



ISO 14001 Environmental-Management Systems

Helping businesses become more environmentally responsible

BY RALPH VASQUEZ

As 2004 unfolds, businesses nationwide are making more concerted efforts to be environmentally responsible by going beyond standard due diligence and compliance to applicable environmental regulations.

Organizations spanning a vast range of industries — manufacturing and industrial operations, electronic suppliers, automotive companies, military bases, landfills and municipalities — are implementing environmental-management systems to become certified under ISO 14001.

Developed in 1992, ISO 14000 is a series of voluntary standards on environmental-management tools and systems developed and maintained by ISO, the International Organization for Standardization, which comprises a hundred member countries.

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ISO 14001 is a standard in the ISO 14000 series that provides a specification for a complete and effective environmental-management system. As a specification standard, ISO 14001 can be used as an audit tool to evaluate whether an organization has a complete environmental-management system in place and to specify the elements that must be in place for the system to be complete and effective.

ISO 14001 helps organizations to develop and implement their own environmental-management systems. Each organization sets its own policies, determines its own objectives and targets and defines its own procedures.

The goal of an environmental-management system is to help meet the organization's policy and objectives. ISO 14001 directs which elements need to be in place; however, each organization decides exactly how to define and implement those elements.

In essence, the ISO 14001 standard is applicable to any organization with the following goals:

- Implement, maintain and improve an environmental-management system



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- Be assured of its conformance with its own stated environmental policy
- Demonstrate conformance
- Ensure compliance with environmental laws and regulations
- Seek certification of its environmental-management system by an external third-party organization.

Developing an Effective System

An environmental-management system is a structure of connected elements that define how an organization manages its environmental impacts. These elements include policies, organizational structure, procedures, goals and objectives and defined processes.

In order to be effective, these various elements must work together cohesively and be a part of the overall business-management system. Most organizations have some of these elements in place, but often they're not joined in a cohesive system.

ISO 14001 states that a comprehensive environmental-management system must include the following elements or activities:

- An established environmental policy that can be communicated effectively
- Environmental objectives and implementation plans for meeting those objectives
- Evaluation of environmental aspects and impacts
- Identification of regulatory requirements and evaluation of compliance with those requirements
- Well-defined roles and responsibilities
- Standards for any necessary training
- Documentation of processes that affect environmental impacts
- Control parameters that affect environmental impacts.
- Evaluation of which suppliers' goods and services affect environmental impacts
- Action plans for emergency situations
- Monitoring and measurement of critical environmental parameters
- Specific guidelines on how to initiate corrective actions when problems occur
- Maintenance of environmental records
- Auditing procedures for the environmental-management system to ensure it is effective, suitable and adequate for the organization.

As the business community continues to gravitate toward more environmentally responsible practices, ISO 14001 certification eventually will shift from a touted and prestigious achievement of select businesses to a standard form of due diligence.

Taking a closer look at how your business operates may prove very beneficial to determine what may need to be implemented. ■

EMS Implementation

The best approach for most companies is to begin by using the ISO 14001 standard to evaluate and improve their systems. Later, if third-party registration seems either necessary or desirable, systems will be functioning at optimum levels and simply will need to be audited. Following are a few recommended beginning steps:

- **Get more information**
Obtain copies of ISO 14001 and ISO 14004, the Environmental Management System guidance standard, from ISO or the American National Standards Institute.
- **Seek out ISO 14001 information and expertise within your own company and from well-regarded experts.**
- **Conduct a gap analysis**
Compare your systems against the requirements of the ISO 14001 standard. Use internal or external resources who fully understand the flexibility and interpretation of the standard and are familiar with the types of systems you have in place.
- **Form a plan to improve**

Based on your gap analysis, determine which elements of your systems will need improvement in order to meet the requirements of ISO 14001. At the same time, consider how existing systems can be streamlined or integrated for improved productivity.

- **Conduct an internal audit before the certification audit**

This may entail putting together a project matrix and a Gantt chart, which outlines "how to" steps for approaching the official certification audit. It may be helpful to seek guidance in development of any necessary documents from an environmental consultant who is well versed in the ISO 14001 standard as well as Environmental Management System development and implementation.

These guidelines apply primarily to business and municipal operations. ISO 14001 applications and certification requirements are different for military bases and other Department of Defense installations.

For example, some defense installations use the same systems, but there might be internal differences in terms of approach that don't exactly follow the standard. Also, military bases, like some companies, may use the standard as a guideline but do not necessarily pursue certification. In other cases, a number of military services share bases, so the whole installation is not necessarily under the standard. ■