

Lessons in Leadership: Operationalizing Sustainability Through an Integrated Management System

Many organizations are struggling with how to effectively operationalize sustainability initiatives for competitive advantage, particularly in these challenging economic times. The issue is especially important given that organizations often must undergo significant change efforts to reap the benefits of sustainability programs.

In a recent *Harvard Business Review* article, David A. Lubin and Daniel C. Esty captured the essence of this challenge, noting, "To gain an advantage in sustainability, organizations must solve two problems simultaneously: (1) formalize and execute a vision for value creation and (2) recast how they operate to execute new management structures, methods, executive roles, and processes tailored to sustainability demands."

Despite the recent downturn in the economy, E-World Recyclers was able to surmount these twin challenges. E-World adopted an integrated sustainability management approach as an ef-

E-World Recyclers successfully implements an integrated QEHS management systems approach

fective pathway to creating positive triple-bottom-line impacts on people, planet, and profits.

About This Article

In this article, we first discuss the business context that E-World faced. We then offer some background on integrated sustainability management systems and explain E-World's motivation for adopting an integrated approach.

Next, we describe the specifics of E-World's integrated sustainability management system. We also examine the benefits of this integrated system, which allowed E-World to attain certification to both the Responsible Recycling (R2) standard and the Recycling Industry Operating Standard® (RIOS®). E-World is among the first organizations to attain joint R2/RIOS® certification.

We conclude with lessons learned, describing how other organizations can effectively imple-

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ment (and benefit from) an integrated sustainability management system—whether their motivation is to create more efficient operations, to improve performance, or to validate their system through achievement of certification to a management standard.

E-World's Business Context

E-World is located in northern San Diego County, California. The company provides waste management and recycling services for the environmentally safe handling of electronic components, waste, and equipment, including computers, televisions, printers, stereo systems, and cell phones.

The company, which currently employs 26 workers, occupies two physical plants of approximately 50,000 square feet. It is managed by a partnership team that originally included six

corporate officers (this team has recently been restructured to three officers).

E-World is certified by the National Association for Information Destruction and is recognized as an “approved recycler” of electronic waste (e-waste) by the California Environmental Protection Agency (CAL EPA). It is one of the first recyclers in the country to recycle glass from cathode ray tubes, using a proprietary process and customized equipment developed at E-World itself. Some of its key clients include major corporations such as NEC Corporation, FedEx, Waste Management, Samsung, Hitachi, and Mitsubishi.

E-World's business strategy is to reuse e-waste products whenever possible. The company has developed partnerships with a number of organizations to resell, reuse, and recycle the source materials it extracts from discarded or recycled

electronic products and wastes. As a result, E-World does not landfill or incinerate any of the materials it processes. Instead, the company returns all materials received to beneficial uses.

While E-World has grown steadily in the past five years, it has also experienced reduced revenue streams during these difficult economic times. In addition, the company has simultaneously faced another challenge: A number of its corporate clients, as part of their own sustainability efforts, have been increasing their scrutiny of suppliers and downstream partners—of which E-World is one.

Thus, E-World faced the twin challenges of declining revenues and the need to provide greater detail and more evidence regarding the effectiveness of its e-waste recycling methods and outcomes. To meet these challenges, the company took steps to implement an integrated sustainability management system.

The integrated system allowed E-World to improve operations and efficiency. Crucially, it also allowed the company to attain joint R2/RIOS® certification, which provides external validation to its corporate clients.

Background: Integrated Sustainability Management Systems

A Comprehensive Approach

An integrated sustainability management system seeks to address the major risks, threats, and opportunities facing an organization from a triple-bottom-line perspective and in a comprehensive fashion—rather than through separate functional systems and programs, as is more customary. When fully implemented, such a management system provides a cross-functional, interdepartmental approach to risk management.

An integrated sustainability management system focuses on more than just environmental aspects and impacts related to the firm's activities.

An integrated sustainability management system seeks to address the major risks, threats, and opportunities facing an organization from a triple-bottom-line perspective and in a comprehensive fashion.

It also encompasses other key business aspects, including quality, health and safety, security, operations, and social responsibility.

Benefits of Integrated Management

The integrated approach is more streamlined and efficient. It also facilitates a more thorough examination of organizational risks and business opportunities, thereby allowing the organization to better address all elements of the triple bottom line (social, environmental, and economic).

Having an integrated sustainability management system can make it easier for the organization to achieve certification to prominent national and international standards, such as ISO 9001 (quality management), ISO 14001 (environmental management), OHSAS 18001 (occupational health and safety management), and RIOS®. Many of the processes included in an integrated sustainability management program are similar to those required for certification to major standards, which typically are grounded in quality management principles and practices. Moreover, using an integrated system can allow the organization to simultaneously attain certification to multiple standards, since many of the key standards are based on similar management principles, practices, and methods.

E-World's Motivation for Adopting an Integrated Sustainability Management System

Several factors motivated E-World to adopt an integrated sustainability management system—and take advantage of the competitive advantages it offered.

Top Management Interest

Cindy Erie, E-World's president and a member of its executive board, was an early advocate of the integrated sustainability management approach—even though she originally found it dif-

icult to conceptualize exactly how the company could develop and implement such a system. She recalls, "An integrated management system was like a foreign language at first. I knew it was something that we needed, but I didn't understand it completely or how we would get there."

With Erie's commitment and encouragement, however, the company participated in a pilot group on best practices in e-waste recycling offered by the United States Environmental Protection Agency (US EPA). This experience enabled E-World to learn more about integrated management systems, recognize their value, and gain confidence that the company ultimately could implement such an approach.

Need for a Systematic Downstream Evaluation Process

As E-World began conducting downstream due-diligence reviews of its partners and associated vendors, the company realized that it needed a more systematic approach in order to make effective assessments of their operating processes and their environmental, health, and safety (EHS) performance.

Lyle DeStigter, E-World's chief operations officer and a member of the executive board, observed, "E-World realized it needed to formalize its downstream audit. We needed a documented paper trail and an audit process to follow."

Need for External Validation

Finally, and perhaps most crucially, E-World increasingly recognized the importance of providing its corporate clients with external validation about its e-waste recycling and sourcing methods. Adopting an integrated sustainability

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management system was an important step toward achieving such validation through certification to a recognized standard.

Choosing R2/RIOS® Certification

E-World realized that for a firm of its small size, certifying to management system standards such as ISO 9001 or ISO 14001 would not be financially feasible in the short term. So the company instead set its sights on achieving certification to the Responsible Recycling standard and the Recycling Industry Operating Standard®. Both standards are highly relevant to e-waste recycling, and they offer a more streamlined approach than ISO.

E-World recognized that achieving certification to both standards simultaneously would be less costly than pursuing each separately. In addition, it would represent a very significant

achievement, since only a handful of firms hold such dual certification.

Even with a streamlined process, the effort and expense involved in achieving certification were significant for E-World. However, the company viewed R2/RIOS® certification as a way to establish itself as an industry leader—and as an important step toward improving its marketing and sales efforts in the longer term.

E-World's Integrated Sustainability Management System

With the assistance of John Grosskopf, a management systems expert and a coauthor of this article, E-World Recyclers undertook the process of developing an integrated quality, environmental, health, and safety (QEHS) management system in order to meet the requirements of R2/RIOS®. The

company's QEHS management system includes many of the key elements and processes necessary for an integrated sustainability management approach.

E-World also included some security management aspects within its integrated management system and is planning to conduct a more robust effort to address security at a later date. The company is currently in the process of more fully integrating the various aspects of its integrated QEHS management system.

In the paragraphs that follow, we discuss some key aspects of E-World's integrated QEHS management system, including several of the most important policies and procedures.

Integrated Policy Statement and Procedures

The critical starting point for E-World's management system approach is the company's integrated QEHS policy statement. As this statement makes clear, the organization seeks to be recognized as a leader in its industry, is focused on quality excellence, and seeks to adhere to the R2/RIOS® standards.

Key organizational goals in the policy statement include addressing positive triple-bottom-line impacts, creating a beneficial impact on the environment through the reclamation of electronic resources, seeking to meet or exceed customer expectations, maintaining an injury-free workplace, and continually striving to improve all aspects of the business.

E-World has also developed numerous policies and procedures (and associated forms) for various aspects of its operations. These include EHS footprint identification, integrated audit procedures and impact rankings, root-cause analysis, documentation and recordkeeping, downstream compliance, and management communication and review. A number of forms and spreadsheets were also developed to enable more effective implementation of these policies and procedures.

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EHS Regulatory Applicability and Compliance Assessment

A central aspect of E-World’s integrated QEHS management system involves comprehensive and detailed assessment of how the company must conform to a variety of EHS regulations. **Exhibit 1** shows the steps used in this regulatory applicability and compliance assessment, illustrating the process via some examples of applicable EHS regulatory requirements.

As shown in the first two columns of Exhibit 1, each EHS regulatory requirement is first summarized and then broken down by the criteria applicable to E-World. These criteria are then narrowed further to the specific departmental requirements within E-World’s operations and processes, as illustrated in the middle column of Exhibit 1.

The next column describes specifically how E-World is addressing each applicable regulatory issue. The last column indicates the company’s regulatory compliance status.

Nonconformance Monitoring and Tracking

Another key aspect of E-World’s integrated sustainability management system involves nonconformance monitoring and tracking. The company aims to systematically identify employee behaviors and organizational practices that fail to conform to applicable EHS regulations or to the organization’s QEHS policies and procedures.

Nonconformance monitoring occurs in several ways, including observation by the EHS coordinator, warehouse managers, and executive board members. Employees are also encouraged to report any observed nonconformances either anonymously or by communicating them to warehouse managers or the EHS coordinator.

In addition, E-World periodically tests employees’ knowledge of the company’s QEHS policies and procedures through verbal quizzes by warehouse managers. For instance, employees have been verbally quizzed on proper lockout/

Exhibit 1. E-World EHS Regulatory Applicability and Compliance Assessment

EHS Regulatory Requirement and Reference	Applicable Criteria	Specific Departmental Requirement	Training, Procedure, and Program Requirements for This Regulation	E-World Compliance Status
40 CFR part 122 Stormwater Permit Requirements http://cfpub.epa.gov/npdes/home.cfm?program_id=6	Are process options conducted and/or materials intended for recycling exposed to stormwater?	Prepare and implement a stormwater pollution prevention plan (SWPPP), perform periodic monitoring, and maintain required records.	Provide training (on spill response, good housekeeping, and other requirements) to all employees who work in areas where industrial materials or activities are exposed to stormwater.	Department Compliance Achieved
OSHA 1910.38 Emergency Action Plans	Fire Prevention Emergency Action Guide	Prepare and maintain an emergency action plan.	Provide a written emergency action plan that includes designating and training employees for a safe and orderly evacuation.	Company Compliance Achieved
Cal OSHA section 5157 Permit-Required Confined Spaces	Confined space contains low oxygen content, hazardous materials, or other safety or health hazard	Determine if any confined space exists that represents a safety or health hazard and, if so, which employees are allowed to enter. If necessary, prepare and maintain a “permit-required confined space” program.	As necessary, provide training to employees who are permitted to enter any area that might be deemed a “confined space.”	Permit is not currently required because there are no confined spaces at E-World that are used by its employees. It is current company policy that an outside contractor operating in an E-World confined space is responsible for possessing the required permits.

tagout procedures and other maintenance and safety procedures.

Exhibit 2 shows how E-World tracks and resolves nonconformance issues, illustrating the process with some examples of nonconformance items identified during the past year at E-World.

Once a nonconformance has been identified, the EHS coordinator assigns a control number to the issue and includes it in a nonconformance report. The coordinator then makes a preliminary assessment of the cause of the nonconformance and assigns personnel to take corrective action.

If the underlying source of the problem needs to be investigated, the company performs root-cause analysis and completes an accompanying root-cause analysis form. The company records any corrective action taken, indicates when the issue is resolved, and sets a date for follow-up review.

This monitoring and tracking process helps establish accountability for nonconformances and provides a mechanism for addressing nonconformance issues (including identification of root causes). It also provides a follow-up mechanism to ensure that problems are resolved and corrective action is institutionalized.

Integrated Management System Audit and Impact/Risk Analysis

E-World’s integrated sustainability management system incorporates an annual QEHS man-

agement system audit. As required by the RIOS® standard, those performing the audit begin by reviewing the results from previous audits and evaluating the status of any previously identified nonconformance items.

As part of the audit, the company’s EHS coordinator and warehouse managers systematically assess equipment, facilities, processes, materials storage, and other aspects/impacts in each operational area against a list of potential EHS impacts. The various EHS impacts are then categorized and ranked by the company president and the EHS coordinator according to the following impact/risk levels:

- Impact/Risk Level 3: Issues that involve potential noncompliance with EHS regulations, create an obvious threat to the environment or the health and safety of employees, or would be deemed an environmental/health threat to the community.
- Impact/Risk Level 2: Issues that, if not immediately addressed, could potentially cause EHS nonconformances or damage in the future.
- Impact/Risk Level 1: Issues that require some corrective action but that apply to routine operations, and issues that require consideration (e.g., recertification for operating equipment, annual training to ensure that employees are up to date on key policies and procedures).

Exhibit 2. E-World Tracking of Nonconformance Items

Description of Nonconformance	Responsible Party	Date Assigned	Root Cause	Action Taken	Date Resolved	Date To Be Reviewed
Lack of forklift certification for two staff members	Operations Manager	4/22/2010	Confusion over certification requirements	Recertified both staff members	5/27/2010	11/27/2010
Stormwater plan doesn't address proper pollutants	EHS Coordinator	3/1/2010		Rewrite plan to reflect pollutants actually monitored	4/12/2010	10/12/2010
Lack of incentives for staff buy-in on improvement ideas	Operations Manager	3/1/2010		Tie employee-of-the-month award to providing suggestions for improvement	4/1/2010	10/1/2010

Exhibit 3 illustrates the EHS footprint-identification process at E-World. This system represents the company's first attempt at rating and ranking its EHS aspects and impacts. While these rankings may not appear particularly detailed or specific, they do provide an overall quantitative estimate of E-World's EHS risks/impacts and the company's regulatory compliance status.

The company recognizes that this is an area requiring refinement and improvement in the future. This impact-scoring process is scheduled to be reassessed annually as a part of E-World's continuous improvement efforts.

Upstream and Downstream Supply-Chain Monitoring

E-World conducts risk/impact assessments both internally and externally. The external focus includes analyzing the inflow of upstream materials from various sources (e.g., from its corporate clients), as well as the outflow of refurbished and reworked equipment, source materials, and other items to E-World's downstream partners.

E-World has taken steps to ensure that it doesn't receive any materials it is not licensed to handle. The company has identified certain hazardous "focus materials" (materials of con-

cern) that may be present in end-of-life electronic equipment. Each supplier to E-World must submit a disclosure form that contains detailed information and supporting documentation on incoming materials.

E-World employees review the information in these supplier forms, comparing the materials listed against the company's checklist. This process is intended to ensure that incoming items do not contain substances that could create a safety hazard and that E-World is receiving only materials it is licensed to process.

E-World also seeks to maintain open lines of communication with its customers to ensure that only appropriate materials are shipped to the company. Although it hasn't been necessary to date, the warehouse managers at E-World are empowered to refuse any shipments that contain inappropriate materials.

Vendors who purchase items from E-World must provide supporting documentation showing they are approved to handle specific materials. The required documentation includes reports, certificates regarding when material was received and how it will be processed, the vendor's regulatory compliance history (including certifications), and plans for end use of unused electronic

Exhibit 3. E-World EHS Footprint Identification

Cause of Impact	Description of How Impact Applies to E-World	Sample of Areas Impacted at E-World	Impact Ranking Score
Environmental Impacts			
Air Emissions	Refrigerants, particulates, dust, NO _x , SO _x , CO ₂ , mercury, etc.	On-site Materials Management Truck Loading	1 1
Potential Spill or Release	Lubricants, oil, cleaning materials, hydraulic fluids, etc.	On-site Materials Management Maintenance Operations	1 2
Health and Safety Impacts			
Sharp Objects/Edging	Potential employee exposure	Shredding Area Manual Disassembly	1 3
Total EHS Impact Rankings by Area and Facility			

components. Vendors are also subject to on-site audits by E-World.

Employee Training and Management Communication

E-World has implemented a number of steps to ensure that employees are adhering to the company's integrated QEHS policies and procedures. Foremost among these steps is training. New hires go through an employee orientation and education process that is customized to specific job responsibilities.

Employees are regularly tested and recertified with regard to EHS issues. Training recertifica-

tions are conducted annually, with the exception of emergency response plan and propane safety certification, which are documented on a quarterly or semiannual basis. The company periodically conducts assess-

ments to ensure that training certifications, such as those required for equipment utilization, are present in employee personnel files.

Management practices an "open door" policy with its employees. For instance, the chief operations officer and warehouse supervisor conduct weekly meetings with employees to review current health and safety information, policies, and procedures. During these meetings, employees are tested on their knowledge of materials and are asked to provide suggestions for improvement. These meetings are mandatory, and formal records of attendance are kept.

The chief operations officer also conducts quarterly meetings with corporate officers to discuss processes and results associated with the company's integrated QEHS management system. These are key components of E-World's overarch-

ing continual improvement process, which in turn is an important framing objective for its integrated sustainability management system.

Management Review and Goal Setting

Each year, E-World carries out a thorough management review of operations. It involves the following five steps:

- The EHS coordinator prepares an assessment of the nonconformance reports, EHS footprint identification, and audits.
- The company president and the EHS coordinator conduct interviews with warehouse employees.
- The company completes a comprehensive review of operations, including review and analysis of key EHS metrics such as the number of workplace injuries or incidents.
- Customer satisfaction surveys are collected from key corporate clients, downstream vendors, government agencies, and nongovernmental organizations (NGOs).
- The company analyzes key quality metrics, such as mass balance controls (which involve the tracking of pounds of materials brought in versus pounds of materials shipped out), the amount of materials refurbished for resale or reuse, cleanliness of the facility, adherence to established procedures, and organization of paperwork.

These various data are reviewed and discussed with E-World's executive management team. The company focuses particularly on discussion of EHS impact rankings, nonconformance incidents and their resolution, and goal-setting for improvements during the following year. In 2010, E-World set a 30-percent improvement goal for both worker safety and EHS impact rankings, along with a 20-percent reduction target for workers' compensation claims.

The company periodically conducts assessments to ensure that training certifications, such as those required for equipment utilization, are present in employee personnel files.

Benefits of E-World's Integrated QEHS Management Approach

The benefits of E-World's integrated QEHS management system, as viewed by its management team, are summarized in **Exhibit 4** and discussed below. As the exhibit indicates, E-World's integrated sustainability management system has had a positive impact on its operations.

The integrated system has also helped E-World become one of the first e-waste recycling organizations nationwide to secure joint R2/RIOS® certification. This is a special point of pride at E-World since most of the companies that preceded it in securing R2/RIOS® certification are much larger organizations, some of which already possessed certification to one or more ISO standards.

Improved Organization and Clarity

Before the development of its integrated QEHS management system, E-World had already adopted a number of policies and procedures related to quality, environment, health, and safety. However, these policies were written in a variety of different formats and were not always clearly articulated. Erie commented, "We didn't incorporate all of these policies into an integrated system, and into a process format."

Adopting an integrated QEHS program allowed E-World to take a more organized, formal,

and systematic approach to conducting business. All of the company's policies are now written in the same format and are located within a centralized document control system. This promotes consistency and improves the process of instructing employees on company procedures.

Regarding the new procedures developed through the company's integrated QEHS management system, DeStigter observed, "It took policies previously written and got us to review them and put them in a standard form . . . It allows for information to be accessed in an easy-to-access place and helps in communicating to our employees."

Improved Monitoring

E-World managers believe that the integrated QEHS management system has also improved monitoring of company processes and procedures. Erie commented, "We were missing 'monitoring.' Now we can improve what we are doing, not just accepting what we have . . . We better recognize what we need to improve, and how to improve. It leads to 'doing' continuous improvement, not just staying where we are."

E-World's EHS coordinator, Jonathan Golding, expressed a similar view, saying, "It made us think through things and past problems more deeply. Now is the time to address this issue."

As an example, the integrated QEHS management system enabled E-World to improve its

Exhibit 4. How E-World Benefits From an Integrated QEHS Management System

Type of Benefit	Illustration at E-World
Improved Organization and Clarity	Development of formal policies allows for quicker retrieval and improved communication to employees
Improved Monitoring	Encourages more in-depth questioning of existing policies and verification of what practices are actually taking place
Better Follow-Through	Helps ensure that corrective action is taken on nonconforming items and that employees do as they are instructed
Enhanced Customer Service	Improves customer access to E-World documents for supply-chain monitoring
Improved Marketing	Implementation of integrated QEHS management system has led to attainment of R2/RIOS® national certification, which provides improved external validation for customers

monitoring of employee safety. Before adopting the integrated QEHS management program, the company had a standard operating procedure regarding completion of Cal-OSHA forms for employees who were injured at work. However, it was only after developing the integrated program that E-World realized it did not have a formal procedure for documenting how an injured employee would be triaged for medical care or a process for investigating the root cause of safety problems.

As a result of analysis conducted in connection with the integrated QEHS management system, E-World now has institutionalized a policy that includes root cause analysis of safety incidents and a formal medical-care triage process.

Erie observed that adopting an integrated QEHS management system forced E-World to ask itself a number of questions about employees who are injured on the job: “What do we do with the employee? What

do we need to do to solve the problem for the future? How can we improve what we are doing, and not just accept what we have?”

She added, “We had the opportunity to take the regulations and make this process better for us. This challenge empowered people to think creatively, to get a new perspective and create something new.” As a result of analysis conducted in connection with the integrated QEHS management system, E-World now has institutionalized a policy that includes root cause analysis of safety incidents and a formal medical-care triage process.

Better Follow-Through

Developing an integrated QEHS management system has also helped E-World make sure that employees are doing what they are supposed to do. For instance, the integrated system has helped ensure that employees properly separate items into the correct bins for resale and take the appropriate steps necessary to preserve material

or product quality. This has resulted in additional revenue for the company—a particular concern during the current recession, since E-World has become even more motivated to squeeze whatever income it can out of the resale of source materials.

Golding observed of the company’s integrated QEHS management system, “It has made us more efficient. It forced us to pay attention to identifying key things and helped us act rather than just do business as usual.”

The integrated QEHS management system also helped E-World follow through on issues such as spill cleanup, stormwater drainage, and outside material storage. In regard to spills, DeStigter stated, “It challenged things we assumed, but we didn’t formally check. What are the proper steps for spill cleanup? It made sure we follow up until the entire spill was remediated and makes sure our practices are stated in policy.”

Another recent issue that E-World faced involved managing an overflow of e-waste materials from its building into an outside storage yard. Company employees had already been scrutinizing the content of these externally housed e-waste materials to ensure that exposure to heat or sun would not create a fire/safety hazard. However, outside storage can also cause problems related to stormwater runoff and noncompliant stormwater discharges.

After some examination, E-World came up with a solution to these problems: Covering e-waste materials in shrink wrap in order to reduce exposure to rainfall and prevent any contaminants from entering stormwater runoff. The company has also assigned an employee to take lead responsibility for monitoring E-World’s stormwater runoff by formally collecting water samples or observing runoff on a quarterly basis.

Noting how E-World’s integrated QEHS management system has enhanced follow-through, DeStigter said:

This improved our spot checking of our activities. QEHS is a tool that made it easier for us to evaluate employees on whether they were following procedures or not . . . We practice now not just what we say, but what we do. We stand by our principles and we are focused on our principles. The approach makes it clear what we are doing.

Enhanced Customer Service and Security

The integrated QEHS management system has also helped E-World improve information security and hard-drive destruction. These issues are very important to many customers because of the potential for inadvertent disclosure of personal or proprietary information contained in electronic files.

The integrated QEHS management system helped E-World refine its processes in this area. The company's procedures now ensure that hard drives are kept in a lockbox during transportation and, upon arrival at E-World, are placed in a secured cage. Only designated employees with badges of a specific color are allowed to access the cage.

DeStigter stated, "We are showing people what we are doing. Customers can see their hard drives shredded. We believe it, our employees believe it. With the help of an integrated system, we have an intelligent response."

Improved Marketing and Client Engagement

Prior to implementing an integrated QEHS management system, E-World had begun to receive feedback from clients indicating that it needed greater external validation of its recycling practices. E-World targeted certification to the R2/RIOS® standards in part as a means of achieving this external validation.

Certifying to these standards was a less costly option than certifying to other standards, such

as ISO 9001 or 14001. But dual certification still represented a major expense for such a small organization.

E-World was able to make a business case for certifying to R2/RIOS® because achieving certification would potentially allow the company to gain increased revenue from securing new corporate clients. This revenue analysis made the case that E-World should attain standard compliance and certification in order to market more effectively to larger corporations. Erie stated of the certification effort:

It is a business decision, not just one about the environment. We want to address all of our clients' needs. We realized that what the clients said was helpful. We want to get better and to compete. If we can justify the cost of the action [attaining R2/RIOS® certification] with the value of the contract with the client, then E-World would do it.

E-World was able to make a business case for certifying to R2/RIOS® because achieving certification would potentially allow the company to gain increased revenue from securing new corporate clients.

Recently, a prospective corporate client visited E-World's site to inspect the recycling warehouse and audit the company's policies. With its new centralized data system, E-World was able to quickly retrieve and show the client its policies and procedures. As a result, virtually all of the client's questions were answered quickly and effectively, thereby enhancing service quality and client satisfaction.

Erie commented, "People are scrutinizing e-waste recycling much more. The R2/RIOS® certification creates more opportunities with larger clients and we now have better marketing and client engagement."

Lessons Learned: How Other Organizations Can Benefit From E-World's Experience

E-World has demonstrated how, even during difficult economic times, a small organization can develop an integrated QEHS management system that helps it attain significant operational, marketing, and other business advantages.

In the paragraphs that follow, we discuss key lessons learned at E-World. These lessons can help other organizations, particularly those with lean budgets, implement integrated QEHS management systems more efficiently and effectively, improve business practices, and achieve better results.

The Importance of an Executive Champion

Companies need champions at the executive level who can provide the vision, enthusiasm, and drive needed to implement an integrated

QEHS management system. These leaders must articulate the benefits that such a system can bring to the organization. Top management support is critical to providing the resources needed, as well as for

approving and overseeing the implementation of policies and procedures that will arise out of an integrated QEHS management process.

To gain the approval of E-World's executive management board, Erie pragmatically targeted R2/RIOS® certification—in large part because this option was less costly than certifying to better-known standards such as ISO 9001 and ISO 14001. E-World's executive board was persuaded to accept the short-run certification costs in return for the longer-term benefits that certification would offer the company.

It is important to note that E-World worked incrementally toward adopting its integrated QEHS management system and attaining R2/

RIOS® certification. This effectively spread the cost of implementation over many months.

The Importance of an Implementation Champion

Adopting an integrated QEHS management system requires a company to “flesh out” its numerous organizational policies and processes, and then document them. All key policies and procedures need to be written down in order to document and illustrate organizational practices. Moreover, these documents need to be written in a common format and reviewed by the company's key managers. Creating this documentation can be a time-consuming process. For this reason, it is crucial to have an implementation champion or “doer” who can devote time to the project on a day-to-day basis.

This is always a challenging issue for smaller organizations. But it is also increasingly salient even for larger companies, many of which have become leaner during these difficult economic times. In E-World's case, the management board recognized that the company simply did not have time to do the foundational work necessary for creating an integrated QEHS management system. In addition, the company's budget was insufficient to cover hiring outside assistance.

Erie experienced an “aha” moment when she recognized the need to tap an existing employee, Jonathan Golding, to be the company's EHS coordinator. His duties were expanded to cover spearheading the E-World integrated QEHS management program.

Just as importantly, the E-World management board enabled the EHS coordinator to take leadership of the process on a day-to-day basis. In this connection, Golding observed that top management needs to “communicate the importance of what is being done and then give people ownership of doing it.”

E-World showed effective leadership in finding a way—through personnel change and establishment of a new position—to get a major task

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done with a lean staff. This is a key challenge for many small and/or lean organizations.

Keeping Policies and Procedures Simple

Developing effective written policies and procedures is a core foundation of any integrated QEHS management system. Such policies and procedures must be tailored to the specific needs of each organization.

According to DeStigter, one key to writing effective policies is, “Keep it simple, uniform, realistic, and executable. Educate yourself before reviewing a policy. How do you do it? What is the result you want?”

For example, while E-World was in the process of dealing with stormwater drainage policies, the company received a large binder of information detailing how to mitigate stormwater issues. The material, which came from an engineering consulting firm, was written in complicated terminology. E-World’s managers simplified the procedures to fit the educational level of its blue-collar warehouse employees.

Golding observed of this process, “We broke down the regulations to what was actually needed. We didn’t need to do so many steps to achieve compliance. Think of your audience. What is most important? What are you really trying to accomplish?”

To improve clarity and consistency, E-World’s policies are written in a uniform format that includes the following five sections:

- introduction (statement of the policy and its purposes),
- activity/action required by the policy,
- assignment of responsibility to those who must carry out the activity/action,
- procedures involved in carrying out the activity/action, and
- goals and reporting requirements.

In addition, E-World’s policies are supported by forms that are designed to provide a standard-

ized process and make clear what is to be done. Using standard forms expedites action by reducing the amount of written documentation.

Examples of forms developed so far at E-World include a root-cause analysis form, non-conformance and corrective action forms, non-conformance reports, a QEHS goal establishment and progress form, a change management tool (material/process/equipment change evaluation), a downstream partner disclosure checklist, and a supplier checklist.

Centralizing Document Control

Developing a centralized document management system may be routine for larger organizations with dedicated information technology support, but it can be a challenge for smaller organizations or those with lean staffing. E-World was able to create such a system by tapping a manager who had information technology skills.

E-World’s QEHS policies are all contained in a master file. They are listed in a systematic manner, including policies, forms, and evaluative actions (such as annual EHS footprint-identification spreadsheets). This facilitates access for managers who need to review and make revisions to the policies.

Timely Communication and Feedback

An important part of any management system involves communicating policies and learnings across the whole organization. This tends to be easier for smaller organizations. Nonetheless, E-World has worked to ensure effective communication and feedback.

For example, the company’s warehouse managers frequently conduct “tailgating” meetings at the end of the workday to elicit input, ask for

Developing effective written policies and procedures is a core foundation of any integrated QEHS management system.

employee suggestions, and review policies and procedures with workers. E-World also provides repetitive and continuous communication to employees to ensure that quality points “stick.” This communication is targeted to the employee’s needs and interests. DeStigter observed that such communication should address the following points: “Why it is important to the company. What it means to you (the worker) for your safety, productivity, and benefit.”

Because a large percentage of E-World’s warehouse workers are Hispanic, much of this communication must be translated into Spanish by one of the warehouse managers or by a lead employee. In addition, the EHS coordinator’s PowerPoint presentations on awareness and training are kept very simple, with lots of photos, pictures, and graphics to illustrate the key points. In the future, E-World intends to translate its written policies into Spanish so they can be more easily read and understood by its warehouse employees.

Conclusion

E-World illustrates how even a small organization, during tough economic times, can exercise the leadership needed to change its management methods, processes, policies, and roles to effectively adopt an integrated QEHS management system. E-World was able to accomplish this even though the company’s executives could not at first clearly conceptualize how an integrated sustainability management system would be operationalized within the organization.

Despite the obstacles, E-World took proactive steps to develop and implement an integrated

QEHS management system. As a result, the company was able to achieve a variety of benefits, including improved health and safety for employees, greater protection of the environment, more proactive management of organizational risks, cost reductions, and enhanced operating efficiencies. In addition, the attainment of R2/RIOS® certification provided E-World with advantages in both customer service and marketing.

As E-World’s example shows, smaller organizations must think strategically in order to develop their integrated systems in an efficient and effective manner. When deciding which management system standards to target for conformance and certification, the organization must be careful to choose standards that are cost-effective and that provide sufficient external validity.

Other keys to E-World’s successful adoption of an integrated QEHS management system included having internal champions at both the executive and implementation levels, keeping policies simple and straightforward, creating a centralized document control system, and implementing effective communication and feedback processes.

Taking these important organizational steps enabled E-World to create an integrated QEHS management system that is both effective and sustainable. The integrated system offers a pathway to producing significant benefits for the environment, the community, employee health and safety, and the company’s bottom line.

Reference

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