Right-Sizing Organizations for Quality

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OVERVIEW

Adequate staff resources are essential for achieving quality environment, health, and safety (EHS) programs. The technical challenges, internal coordination difficulties, public relations problems, and so on are rarely insurmountable—if you have sufficient fiscal and human resources to effectively deal with the issues. Without a minimum critical mass of resources, you become consumed with day-to-day firefighting and never make progress. In the worst case, an issue can erupt into a full-blown crisis, putting the company at risk and your reputation and career on the line.

Conservative risk managers, wanting to be on the "safe side," would argue for substantial resource commitments. However, demands for rising profits, one of the primary drivers in a competitive marketplace, argue for limiting resources to the "bare bones." How does the strategically thinking EHS manager determine the "right-sized" EHS resource level? What is the most efficient EHS organization structure? How is this resource level and organization justified to senior management?

This is the last in a series of three articles. Part 1 provided guidance on how to determine the appropriate staffing and resource needs. Part 2 discussed how to organize these resources effectively. This article, Part 3, provides suggestions on how to make a convincing business case to management to implement the desired changes.

The authors are senior-level EHS practitioners who have perfected these techniques by working with executive management. The methods are similar to those effectively employed by other functional disciplines to define and obtain resources. Written in the context of a corporate EHS group, these techniques can be modified and adapted to any functional level within a broad range of organizations. Whether you are an individual contributor or a manager, these articles can help you better understand resource issues.

PART 3: MAKING THE BUSINESS CASE TO EXECUTIVE MANAGEMENT

The perfect plan is of no value if you are unable to obtain the resources necessary to move forward. One of senior management's primary functions is to allocate resources. *You* may be convinced that the plan adds value, but the definitive test is, "Does it convince those who can approve the organizational change?"

As Harry Truman once said, "Leadership is the ability to get men [and women] to do what they don't want to do and like it." In this article we will discuss leadership techniques to gain support from business managers. Management may prefer to allocate the resources to more familiar, income-generating programs, but with the approaches recommended in this article, they will recognize the ultimate value of your recommendations to the company.

INTRODUCTION

The final task before implementing your EHS plan is selling your proposal to senior management. Most of your work has been done. You have already

- established a shared vision with senior management and obtained agreement on the EHS strategic direction and goals;
- defined the programs and activities needed to achieve the vision and goals;
- used job mapping, zero-based matrix, or some other systematic approach to determine the resources required (i.e., "right-sized" the organization as if you were starting from the ground up); and
- assessed the organization's ability, in numbers, tools, and capabilities, to achieve its new vision.

At this stage we must make the transition from the EHS plan to deliverables defined based on their *actual contribution to the business's competitiveness*. This contribution should be defined at two levels: (1) identified, actual resource dollar costs and savings, and (2) direct and indirect, short- and long-term strategic value.

A presentation with this foundation will be understandable and consistent with the analyses used by the other functional parts of the business (e.g., operations, marketing, and research and development [R&D]). This represents an opportunity for you to clearly and succinctly communicate EHS needs and value to senior business leadership.

This strategy is geared for a broad, overall proposal to management on staff

resources—the subject of this three-part series. The basic concepts apply, however, to a single "head count" addition or an individual project. In many respects a similar approach must be used, regardless of the size of the proposal. Management will want to know how this particular element on the table for discussion fits into the broader plan. Is it consistent? Should some other program be dropped? Can the resources come from some other area? Unless a company-, business group-, or division-wide perspective is given, you may be faced with the response, "Great idea, fit it into the current plan with no additional resources."

Every presentation should reiterate the theme illustrated in Figure 1, namely, that you have (or are moving in the direction of) the right programs implemented by the right resources.

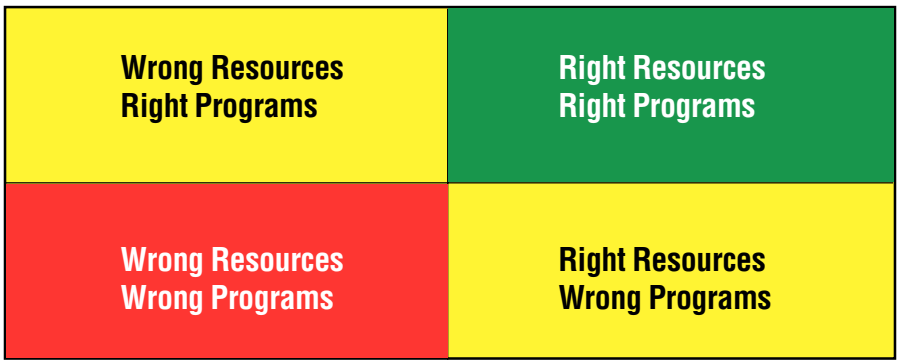

Figure 1. Optimizing EHS resources.

USING BENCHMARK DATA

Throughout these articles we have emphasized that there is no magic formula to determine overall, minimum resource requirements. You should, however, have access to benchmark information on resources because *your management may want to use this as a basis to judge the EHS organization.*

Staffing surveys by companies such as Price Waterhouse, Temple Barker and Sloane, and Mercer are favored sources used by executive management to judge their staff size and efficiency. Typically, these studies are indexed by industry category and size (e.g., total revenues, production rate, employees, or number of facilities). While surveys can provide valuable insight into relative staff size of some functions (e.g., accounts payable and payroll), they offer only the broadest framework to judge EHS staffing head count. For example, a benchmarking study conducted by Compaq reported a variation in EHS staff size from three to 200, per billion dollars of revenue, in their survey of large corporations.[1]

As the Compaq study illustrates, there is an enormous difference in the size of internal EHS staff organizations. Corporate staffs can range from a "skeleton crew" to hundreds networked across the company. Similarly, manufacturing site staffs can vary tremendously in size and are highly dependent on the current issues, its regulatory obligations, and the nature of its operations. Overall, a company's "legacy of EHS issues" and management's philosophy for dealing with them can be a far greater determinant than any common metric such as total revenues. True comparisons, therefore, are only valid within similar industry sectors, and then only when evaluated with consideration given to potential special circumstances.

If your proposal *appears* to move the company in a direction that is significantly over- or under-resourced within your specific industry sector, you should be prepared to put this apparent anomaly in perspective. For example, Table 1 contains a list of factors that may influence resource requirements. You can construct a chart to illustrate where the company may stand relative to each of these items to help frame the issue for management.

You might use benchmarking data to support your argument, but it should not be the primary argument and certainly not the justification to maintain the status quo. Note also that management has limited control over some of the items listed in Table 1 (e.g., historical "legacy" of issues), but considerable control over others (e.g., competency of the group).

Defining the Costs and Benefits

It is relatively easy to define the costs associated with adding, reducing, or maintaining staff and programs. Defining both the long-term and the "hidden" costs and benefits can be problematic, yet sometimes these are the numbers most needed to make a persuasive business case. Fortunately, techniques to estimate these costs through "full cost accounting" have progressed

Table 1. Factors affecting overall staff resource level.

Company-Driven
• Nature of the business/risk of operations (e.g., industry group, environmental "footprint," proximity to sensitive areas)
• Legal/regulatory requirements (e.g., different states or countries, chemicals, and processes)
• Company goals
• Company culture (e.g., degree of integration of environment into line management, risk tolerance)
• Number of separate sites/employees
• Communication obstacles (e.g., language barriers, distance between sites)
• Company regulatory compliance history
• Profitability and production rate of facility
EHS Department-Driven
• Staff competency
• Individual experience level
• Group morale and work ethic
• Maturity of the existing programs
• Organizational structure
• Departmental processes (e.g., use of information management systems)
• Program mix and priorities given
• Cost of EHS staff
• Willingness to share information and resources

significantly over the past decade. Volumes have been written on the subject and numerous resources exist today (see resource chart).

It is essential that top management understands and supports the need to better identify hidden and long-term EHS costs. Accounting and budgeting systems were originally structured to answer specific business questions and to satisfy external requirements (e.g., the Securities and Exchange Commission). Even in a new company, this framework will dominate how the new accounting systems are structured. You will need to work within this structure to identify existing information and mesh new needs conveniently with the existing system. You should establish a close working relationship with a contact within the finance organization who has sufficient stature and knowledge to facilitate this process.

One of the best ways to promote full cost accounting in your company is to explain to your management the progressive steps taken and the benefits gained by other companies. You may want to set aside a modest budget for benchmarking in this area. For example, a number of companies are using Activity-Based Costing (ABC), in which specific overhead costs are linked to manufacturing activities. EHS costs hidden in overhead accounts can be readily identified in an ABC system.

The process may take time, and trying to get the finance organization's attention during year-end close is unwise. Also recognize that EHS costs may be only a small percentage of the total costs tracked by the company. Making significant modifications to the entire accounting system may not be justifiable on this basis alone. On the other hand, good opportunities may present themselves.

For example, the finance and information systems organizations may be undertaking major overhauls in the way data are gathered and analyzed. Currently, a number of companies are piloting or converting to "enterprise applications" software systems such as SAP, PeopleSoft, Banyan, and Oracle. Find out if these windows of opportunity are on the immediate horizon, even if you are not very far along in your activities. Partnering with an effort not directly related to EHS tracking may give you the needed access to modify company-wide systems.

As an illustration of the above principle, the EHS group at Bristol-Myers Squibb launched full cost accounting in 1995 as part of their contribution to a company-wide productivity effort. Four elements were identified for implementation over a four-year period, with most of the effort centered in the pharmaceutical business group:

Full Cost Accounting Resources

The **U.S. Environmental Protection Agency** (EPA) makes available a wealth of information on environmental accounting through the **Pollution Prevention Information Clearinghouse** (PPIC). Contact PPIC by phone: (202) 260-1023; fax: (202) 260-4659; or e-mail: PPIC@epamail.epa.gov, and request their list of available documents. This should be your first stop in obtaining additional information on environmental accounting. More information is available at *http://www.epa.gov/opptintr/p2home*.

The EPA also sponsors a number of projects through the **Environmental Accounting Project** managed by Susan McLaughlin at EPA, phone: (202) 260-3844; e-mail: mclaughlin.susan@epamail.epa.gov. They publish periodic updates on EPA's activities in this area, links to various resources, and a network directory of professionals interested in environmental accounting. More information is available at *http://www.epa.gov/opptintr/acctg*.

There are a number of commercially available software systems and tools to support environmental accounting:

- **EPA's Office of Pollution Prevention and Toxics** published two reviews: *Incorporating Environmental Costs and Considerations into Decision-Making*, EPA742-R-95-006, February 1996 and *Valuing Potential Liabilities for Managerial Decision-Making: A Review of Available Techniques*, EPA742-R-96-003, December 1996, both available through the PPIC or National Technical Information Service (NTIS), phone: (800) 553-NTIS. More information is available at *http://www.fedworld.gov/ntis/index.html*.
- The **Organization Resources Counselors, Inc**. sponsored the development of a software tool to analyze health and safety investments, Return on Health and Safety Investments (ROHSI). It is currently marketed by Arthur Andersen. More information is available at *http://www.orcsac.com/offices.html*.
- The **EPA's Design for the Environment Program** and the Office of Pollution Prevention sponsored a software system, P2/FINANCE, to guide users in the data collection and analysis of pollution prevention projects using a Total Cost Assessment approach. It can be obtained through the PPIC. More information is available at *http://www.epa.gov/dfe*.
- The American Institute of Chemical Engineers' **Center for Waste Reduction Technologies** is currently sponsoring a project to develop a Total Cost Accounting software program. The tool is expected to be completed by July 1999. More information is available at *http://www.aiche.org/docs/cwrt/projects/account.htm*.

The **Institute of Management Accountants**, Montvale, New Jersey, has prepared several documents on activity-based costing, including "Practices and Techniques: Implementing Corporate Environmental Strategies" and "Measuring Corporate Environmental Performance: Best Practices for Costing and Managing an Effective Strategy." Call the Special Orders Department at (800) 638-4427 and request a current list of publications. More information is available at *http://www.rutgers.edu/Accounting/raw/ima/ima.htm*.

The **Society of Management Accountants of Canada**, Hamilton, Ontario, Canada, has published management accounting practices handbooks, including "Tools and Techniques of Environmental Accounting for Business Decisions, #40" and "Accounting for the Environment." Call (905) 525-4100. More information is available at *http://www.cma-canada.org/english/cma1.html*.

The **Canada Institute of Chartered Accountants**, Toronto, Ontario, Canada, has published relevant research reports and study group reports, including "Environmental Costs and Liabilities: Accounting and Financial Reporting Issues," (1993), and "Environmental Auditing and the Role of the Accounting Profession" (1992). To order, call (416) 204 3322, or fax: (416) 204-3416. More information is available at *http://www.cica.ca/new/index.htm*.

The **American Institute of Certified Public Accountants** (AICPA) and the Financial Accounting Standards Board (FASB) have published accounting standards related to environmental accounting. Much of this work is related to accrual and reporting of environmental liabilities such as AICPA's *Statement of Position on Environmental Remediation Liabilities*. For a current listing call AICPA at (800) 862-4272 and FASB at (203) 847-0700. More information is available at *http://www.aicpa.org*.

The **United Nations** has prepared a guide to literature on corporate environmental accounting called "Environmental Accounting: Current Issues, Abstracts, and Bibliographies," United Nations Publication No. E.92.11.A.23. Call the United Nations Publications Sales Section at (212) 963-8302. More information is available at *http://www.un.org*.

The **World Business Council for Sustainable Development's** 1994 publication *Internalizing Environmental Costs to Promote Eco-Efficiency* has a chapter devoted to accounting for environmental costs. Call the Council in Switzerland, at 41 22 839 3100; fax: 41 22 839 3131. More information is available at *http://www.wbcsd.org*.

The **World Resources Institute** has published a number of studies on environmental metrics (e.g., *Measuring Up—Toward a Common Framework for Tracking Corporate Environmental Performance*, 1997) and case studies in environmental accounting (*Green Ledgers: Case Studies in Corporate Environmental Accounting*, 1995). More information is available at *http://www.wri.org/index.html*.

The **Tellus Institute** has prepared a number of benchmarking studies on environmental accounting and polluting prevention for EPA and other organizations (e.g., *Environmental Cost Accounting for Capital Budgeting: A Benchmark Survey of Management Accountants*, 1995, OPP EPA742-R-95-005). More information is available at *http://www.tellus.org*.

1. Develop and implement enhanced methodology for capital project evaluation. By justifying EHS spending on quantifiable financial benefits and compliance, approval and implementation of projects with positive financial returns will be accelerated.
2. Develop an EHS capital project tracking and reporting system. By coding all significant EHS projects, the company will facilitate analysis and expect economies of scale in executing similar projects.
3. Track and report priority EHS operating costs. ABC will help link EHS costs to specific products and businesses, and is expected to hold down increases in EHS operating costs by helping decision-makers identify the most cost-effective areas of focus.
4. Develop electronic systems for managing remediation projects. Developing software and establishing cost centers will reduce administrative time for data gathering, analysis, and reporting.

These full cost accounting efforts complement the company's commitment to pollution prevention throughout the product life cycle, a strategic approach launched in 1992.[2] The company anticipates significant cost savings and cost avoidance associated with the total package of EHS productivity measures. Implementation of full cost accounting may well result in additional savings beyond those initially anticipated.

Identify the Strategic Business Value

In making a case for resources, you need to address the *business* issues that management can readily understand and support. Defining the issues in terms of *environmental* impacts is only the first step. The link to strategic business impact (both negative and positive) must be made. The sidebar below illustrates this point.

In the sidebar story, a last-minute crisis was averted because the employee talked to an environmental professional who understood environmental issues and was willing to spend an hour listening to the nuisances of a complex regulation. Persons outside of your profession (e.g., business managers) may be expected to have endurance limits of five minutes when it comes to regulatory complexities. They are unfamiliar with environmental jargon, and it is your job to translate this into plain English. Unless you quickly get to the business "punch line" of your case, you should not be surprised if your message does not get through.

The following are examples of some of the more pressing *business* concerns that may form the basis of a "punch line" that galvanizes management's attention:

1. Risk avoidance—Eliminate or minimize costly legal liability, regulatory, and remediation issues for damage to human heath and the environment.
2. Licenses to operate—Obtain, expand, and maintain EHS permits, without which the company cannot operate.
3. Cost reduction—Achieve the absolute lowest operating costs (including EHS program costs).
4. Productivity—Seek innovative ways to reduce wasted resources and increase workplace performance (e.g., through improved ergonomics and reduced workplace injury).
5. Reputation—Be the preferred, trusted corporation to operate within a community. Have employees who are proud of their company and will work hard toward its continued success.
6. Reliability—Ensure that processes are not interrupted because of releases or EHS permit issues. Customers who rely on sole source suppliers are particularly sensitive to this issue.
7. Product quality—Gain a marketing advantage by increasing product quality (e.g., reduction in trace contamination, product labeling advantage).

Management may readily recognize that these issues add (or remove) strategic value. However, they may have little understanding of how to achieve these objectives through EHS

Get to the Punch Line!

During several telephone conversations to one of the authors, an environmental specialist expressed concern over a future regulation on product labeling. All that could be fathomed from the calls was that: (1) the employee was very worried and (2) the regulation was complex. When in the same town on business, the author had a chance to sit down face-to-face with the employee during lunch and listen once again to the intricacies of the regulation. After a full hour of back-and-forth dialogue, the conversation was interrupted with an "Oh my gosh!"

It finally became crystal-clear that the concern was not only real, but the potential business impact was far beyond what the employee had even considered. Within days a task force had been formed, business management had been notified, and the issue was being addressed.

performance. Without this clear understanding there will be no sense of *urgency*, and EHS performance will not be central to their concerns.

Many of the above strategic elements may be quantifiable in precise dollar terms. Others may not be, but the strategic significance may carry enough weight that precision in actual financial terms is not necessary. For example, the value of the company's reputation is very difficult to quantify; yet reputation may be the overriding management concern. Companies that sell directly to the public do not want to risk sales loss as a result of questions over the purity of their products and the care with which they are manufactured (e.g., food processing, pharmaceutical, and medical products industries). Heavy manufacturing, utility, and mining industries depend on the community's trust and willingness to allow permits that discharge effluents or extract mineral wealth. As a specific example, Volvo's main marketing thrust is their product's safety performance. How would this fare if they had one of the worst EHS performance records?

Do not be overly concerned if a strategic element can only be estimated within some broad range or benchmarked within some framework. At this point, it is more important to inform management that there is, in fact, a strategic value, and that value may be relatively large compared with other manufacturing costs. You are probably better off today developing a workable system educating and influencing management and striving for continuous improvement than waiting five years for accurate numbers.

The challenge is to develop an EHS business case that is clear, strong, and persuasive enough for management to commit resources. Without a convincing plan of action management may assume things are moving along satisfactorily. In a best-case scenario, business management does not request EHS staff reductions, but needed resources are not approved. In the worst case, existing, needed resources are cut back.

Changing Business Realities

The ultimate goal is to broaden management's perception of EHS issues from an exclusively negative (i.e., reactive, problem-solving, compliance-driven) or defensive (i.e., due diligence) role toward a strategic function that improves the company's competitive position. In other words, the environmental department does not just manage consequences; it manages resources and adds value to the product.

Shifting management's perceptions of EHS can be challenging. For example, a group of EHS executives recently evaluated the seven business concerns listed above. They force-ranked the list according to the influence each factor has with their business management.[3] "Risk avoidance" was rated as first in significance *by a factor of two to one* compared to any of the other factors listed. "Product quality" was ranked last by a wide margin.

In some respects, EHS managers may have been *too effective* in pointing out the consequences of noncompliance and other regulatory-related problems. Business management may have an overly narrow view of the potential contribution of EHS programs. Robert Shelton describes the difficulty in linking EHS to business performance as "Hitting the Green Wall."[4] The most visible consequence is that EHS management may not have "a place at the table" (i.e., participate in key business management decisions) as described in Part 2 of this series. There are, however, more significant, though less obvious, consequences.

For example, in any company there are both strategic and "traditional" components to EHS activities. For the purpose of this illustration, traditional activities are (loosely) defined as those functions readily identified by business management as EHS service–related. These activities are frequently outsourced or located in service-type EHS organizations. Strategic activities are (or should be!) rarely outsourced and are closely tied to the long-term competitive position of the company. (Part 2 of this series contains a table listing these various activities.) The overall size of the effort (i.e., total resources devoted to EHS) and the ratio of strategic to traditional activities varies from company to company.

If a "green wall" exists in a company, as shown in Figure 2, business management may not see the full range of possible

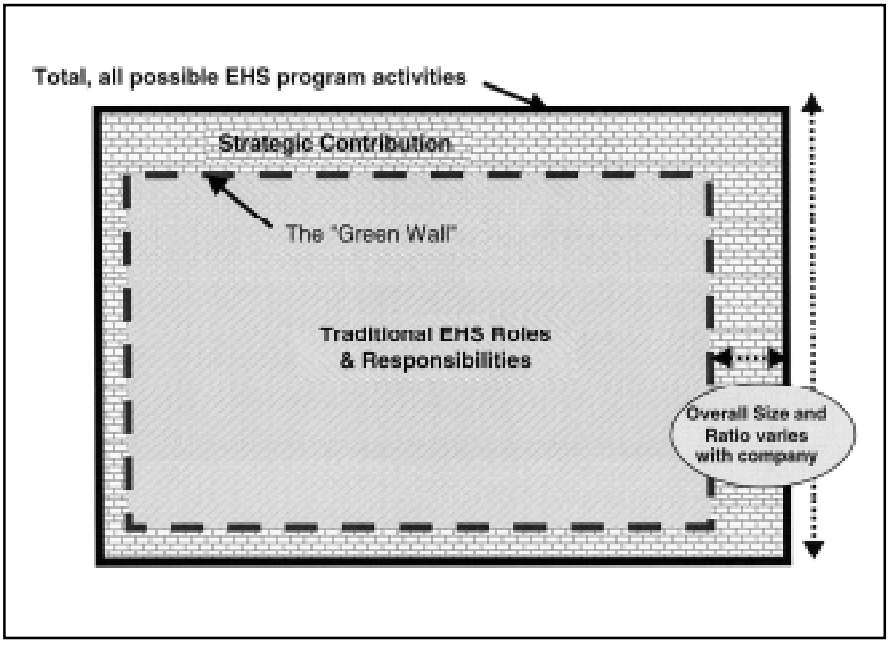

Figure 2. Strategic and traditional EHS activities.

value-added EHS activities. EHS management may have a very difficult time adding resources beyond those required for regulatory compliance, auditing, remediation, waste reduction, and other EHS activities that business managers have historically supported. Depending on the strategic significance of these nontraditional activities, there could be a profound negative impact on the company's long-term competitive position.

In describing the potential "green wall" between EHS management and business management, Shelton points to the use of "environmentalese"—EHS jargon incomprehensible to business management. "Design for the Environment" may have a familiar ring to EHS professionals, but business managers want to know the specific elements that are important to customers and should be incorporated into the design process. Meeting Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) requirements is important, but explaining the net present value of avoided fines or the return on investment of a new pollution prevention project is more comprehensible to management.

Fortunately, there are a growing number of tools that help define EHS issues in a business context. For example, the Global Environmental Management Initiative (GEMI) has prepared an excellent booklet on defining and measuring EHS value in business terms.[5] In addition, there are a number of recent journal articles and reports that describe the impact that environmental issues have on shareholder value.[6]

The authors recommend that in developing your business case, you incorporate one or more of the following messages: First, the issue is a *core* business concern. The company cannot grow or remain profitable unless its performance is up to industry standards *and* stakeholder expectations. Licenses to operate, reputation, and reliability can make or break a company. Second, superior EHS performance is a *competitive* issue. For the company to remain competitive in the long term it must

- operate its programs efficiently and at the lowest possible costs. This does not mean cutting back to minimal performance, but performing at exceptional levels with minimum resources;
- obtain and maintain a portfolio of operating permits;
- participate in the regulatory and legislative process for competitive advantage or to protect its interests;
- maintain or enhance its assets through effective due diligence; and
- seek out competitive advantages in its processes, products, and services.

Fine-Tuning the Analysis

How receptive management is to resource changes—increases, decreases, or structural revisions—depends on a number of factors, including (in order of significance)

1. whether the change is mandatory. Increases based on a crystal-clear regulatory requirement are relatively easy to obtain—adding discretionary staff resources is extremely difficult;
2. management viewpoint and attitude toward environmental performance and risk;
3. the clarity and forcefulness by which executive management (especially the CEO) promotes environmental protection; and
4. the current business performance (i.e., whether the business is making revenue targets).

The second issue, attitudes, is typically the "wild card" in the resource strategy. Recognize that you must deal with a number of personality types and that each has to be dealt with differently. The business case that you prepare may have to be adjusted to highlight the particular concerns and "hot buttons" of your audience.

Having an informed management is critical. How much effort this will take depends on the amount of airtime they are willing to give and how convincing the case must be to gain support. "True Believers"—business managers with deep, personal convictions on the environment and worker safety—provide ample airtime and need relatively little convincing (i.e., precise financial justification). Often, these managers got their "religion" after going through hell with a catastrophic EHS issue. At the other extreme, some managers may only be willing to listen to a brief, very compelling argument that it is in the company's and *their* best interest to support the recommendations.

Explaining the net present value of avoided fines or the return on investment of a new pollution prevention project is more comprehensible to management.

Once you have set down your recommendations, you will need to support and justify the recommendations *in the style effective with the individuals you must convince*. "Selling" program proposals does not come naturally and easily to many EHS professionals; however, a convincing argument is essential to compete head-to-head with all the other business proposals seeking resources.

In selling EHS programs, the authors found that managers respond positively if a case can be made that responds to what strongly motivates them. This approach is especially important if the recommended change cannot be justified solely on the basis of financial payback. Table 2 contains a list of possible areas to consider. Unfortunately, in the past, EHS professionals have overused the "aversion to risk" approach when justifying recommendations, as previously described in this article. The "If you don't do such-and-such, you'll go

to jail" expressed in regulatory jargon is a major turn-off and reinforces the stereotype that EHS programs are strictly negative and do not contribute value. Moreover, the "go to jail" mantra has lost its credibility, because relatively few business managers have gone to jail. A more positive argument, stressing value added and competitive advantage, is more likely to elicit a favorable response.

The most successful environmental managers today focus their efforts on delivering facts concisely, in a format and in terms that business managers readily understand. The recent evolution of full cost accounting has helped this process. Watching other business managers make presentations is one of the best ways to learn these techniques. Business managers respond when the message is in business terms (i.e., in lost productivity, not in threats of criminal penalties). *If you cannot make a good business case, you cannot make a convincing EHS case.*

Formatting the Information

The structure of the business case is primarily dependent on what seems to work within the company's business culture. You should consider using a style and format as close as possible to those used to deliver other business issues. Some companies use "book presentations," in which the information is laid out in outline form and discussed with management around a table. Other companies rely on charts and graphics. Areas covered might include:

- Scope
- Objectives
- Deliverables
- Prerequisites
- Contributions to corporate success indicators
- Major drivers
- Major impacts
- Financial impacts
- People impacts
- Probability of success

Lay out in detail what is required and why. Management may not have the time or patience to go through the supporting information, but it should be apparent from the material presented that the details exist, if they want to probe further.

Unless your vision is clearly articulated, both verbally and through charts and written material, executive management's understanding of the issues may be amazingly different than your own. In the final analysis, it is what is in their mind that counts. Unless everyone is "calibrated" on the

Table 2. Areas to consider in selling an EHS program.

Motivation	Messages	Examples
Business sense • Financial • Dynamics	The plan has a positive cost/benefit ratio It meets threshold Return on Investment Consistent with business dynamics and emerging strategies	Hard numbers showing cost savings from programs such as corporate-supported pollution prevention programs Figures showing value added from expediting permits Figures demonstrating cost savings from consolidation efforts, outsourcing, networking, shared services, etc. Cost benefit numbers directly generated from company data or comparative numbers from other corporate organizations Cost information for business-by-business program development vs. joint "template" development Impact of legislative successes/failures "Four-box" analysis of programs and other commonly used management tools to illustrate value-added programs Management visual aids such as the diminishing returns curve on environmental programs Diagrams of how key components fit together
Competitive spirit • Peer pressure • Industry benchmarks	Other respected companies run their programs using these methods and staffing levels Other business leaders support these concepts Other company business group leaders have succeeded in employing these concepts	Sample organization charts from a number of leading multinationals Benchmarking data on staffing levels Success stories in company that might be leveraged across the company
Aversion to risk	Greater corporate governance required If not properly managed, issues can have enormous implications	Inventory of major company issues and their liability costs Cost estimates for shutdowns (examples taken from industry or your own company) Cost estimates from permit delays (examples taken from industry or your own company) Fine/litigation costs (industry/company) Emerging issues and need for strong leadership direction Statistics from public opinion surveys, e.g., before/during/after a major issue
Pride • Company reputation • Personal reputation	Company can position itself as a business leader	Examples of what it means for company to be leader in environmental management. May be important to make clear distinction that "leadership" means a competitive environmental business strategy that is good for the company and for the environment. It is not a benevolent effort to "save the world" to the detriment of company shareholders. Example of how other companies have gained from improved environmental images

scope, it will be difficult to get closure. It is easy to express the number of resources and budgets. Clearly defining the problem or the opportunity and providing convincing supporting arguments is much harder.

For each of the roles and responsibilities of the department it will be important to define the program content that accomplishes the defined objectives. It may even be worthwhile to start with a clean slate and use a ground-up approach in specifying what needs to be done. The human resources requirements may need to be defined in precise detail (e.g., job descriptions prepared). Critical mass (i.e., minimum internal staff), key specialty areas, outsourcing, networks, matrixed support, and shared services should be addressed. Capital and expense budgets should be estimated for each major program and extrapolated out over time. Budgets may reduce with time as programs become organized and integrated into the business line or EHS organizations.

Delivering the Message—in Stages

Before presenting the recommendations to a large audience, a series of small, possibly one-on-one sessions with key individuals may be in order if the recommendations are likely to run into considerable resistance. Major land mines, weaknesses in the logic, or supporting ideas can be explored. Ten to 20 charts of the issue, supporting material, approach, and recommendations may be appropriate. Ideally, you will build momentum and supporters by going up through the organization. Obtaining one or two business management champions is critical for success.

With sufficient backing and understanding of the "hot buttons," a presentation to larger management groups would take place. Should these efforts prove successful, a Board of Directors presentation would follow. The object of going to the Board is not necessarily to seek approval to move forward, but to demonstrate that action is being taken to improve the company's competitive position and, if required, seek policy advice. Board support is also important in moving some of the more sensitive recommendations into all areas of the company.

CONCLUSION

EHS staff are sometimes challenged to cut resources by a fixed percentage from current levels to meet business financial objectives. These requests often come in the wake of a major company review of staff resources by internal teams or external management consultants.

In this series on staff resources, we suggest that senior EHS management should *lead, not react to,* initiatives to right-size their organizations. Once the companies are right-sized, there should be an ongoing effort to keep the staff operating efficiently and contributing the maximum value possible to the company.

We have explored some of the tools that can be used to achieve this level of effectiveness. Mapping resources can identify which resources can be better spent on higher-value activities. Performance can be traced and issues identified early. Organizations can be structured to not only fit within the company's culture, but also be fine-tuned to operate at peak efficiency. Finally, where changes should be made, a convincing business case can be made to senior management based on strategic value to the company.

It takes resources to do all this, and too often EHS managers are too busy reacting to daily pressures to "get ahead of the curve." EHS managers should first ask themselves and their staff, "How productive is our time *really* being spent? Are we winning the day-to-day battles but heading for defeat?" The answer to these two questions may provide impetus to step back and evaluate where you are headed and how you will get there.

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