where a company is headed, it should have most (if not all) of the elements outlined in Table 1. When reviewing this process with business executives, I often draw an analogy to transportation: corporate responsibility and regulatory and competitive pressures require you to advance from point A to B. You can walk, ride a bicycle, drive a Yugo or travel in style with a Lamborghini. It all depends on your needs and how far and fast you want to travel. This helps to clarify that there are degrees to which EMS improvements can be made and that the choices are usually within the company's complete control.

What's Really Going On

I have not gotten beyond part one of the first element — vision — and by now you should be getting the picture. This review is not your typical paperwork and records check. It is about determining what is really going on: finding out if a company is on the right kind of bus (EMS), if they are headed in the right direction (strategy) and if they are moving along at the right speed (performance goals).

It is not up to the reviewer to judge what is right or wrong for the company. Instead, the reviewer should: (1) ensure that management is clearly aware of the status of their EMS; (2) point out weaknesses and strengths of the system relative to what the company wants to achieve, and (3) provide suggestions for improvements. All of this supports management's ability to make informed decisions and to have a better understanding of what both the EMS and the environmental staff are contributing to the company.

In this limited space, I cannot go into detail on each element of **Table 1**, but based on more years of experience than I care to admit, I have listed below the 10 components of an EMS that are most often in need of improvement:

- A clear vision of future direction, developed with the intimate involvement of top officers and directors
- A real strategic plan, not just the usual project list
- A robust set of metrics, not just those usually reported and benchmarked within the industry sector
- A robust reporting system, particularly with respect to the officers and directors
- A competency development program for EHS staff members
- An organizational and staffing review that examines potential dysfunctional behavior among groups and/or individuals
- A management system that is conceptually simple: both executives and front-line employees understand what their role is, each step along the way
- A governance system that attacks the real issues and includes hard mechanisms (e.g., signoffs) for certain key business transactions by the appropriate EHS professional
- A core risk analysis process that examines past, present and future risks rigorously
- Transparency and outreach programs

that build good community and agency relationships

The "why" and "how" that each of these components delivers value would require several "Manager's Notebook" articles to explain. I have written articles on some aspects of these.² Someday, I hope to get to the others.

The important point is that environment management systems are delivering only a fraction of their potential. Installing a certified ISO 14001 EMS may not adequately support the items listed above. Certainly, if you read the language of these standards, anything and everything can be incorporated. But, let's get real; that is not how conformance systems are being implemented and certified. I am saying that you may need to "kick it up a notch" (as Emeril Lagasse would say) to gain any lasting value.

Richard MacLean is president of Competitive Environment Inc., a management consulting firm established in 1995 in Scottsdale, Ariz.; a principal at Independent Perspectives, a virtual consult-



ing network supporting business management; and the executive director of the Center for Environmental Innovation (CEI), a universitybased nonprofit research organization. He can be reached via e-mail at maclean@ competitive-e.com. For Adobe Acrobat[®] electronic files of this and his other writings, visit his Web site at www.Competitive-E.com.

References

- ¹ The database is set up to support environmental, health, safety and social responsibility reviews; this article only discusses environmental reviews. **Table 1** does not apply to these broader reviews.
- ² See for example, "The Three Levels of Governance: Where is your company in this spectrum: Passive — Active — Aggressive," "Manager's Notebook," *Environmental Protection*, March 2003, pages 20-23. Also available at no charge at *www.eponline.com* under archives.

Our Readers Talk Back About EMS Value



Environmental Protection's readers respond to the question, "Do environmental management systems provide value?"

By Richard MacLean

The February 2004 Manager's Notebook (available online at no charge at www. eponline.com under "Archives") that focused on the value of environmental management systems provoked an outpouring of readership response from around the world. In this September issue, we examine the underlying factors that may have produced this flood of feedback and provide excerpts from some of the e-mail correspondence.

ver the past decade I have written more than a hundred articles for various magazines, journals, and Web sites. Many have evoked responses from readers, but nothing compares to my February 2004 *Manager's Notebook* article on environmental management systems (EMSs). I received comments from as far away as Australia and South Africa and it has been translated into Japanese and posted on the Web.¹ Comments came from consultants; editors; corporate environmental, health, and safety (EHS) managers; and government employees.

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Excerpts appear later in this article. Titles and organizational affiliations are in most cases included; however, please recognize that their comments may or may not reflect their organization's official position. Suffice to say that these are all senior and well-respected EHS professionals — in fact, you may recognize some of the names. Prior to publication, they were given an opportunity to review this article. Again, just because they reviewed it does not imply that they agree with what I stated in this article.

Whew! I'm starting to sound like a lawyer. Somebody help me!

So, what's going on here? First of all, the vast majority of the feedback was extremely positive. I've edited out all of the laudatory comments in the "Readers Respond" section, but here is a sampling: "Hooray!!!!! Hats off to you for speaking so firmly and brutally" and "Kudos to you! It is the best article on ISO 14001 EMS I have read in a long time." I would quote others but my massive ego and sheer brilliance are exceeded only by my modesty. (Reminder to self: Take medication soon.)

There were, however, challenges falling into two broad categories: (1) technical disagreements such as the difference between ISO 14001 and the Eco-Management and Audit Scheme (EMAS), which is popular in Europe, and the original intent for these systems; and (2) objections to the contention that an EMS adds little value.

Several of the people who responded were literally there when ISO 14001 and EMAS were created. I dumped both standards into the same category, when, in fact, they have distinct differences, especially with respect to disclosure, employee involvement, and verification. I should have been more precise.

With respect to my statements on the value of performance- vs. conformancebased EMS, this issue continues undiminished. Edwin Piñero recently addressed the issue head-on and concluded the "shortcomings of an EMS may be in large part, rooted in misunderstanding and misuse.... The inherent commitment to continual improvement, *if done properly*, will drive an EMS to improved performance."² [Emphasis added.]

Therein lies much of the problem. As Piñero implies, even a conformancebased system can deliver performance, but that is not necessarily the way that these systems are being implemented in practice. There are great companies and government organizations doing great things that abide by the letter and spirit of EMAS, ISO 14001, the Responsible Care program promoted by the American Chemistry Council (ACC), and/or their own custom-designed system. But then there are also organizations out there that are totally gaming the system for marketing or public relations purposes.

For example, the Responsible Care program was losing public and agency credibility because of the unevenness of implementation: the good, the bad, and the ugly. The ACC, to its credit, finally decided to mandate independent verification and greater public reporting.

Adding to the confusion have been consultants who have sold (and oversold)

problems instead of assuming that they will go away or that they are trivial.

The problems are well documented. A good summary can be found in the 2003 European Association for the Coordination of Consumer Representation in Standardisation (ANEC)/European Environmental Bureau position paper on EMS.³ The problems extend beyond the implementation of EMSs and include the accreditation and registration structure. A thoughtful analysis of just one dimension to these problems — differences between American and European and ISO 14001 accreditation requirements - was provided by David Burdick in 2001.4 This is just a tiny sampling of the published literature, but it is dwarfed by the upbeat sales pitches of the consultants and certifiers

We as environmental professionals must look beyond the case studies of highly successful EMSs and acknowledge that there is something amiss.

these systems on the promise that they will improve EHS performance and business value, far beyond what might be expected from a conformance-based system. Indeed, they have been promoted beyond what any system could deliver when business support is problematic.

This leads to the second group of challenging feedback: the objection to my implied message that EMSs do not add value and drive performance improvement. Individuals offered as proof their direct experience wherein their EMS was instrumental in their organization's environmental successes. But EMS successes in some organizations do not prove that an EMS will add business value in other companies. Indeed, if improperly implemented, as is sometimes the case, an EMS could actually subtract value. As already pointed out, it's all in the execution.

Whither from Here?

We as environmental professionals must look beyond the case studies of highly successful EMSs and acknowledge that there is something amiss. Why? Because if the public, nongovernmental organizations (NGOs) and/or government agencies become cynical about organizations with a certified EMS, the distrust will hurt every organization. We need to view the situation as it is and deal with and the company testimonials.

Human nature is such that people make the effort to comment if they strongly disagree with something rather than if they agree. My take on the deluge of mostly positive reaction to the February article is that the subject struck a widespread (literally a world-wide) chord with environmental professionals. In other words, there are a lot of people out there in environmental land that clearly recognize that EMSs have some very real problems, and they are frustrated that nothing significant seems to be going on to fix the situation.

It is time for the proverbial "powers-thatbe" and the "adults-in-charge" to deal with these issues with a sense of urgency. If not, at some point in the future the issue will take on dimensions similar to the accounting scandals. The claim, "We were just following generally accepted accounting principles. We did nothing wrong," held no currency for the corporations that were melting down. Today companies point to their certifications as proof of their commitment to sound environmental management. Certification is a valid indication of environmental commitment in some companies, but it is a total sham in other companies. This fact endangers all companies and may lead to another round of public mistrust and regulatory intervention.

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Readers Respond

The following letters were sent in response to the February 2004 Manager's Notebook column. Stevens Publishing Corporation is not responsible for the accuracy of the data or the validity of the readers' opinions expressed herein.



The push for EMS certification in Australia has been such that most people don't want to listen to the concerns you expressed. It is an issue I have raised with clients for some time.... Inevitably the people auditing on behalf of the certification bodies also do not look at what is actually occurring on the factory floor, concentrating instead on a paper trail and written procedures.

> Frank Fleer Managing Director AWN (Air Water Noise) Consultants Victoria, Australia

It is important to remember that the environmental management system standard ISO 14001 was, after some lengthy discussion, neither intended nor written to be a performance standard. That is and continues to be the thorny distinction. Mistaking that leads to the wrong prognosis. Not coincidentally, the "criticisms" of Riva Krut were that she (as well as many other participants and observers of the standards-writing effort) insisted that the international EMS ought to be performance based, and then proceeded to attack the document because it was not. No one, to my recollection, ever suggested or tried to argue that Riva was wrong in her evaluation — that certification to the standard by itself would not insure improved performance or legal compliance. This extremely important point is always lost in discussions about the subject.

Current thinking, little changed since 1997 but supported by more evidence, is that ISO 14001 is an excellent process standard, which enables organizations to address their environmental aspects in a systematic way and to improve their environmental profile, if that is what they wish to do.

The elephant in the closet at The Auditing Roundtable conference, in my opinion, was and continues to be the failure of the certification auditors assembled there to address serious conflicts of interest, perceived and real, between consulting with firms on EMS and independently certifying them to 14001.

William D'Alessandro Editor, Crosslands Bulletin Amherst, N.H.

Even ISO 14001 says you have to have targets and objectives aimed at continual improvement and pollution prevention. This doesn't mean you lose your certification if you don't meet those goals, unless you get a tough certifier — which rarely ever happens.... Also, it's okay if you go from really, really bad to just really bad. That's continual improvement.... There is one good thing about EMAS, though, that isn't in ISO: You don't get a verification if the auditor spots any legal non-compliance during his spot-check review. But there is no duty to do a comprehensive review of legal compliance during the audit, nor does the standard say that you lose your verification if you get an [notice of violation] NOV later. Except for the public reporting and the regulatory compliance point noted, EMAS really doesn't do much more for you than ISO. William R. Blackburn

William Blackburn Consulting Ltd. Long Grove, Ill.

EMAS has historically been orientated toward improved environmental performance. OJ No. L114, 24.04.2001. Annex III, point 3.1 is the verbiage that auditors use to get improved environmental performance (reduced impact) from the organization. ISO 14001, even the new version, still allows continual improvement to be system improvement — which was a concession to the American delegates who are strongly influenced by industry — and their reluctance to design a standard that could force them to expend dollars for pollution control/avoidance equipment.... Thus, I conclude that EMAS is more effective in garnering environmental performance improvement (as opposed to system improvement).

That being said, the big unseen gorilla in both standards is the financial conflict of interest inherent in the system. A company that pays a certifier to register their system is not the same as an objective audit, and until that system is addressed, there will be little that standards can do to motivate environmental performance change.... There needs to be much more emphasis on sound environmental assessment, accurate environmental performance indicators, and competent assessment of regulatory compliance.

> David Burdick Sustainable Steps Milwaukie, Ore.

[There was an] erroneous statement made in regard to EMAS: "The standards do not require firms to establish performance improvement goals; they only require that a process is created to facilitate this action"... [EMAS states that the] "environmental statement is to provide environmental information to the public and other interested parties regarding the environmental impact and performance and the continual improvement of environmental performance [emphasis added] of the organisation."... Thus, to state that specific performance improvement goals are not required to be established as part of EMAS is erroneous. Yes, the firm must have a procedure or process in place to facilitate this action, but the goals are expressly required to be identified, and also to be communicated to the public.

> Michael S. Wenk Manager of Regulatory Affairs Eka Chemicals Inc. Marietta, Ga.

... The clear vision of an EMS ... is what we need to do to succeed long-term. Unfortunately some senior managers and even the ISO registrars are missing your message so far. Hopefully they will read your article and find a new "EMS religion."

> Rich Green Houston

As one who has championed EMS activities since 1996, we did experience some missed opportunities early on in the development, but that's what continual improvement is all about. Today, EMS, if properly implemented and managed, can be used as a marketing tool to encourage other parts of an organization to implement proactive management systems that are designed to measure environmental performance, to enhance business decision-making, and to provide a foundation for continual improvement. However, one of the pitfalls is that, all too often, we implement EMS programs to comply with environmental laws and regulations instead of planning strategies to anticipate environmental issues.

The aspect analysis process allows the organization to look at environmental issues early and develop strategies to address them to better manage environmental risk. This is no different than what any other enabling or core business function does to manage their part of the business. Environment groups within organizations are just being asked to implement "good business practices."

An EMS, however, is like any other business system. It needs to be repeatable and done effectively and efficiently, and this involves paperwork. Ultimately, this will add to the bottom line. An EMS audit is not just looking at documentation, but more importantly it asks if there is a process in place and is it being followed. EMS audits are not compliance audits but system assessments. One looks at the trees and the other at the forest. One of the pillars of an EMS is continual improvement. By establishing achievable objectives, targets, and performance measures, an organization is able to accomplish these targets and move on to the remaining issues. This recurring process of setting and achieving goals enhances the EMS by improving overall environmental performance.

John Bridges Director, Incident Management Office of Emergency Preparedness Washington, D.C.

I was interested in your paper because I learned that you have the same kind of problem with implementation of ISO 14001 as I see we have in Japan. There is no doubt that ISO 14001 was created and intended so as to help organizations improve their environmental performance. Confusion arises due to the misperception that the standard requires the process for enhancing EMS only in place.

But the process can be recognized as the process of enhancing EMS only when it has achieved improvement in environmental performance. And while certification by the third-party is a proof that the organization implements its EMS effectively, effective implementation means planned improvement has been achieved in environmental performance. For the stakeholders, the certification given to malfunctioning EMS is even fraudulent. No one can surely be benefited from the EMS which does not contribute to improvement of environmental performance.

> Masaru Oka Sunnyhills Consulting Nagaya, Japan

We (the EHS community) need to be "in tune" with business objectives (and strategies) to move out of senior management's perception that we are only about compliance and regulations. First, we must understand the strategy that the business executives have developed. Sometimes, this can be very elusive, as all we experience (for a strategy) is headcount reduction, cost-cutting measures, and fire fighting. The plan to grow the business is often obscured. We are worried that the axe is going to fall and we'll get caught on the treadmill and/or the business strategy is not communicated in a clear, understandable context to the lay people.

I have read the book *Good to Great: Why Some Companies Make the Leap...And Others Don't*, which was written by Jim Collins, and realize there are no heroes. There are committed individuals who have helped create a sustainable business culture that continually improves upon itself. There is no room for individual egocentric agenda setting. Everyone has to be on the same page, or at least, in the same book!

Tom Eckhoff Hackettstown, N.J.

What struck me was [your description and its similarity to] the EPA-sponsored National Environmental Lab Accreditation Conference (NELAC) program.... I've always asked the same questions when NELAC comes up as a topic. An example: "Has being NELAC accredited made your data 'better'?" Just having the question asked stuns most lab managers or [quality assurance/quality control] QA/QC coordinators who have been through the grueling process. After enormous investments in time (usually several years), where are the net gains? I'm usually shown a binder of corrective action reports. My question is then, "Does this binder reflect fewer incidents requiring corrective action, or is the only difference that you now fill out and collect pieces of paper?" At this point, whatever roundtable I'm at descends into arguments and hard feelings. And, of course, my simple questions never get answered.

> Charles Lytle Portland, Ore.

Providing performance EMS incentives to industry is something my colleague and I have been striving to accomplish for several years — but to no avail! Sustainability — "That's the way of the future!" — is what we hear; but how do you get to a sustainable level without considering environmental performance? I guess those of us in the trenches will never know, since we are labeled as being "short-sighted" or unable "to see the whole picture."

> Ken Barnes Champaign, Ill.

I wrote a series of articles on the whole issue of the Registrar Accreditation Board (RAB), the real value an accredited auditor brings, how the auditor accreditation process is an accident waiting to happen, and how prospective EMS auditors are brainwashed into thinking they will find work with their RAB certificates. I have worked for several of the RAB-accredited course providers who are overly close to RAB (none will admit it) and worked for several registrars as a contract auditor. But my real bread and butter is fixing some of the shortfalls "certified companies" have in their EMS and teaching folks who really want to get a handle on EMS using my real-life experience and screaming to them it's not about the audit numbers.

> Gabe Crognale North Andover, Mass.

I believe a famous management guru once said that you could get a flat concrete slab ISO certified as a life boat as long as you have the procedures to notify the next of kin. Your comments about continuous improvement is dead on. The business of auditing an EMS reminds me of the old [total quality management] TQM scam. When I was at a Fortune 500 company in the early '90s, the company spent millions of dollars on TQM and continuous improvement training. People were dragged out of their regular business meetings in order to do flow charts on TQM. The only one who got anything out of it was the TQM consultant. He now lives in a big mansion. One ISO 14001 auditor recently complained bitterly in a magazine article that he was starving because the [Registrar Accreditation Board] RAB would not make the use of RAB-certified auditors mandatory. He was looking for guaranteed employment.

Norman S. Wei Union, Wash.

I turned against "standards" in 1997 after hearing Amory Lovins in a lunch talk. His basic idea: we need radical innovation and huge efficiency increases to even approach sustainability. The false focus on "systems standards" only reinforces inefficient, non-performing practices, taking us away from a sustainability vision. It is a delusion that interferes with the marketplace in a negative way. Yes, EMS offered some job protection for EHS consultants and corporate staffs and it probably cleans up some bad clerical practices, but it's a pasta solution in an Atkins world. Performance only should be rewarded with certificates, etc. Even the government (EPA) seems to have gotten that right with its recognition programs.

> John Laumer, Environment in Business Philadelphia

The only other positive thing that I can see that comes out of the ISO program is that it makes you take a look at all of your processes and monitor them on a regular basis for any changes. It helps me pay attention to detail. This is also helpful when monitoring your state regulations. One can fold the two together for a strong and complete EMS program. This is meant to be an inside view of the user that is responsible for compliance of the environmental issues of the facility level.

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Daryl Robins Yakima, Wash.



Richard MacLean is president of Competitive Environment Inc., a management consulting firm established in 1995 in Scottsdale, Ariz.; a principal at



Independent Perspectives, a virtual consulting network supporting business management; and the executive director of the Center for Environmental Innovation (CEI), a university-based nonprofit research organization. He can be reached via e-mail at maclean@competitive-e.com. For Adobe Acrobat[®] electronic files of this and his other writings, visit his Web site at www.Competitive-E.com.

References

- 1. At the time of this writing, it is available at www.mc.ccnw.ne.jp/s_hills/sub55-04-05.html.
- 2. Edwin Piñero, "Conformance-Based Vs. Performance-Based Environmental Management Systems," *Environmental Systems Update*, March 2004, pages 16-17.
- 3. "ANEC/EBB Position Paper on Environmental Management System Standards," 2/21/2003, 11 pages, available at www.anec.org/attachments/env008-03.pdf.
- 4. David Burdick, "American And European ISO 14001 Accreditation Requirements and Their Influences on Registrar Practice and Environmental Performance," *Corporate Environmental Strategy*, Vol. 8, Issue 1 (2001), pages 65-74.