

MAKING THE BUSINESS CASE FOR EHS:

Convince Management that Getting Your EMS Certified Is Doable



Creating an environmental management system (EMS) for your company may seem like an overwhelming task. And the process of getting that EMS certified as compliant with a voluntary standard, such as ISO 14001, may seem even more daunting. After all, getting your company's EMS certified requires a significant commitment of time and money and can, frankly, be an intimidating process that senior management may prefer to avoid. So how do you convince them that the certification process is manageable? Answer: Use a case study on a US manufacturer's experience getting its EMS certified under ISO 14001.

Overview of ISO 14001

To earn ISO 14001 certification, you must implement a new EMS or adapt your existing one to meet the standard's requirements. ISO 14001 is based on the 'plan-do-check' framework common in many voluntary standards, including those from the CSA. It has five major components:

1. Development and adoption of an environmental policy to which senior management is committed;
2. Identification of all of the environmental aspects of a facility's operations and applicable legal and other requirements, and establishment of clearly defined objectives and targets for environmental improvement as well as programs to achieve those objectives and targets;
3. Creation of a system of implementation and operation that includes a clear structure of responsibility for environmental management; programs for training, awareness and competence among all workers at the facility; internal and external communication of the EMS; a system of environmental management documentation; procedures for operational controls of environmental impacts; and emergency preparedness and response;
4. Development of a system of checking that includes monitoring and measurement, reporting of non-compliance, taking corrective and preventive action, recordkeeping and EMS audits; and
5. Implementation of a management review process through which senior management reassesses the suitability, effectiveness and adequacy of the

EMS at appropriate intervals to assure continuous improvement.

The H-R Industries Case Study

The US Environmental Protection Agency's Design for the Environment Program did a case study of the process that a printed wiring board manufacturer went through to get its EMS certified under ISO 14001. H-R Industries, which has two facilities in Texas, had already been active in reducing the environmental impact of its operations through changes such as using glycol-free strippers and aqueous solder masks. The company saw the creation of a formal EMS and ISO 14001 certification as a way to:

- Achieve discipline in its environmental programs;
- Incorporate environmental responsibility into all job descriptions;
- Demonstrate industry leadership; and
- Gain a marketing advantage.

Here's a look at how the company handled each of the five components of ISO 14001.

Environmental policy. The company already had an ISO 9002-certified quality management system in place. In-house staff found that they could borrow from the quality management system in developing the EMS. For example, the company modified its quality policy to include its environmental policy. The policy was then enlarged to poster-size, signed by all employees and posted as a reminder of the company's commitments.

Planning. A key element of an effective EMS is identifying the environmental aspects of your company's activities, products and services and determining which aspects have significant impacts on the environment. These 'significant aspects' form the basis for your environmental objectives. H-R Industries decided to address some potential environmental impacts by making suppliers and contractors aware of the environmental aspects associated with their products. For example, the company worked with a chemical supplier to convert its permanganate bath maintenance procedure. Sodium hypochlorite additions were replaced by permanent electrodes in the solution for electro-regeneration, extending bath life two to three times. This change reduced hazardous waste generation, material handling reporting and recordkeeping. *Annual savings:* more than \$32,500.

Implementation and operation. To make the most of its limited resources, the company assigned the same individuals responsibility for both quality and EMS elements where there was overlap. For example, the Safety/Health Officer provides the training required by both systems. And one individual controls and maintains documentation and records for both systems.

Checking and corrective action. The company decided to use the procedures already in place for making requests for corrective action under its quality management system in its EMS. For example, the same Corrective Action Request Form is used for both systems. Similarly, it incorporated the records control and audit procedures established under the quality management system into its EMS.

Management review. Although there's some overlap in personnel on the quality and environmental review committees, the company has the two systems reviewed

separately. However, the review format and control of meeting records is the same.

At H-R Industries, it took about 18 months to obtain certification of the EMS under ISO 14001. For a company without a well-developed system already in place, implementation may take about two years. H-R Industries has one full-time employee who maintains both the environmental and quality systems; several other employees also have EMS responsibilities.

Certification of the EMS cost H-R Industries \$18,000, which included preliminary and on-site audits, a follow-up audit, an audit report, registration fee and auditor time and expenses. It saved on auditor expenses by scheduling the ISO 14001 certification audit and the ISO 9002 six-month surveillance audit on the quality management system at the same time and with the same firm.

The Study's Findings

H-R Industries' experience shows that the process of developing an EMS and getting it certified need not be overwhelming. In many cases, a company can use its existing environmental policies and procedures and those developed for other management systems, such as OHS programs, to help build an EMS that meets the requirements of a voluntary standard. *The company's advice:* Begin with simple, achievable goals and focus on programs where there's obvious economic benefit. As the EMS matures, the procedures and programs can be expanded to further improve environmental performance and continue integration of the EMS into other business functions.

Insider Source

'Building an Environmental Management System: H-R Industries' Experience,' EPA Design for the Environment

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Do You Need an EMS'

Companies that have implemented EMSs have experienced benefits such as:

- Better environmental performance;
- Cost savings;
- Increased efficiency of operations;
- Lower insurance costs; and
- Improved public relations.[/box]