

Six Imperatives for Excellence in Environmental Management

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In managing for the environment, no company, however accomplished, can afford to rest on its laurels. The solid progress achieved over the past decade – in the development of clean technologies, sophisticated resource recovery systems, innovative environmental management systems, risk management methods, performance measurement tools, communication initiatives, training techniques, and more – has established public expectations that transcend both industries and nations. Today's best practices – wherever they are found – represent the *minimal* performance levels at which companies will be expected to manage environmental, health, and safety (EHS) issues in the next few years.

For many companies, making the move to the next generation of EHS management will determine competitiveness. For some, it will determine survival. Attention to six key imperatives can help you make that transition:

- Define policy to push the vision
- Measure to manage
- Communicate to establish dialogue
- Question „business as usual“
- Satisfy all your stakeholders
- Integrate... integrate... integrate

We discuss these imperatives below. For each, we look to what some leading companies are doing right today in order to understand what will soon be expected – or required – of all companies. We also identify potential hurdles or gaps where change must happen if companies are to meet tomorrow's expectations.

Define Policy to Push the Vision

Most companies have written policy statements that articulate their corporate EHS posture. These statements are generally driven by the EHS staff. They may bear little connection to the views of senior executives, operating management, or even line managers. But without that direct connection – and the commitment that underlies it – such policies are hollow. They can't guide the company in its chosen strategic direction. In the last year or two, many leading companies have scrutinized their EHS policies for both appropriateness and effectiveness. They have benchmarked them against what others are doing and redefined them to represent the actual commitments of the firm's leadership. In general, corporate environmental policy should define three things:

- *The company's minimal performance standards across the full range of its operations.* Jonathan Plaut, director of environmental quality for AlliedSignal, stated it this way in a report developed by Arthur D. Little and Business International: „We have our own standards, and we take them wherever we go. These standards are at least the law and often tougher than the law.“
- *A detailed action plan that translates policy into specific goals and target dates.* Polaroid, Monsanto, and AT&T were among the first companies to make bold public statements about environmental goals they had established for themselves. These statements positioned them as early environmental leaders. Similarly, when Id's management redefined its policy in 1991, chairman Sir Denys Henderson announced a new set of objectives to help move the company beyond compliance with existing laws and regulations. The new objectives included reducing waste by 50 percent by 1995 and ensuring that all new plants meet the environmental requirements of the strictest countries in which ICI operates. The company's senior management energized the newly defined policy across the organization.
- *Responsibilities, accountabilities, and incentives for reaching goals.* In defining EHS policy for your company, take time to understand the unwritten rules within your organization. If other company objectives are in conflict with the environmental goals, which take precedence? The boldest policy statement and most aggressive implementation program will fail if the unwritten rules of the company dictate a conflicting performance-reward system. For example, if a plant manager is told that he or she is responsible for meeting certain environmental goals and then is rewarded for meeting production goals – while failing to meet the environmental goals – the „unwritten“ message is clear: the environment is not important. In contrast, at Dow Chemical, plant-level managers' salaries are tied to their ability to meet environmental goals, among other goals.

Measure to Manage

„Track us, don't trust us.“ This statement, made by Robert Kennedy, chairman of Union Carbide, at the Second World Industry Conference on Environmental Management (Rotterdam, 1991), has become a banner in the

process industries – and beyond them. Because environmental management systems and programs are only as impressive as their measured results, companies have devised various ways to measure performance. Some of these approaches have proved more useful than others.

There are several levels at which companies measure environmental performance. On the simplest level, companies keep track of issues that could come back to haunt them (e.g., number and severity of incidents, quantities of waste generated and reduced). But such unsophisticated indicators can be misleading. They are equivalent to tracking your personal automobile driving record by counting the number of tickets you have received. What this measures is not how well you drive, but how many times you've been caught.

At a more sophisticated level, companies start to track regulatory compliance status, progress in meeting goals, and use of natural resources. Compliance measurement can include, for example, tracking the number and type of audit findings, the results of government inspections, and the number of fines or penalties.

Some companies have devised their own comprehensive environmental scorecards, using hard data on emissions, waste tracking, compliance, and accidents. How is the company doing against goals? What improvements has it made? Where is progress sluggish or less than desired? Companies such as BP Chemicals, Chevron, Dow Europe, Monsanto, Norsk-Hydro, Polaroid, and WMX Technologies have begun to publish their score-cards, sometimes through an annual environmental report.

In reviewing your own measurement program, it is essential to look at the data with the healthy skepticism that will be applied by some of your stakeholders. What do the data really mean? What program, product, or process changes do they reflect? Reductions in overall air emissions, for example, may be viewed less enthusiastically by the public if you have achieved them by selling a facility than if you have done so by making changes in production processes or materials.

In addition, it's useful to distinguish between in-process and end-of-process measures. Though both are important, the former give you the information you need to make improvements *earlier*.

Furthermore, you should communicate environmental data across functional and business lines in ways that highlight possible opportunities for business process improvement (e.g., relating emissions levels or waste-generation rates to manufacturing-process operating parameters in the search for cost-saving pollution-prevention initiatives).

There is a lot of work ahead before companies can use measurement tools that actually deliver what many stakeholders want, i.e., realistic assessments of:

- The impact of the company's products and processes on the environment
- The risk faced by the company, as well as its progress in reducing risk
- Overall performance (a kind of environmental „index“ for the company)
- The full cost of meeting EHS requirements and obligations

As part of a recent Distinguished Speaker Series at Arthur D. Little, Harry Fatkin, vice president of Polaroid Corporation, suggested that the day is not very far off when a company's environmental performance will be reduced to a single performance rating – one trackable number. Considering how rapidly companies are implementing measurement schemes, this notion is not unthinkable. In 1988, Rhône-Poulenc introduced environmental indices of liquid effluent discharges – first at its French factories and later in the United Kingdom. The company tracks the reductions in the indices in each facility annually. A computerized waste-tracking system helps account for all wastes and the cost of their disposal – and also helps reduce those costs. Similarly, Niagara Mohawk Power Corporation has recently developed its own environmental performance index based on an integration of compliance parameters, emission/waste parameters, and enhancement parameters (e.g., land protection and environmental research).

Fortune magazine (July 26, 1993) recently published its first environmental index of the top ten environmental leaders, laggards, and most-improved companies. This is likely the precursor of several such public indices, the results of which will vary with the measurements and ratings used. As yet, there is no consensus on a true „index“ of company performance. But with industry „pushing the envelope“ to develop more meaningful measurement techniques, and with prominent institutions such as *Fortune* providing a public forum, we expect the discipline of environmental measurement to show extensive progress in the next few years.

Getting this process right for your company will help you determine where you stand today, where you need to focus, and which changes make a difference, giving you return on your investment. If your company chooses one area to focus on first, it should be measurement.

Communicate to Establish Dialogue

One of the most visible changes in environmental management is the increased willingness of companies to communicate – often quite aggressively – their environmental policies and progress to their stakeholders. Dow Chemical Company is a leader in this respect. It participates in community advisory committees and recently established an external environmental advisory board from which the company can gain experience, insight, and comment. Furthermore, it has an open-door policy with the media and the public. A 1992 survey of 50 top U.S. journalists by *TJFR Business Reporter* (a newsletter for journalists) identified Dow Chemical as one of the best companies at public relations.

The communication process takes many shapes, both internal and external. Internally it means defining posture, commitment, and goals. It also means training and empowering all employees, seeking their suggestions for improvement, informing them about progress against goals, and identifying both problems and progress. External communication includes listening to stakeholders and understanding their needs, reporting in response to regulatory requirements, sharing the company’s measured results against publicly stated goals, reporting progress, and exchanging information with local community groups and the media.

We have seen a rapid evolution in what companies communicate to their stakeholders (Exhibit 1). At first, companies report only what they are required to, primarily to regulators. As companies move forward, they begin to choose information to share with other stakeholders, such as employees and the local community. In general, these companies tell their stakeholders what they *think* the stakeholders want to know; few make the effort to understand what their stakeholders actually need or want to know. But only the latter approach will generate the feedback the company needs in order to make decisions that are good for both business and the environment.

Many companies are still communicating too little or inappropriate information, creating an information gap. A recent forum in Germany brought together leaders in environmental management from industry, activist groups, government, and religious and civic organizations. In two presentations, speakers provided detailed and insightful descriptions of their companies’ environmental, health, and safety programs and initiatives – genuine accounts of real progress on the part of these two companies. Nonetheless, following each presentation, a member of an established activist group rebutted with an effective account of what those two companies – according to publicly available information – were doing „wrong“: emissions, fines, accidents, and so on. In the end, who was right? There was truth on both sides, but a deep communication split in the middle. If you don’t reveal both problems and progress, someone else will. BP Chemicals, for example, recently reinforced its commitment to environmental communication by publishing performance information for 1992 showing not only areas where the company was near achieving its goals but also those where results were not as good as expected.

Exhibit 1

Evolution in Communicating Environmental Performance

		Stage of Evolution			
		Low			High
Approach		Tell them what you have to	Tell them what you want to	Tell them what you think they want to know	Tell them what they have told you they want to know
Manifestation		Required disclosures	Good deeds descriptions	Program implementation progress	Performance improvement

To avoid the environmental communication gap, you must first ask your stakeholders what their information needs are and then develop appropriate mechanisms for communicating to them. For example, some discussion in your company’s annual report about environmental commitments and progress may be sufficient for your shareholders, particularly if you offer more detailed information on request. On the other hand, you should communicate with the local community more personally, e.g. through advisory groups.

Tomorrow's environmental leaders will communicate progress and problems, listen to the response that communication elicits, and continually refine their communication process to ensure that the stakeholders are receiving the information they need.

Question „Business as Usual“

In their eagerness to meet their diverse stakeholders' expectations, companies run the risk of seeing only what's right in how they manage environmental matters. And compared to their performance five or ten years ago, much more is right. But expectations are also higher. A company can find extensive value in questioning its traditional approaches to even the most successful EHS programs.

For example, although many companies have had formal environmental audit programs in place for years, only recently have they begun to manage their audit results in ways that will help them satisfy changing stakeholder needs. Traditionally, audit reports have conveyed information about numbers and kinds of findings. Their goal was to provide assurance that there were no material adverse findings. Now, however, assurance that there are no material findings is no longer sufficient. Many companies are questioning their audit program managers – sometimes at the board level – in an effort to understand just what the audit findings represent. We know from firsthand experience, having participated with senior management and their boards of directors in discussing environmental issues and audit results, that board members are asking increasingly probing questions. Senior management wants to know what can be learned from the findings about the company's environmental performance. How can the company avoid similar findings in six months or a year? To answer this question, some companies are beginning to analyze audit findings for „root causes“ in order to correct any underlying problems. These companies are rethinking their approaches to environmental management in order to ensure excellence for the future.

Satisfy All Your Stakeholders

Recognizing that environmental strategy, like any strategy, can succeed only if it meets the needs of the company's stakeholders, senior managers are ensuring that the company's environmental progress meets those needs – in financial performance, productivity, public responsibility. Many are turning away from gradual, incremental improvements to launch innovative „rethink“ or „redesign“ approaches. They are establishing bold company targets against which to measure progress, empowering employees, establishing effective outreach programs, and building new partnerships with stakeholders. Companies like Amoco, Dow Chemical, Henkel, McDonald's, Procter & Gamble, S.C. Johnson, and Whirlpool are redesigning the ways they manufacture, choose materials, measure, communicate to stakeholders, and find new partners.

One highly effective collaboration has been the McDonald's/Environmental Defense Fund partnership to find ways to reduce McDonald's solid waste through source reduction, reuse, recycling, and composting. Launched in August 1990 as a cautious venture for both parties, it became a successful learning opportunity. The original intent was for the combined task force to recommend options for McDonald's to consider. Instead, a corporate Waste Reduction Policy and a comprehensive Waste Reduction Action Plan were produced, and both are in effect. In another example, Amoco Corporation volunteered to work with the Environmental Protection Agency, at Amoco's expense, to measure the emissions in one of its refineries. The process increased understanding and trust between the partners.

Integrate... Integrate... Integrate

EHS management is still considered a distinct function in many organizations – and an „outside“ function at that. EHS staff members are often isolated from the critical decision makers, with little opportunity to share and apply their specialized knowledge and expertise across the organization. Cultural hurdles are often a major barrier, primarily because there are too few motivators in place. Consequently, some environmental managers spend their time plugging holes in a dike, unable to climb the terrain and look and act more broadly. Only by understanding and managing environmental issues across the organization, as a normal, everyday part of doing business, will companies ensure environmental excellence.

EHS considerations must be built into line management responsibility alongside efficiency, productivity, quality, and profitability. For the last decade, EHS professionals have been talking about the need to integrate environmental thinking into their companies' ways of doing business. Today, line managers themselves also recognize the necessity for this integration.

This is new terrain. Until very recently, EHS issues were managed by functional specialists. That function was driven by a strong sense of where the company stood and where it wanted to be tomorrow. EHS management was considered – and still is considered in many companies – a necessary cost of doing business, rather than a resource that can improve overall business performance. In the next few years, companies will fundamentally rethink the relationships between EHS issues and basic business processes across the company – i.e., developing new products and services; marketing, manufacturing, and distributing these products and services; and

managing human resources (Exhibit 2). Every company needs to know the EHS impacts of its critical business processes and how changes to those processes contribute to overall stakeholder satisfaction and improved business performance.

Companies are beginning to move environmental management into the mainstream management of their businesses. For example, the former GE Aerospace (now part of Martin Marietta) uses a product life-cycle approach for integrating EHS considerations into day-to-day operations and decision-making throughout the company. In reorganizing its major product divisions into business teams, Rohm and Haas placed accountability for achieving a corporate waste reduction goal of 25 percent with those teams, not with either the environmental staff or the plant management. ARCO Chemical Company's Manufacturing Excellence Program focuses on improving the efficiency and reliability of basic processes and products while also emphasizing safety, health, and environmental reliability. Samuel C. Johnson, chairman of S.C. Johnson & Son (named by *Fortune* as one of the most improved companies environmentally), recently cited „integrating eco-efficient decision-making throughout the organization“ as an environmental concern at the top of the company's corporate priority list (*ECO*, June 1993).

Integration of the environment into business management won't happen overnight. In a recent presentation at an Arthur D. Little/Conference Board conference, Anita Roddick, managing director of The Body Shop, described the process as a „tortuous climb up the hill.“ That climb will become smoother as environmental, health, and safety responsibility spreads to line managers across the organization.

Exhibit 2

The Environmental Dimension of Business Processes: One Company's Profile

(Actions highlighted in blue offer greatest opportunity for environmental impact)

<i>Strategic Planning and Analysis</i> <i>Controlling and Monitoring</i> <i>Operational</i>	<i>Develop New Products and Services</i>	<i>Market Products and Services</i>	<i>Manufacture Products and Deliver Services</i>
	Develop product concepts Identify new technologies Develop product/service strategy	Define competitive position Identify customer needs and trends	Develop sourcing strategies Determine manufacturing strategies Develop production rates
	Develop product plans	Develop marketing plans Develop sales plans	Establish standards Identify operational improvements Develop production schedule Plan inbound logistics Plan material requirements
	Monitor product performance Establish process development standards/procedures Measure effectiveness of R&D activities	Monitor sales Monitor customer satisfaction Monitor competition Track execution of marketing plans	Monitor/process product quality Track inbound shipments Track waste costs Monitor stock and WIP
	Conduct R&D activities Build and test prototypes	Advertise/promote products Sell products/services Provide customer service	Store materials/WIP Manufacture products Dispose of wastes Purchase raw materials Purchase services

<i>Distribute Products</i>	<i>Manage People</i>	<i>Manage Finances</i>	<i>Manage the Strategy and Organization</i>
Develop distribution strategy	Establish staff development strategy Establish staff acquisition strategy	Develop long-term financial goals	Define company mission Establish business strategies
Plan inventory levels Develop distribution schedules Plan distribution requirements	Develop recruiting program Set human resource policies Forecast staffing needs Develop career path program Establish training goals	Develop capital budgets Develop operating budgets Reforecast operations Develop cash plan Forecast sales	Develop business and financial plans Define organizational structure Establish policies
Monitor delivery performance	Measure staff performance/productivity Measure staff satisfaction Assess training effectiveness	Measure operating results Control capital cost Control operating costs Track accounts payable	Monitor competitors Measure quality Monitor achievement of strategy
Ship products Warehouse products	Recruit staff Hire staff Conduct training Review staff Promote/reward staff Terminate staff	Maintain accounts Issue invoices Process payables Value inventories	Implement policies and procedures Coordinate/communicate internally

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