

ISO 14000

In today's business world market pressures are forcing internationally and domestically competing companies to better understand the costs and benefits of their products and services. Environmental mismanagement of a firm can cause a lack of control and loss of revenue for a company. Standardizing the development and implementation of an Environmental Management System (EMS) can help companies start, improve, and monitor an environmental program. So this is where the ISO 14000 comes into effect.

The ISO 14000 is a world wide recognized voluntary set of standards formed by the International Standards Organization in Amsterdam to incorporating environmental aspects into operations and product standards. The ISO 14001 was completed in September of 1996 and is a set of specifications for implementing an EMS. The ISO14001 standard specifies requirements for establishing an environmental policy, determining environmental aspects and impacts of products and services, planning environmental objectives, implementation and operation of programs to meet objectives and targets, checking and corrective action, and management review. The following is a very brief introduction to how the ISO 14001 works and how it can be implemented into your company.

The first and most important step in how the ISO 14001 works is having a firm commitment from senior management. If the senior management needs to provide direction and focus on the EMS and if they do not follow through with a commitment

then there is a good chance any EMS implemented will fail. So once senior management is on board the planning process begins. The planning process includes scheduling, budgeting, and assigning personnel, responsibilities and resources to the EMS. The planning process is broken down into four categories that cover 2.1) environmental aspects, 2.2) legal and other requirements, 2.3) objectives and targets, and 2.4) environmental management program. A plan should be developed, written down, and made accessible to anyone who wishes to see the plan. This is a great way to see where your organization is with its plan and where it is going.

The next step is to implementation and operation. Here you want to take the plan you developed in step one and execute it among your company. The subcategories in this step are 3.1) structure and responsibility 3.2) training, awareness and competence 3.3) communication 3.4) environmental management system documentation 3.5) document control 3.6) and operational control 3.7) emergency preparedness and response. So here is where you want to lay out your plan to your employees, provide training and consciences about the EMS, keep an open line of communication among personnel about environmental issues, document everything, and have an emergency plan in case something is to happen. An important issue to remember here is to document everything. This provides the organization with reference as to how the company is doing, where the organization is at with concerns to its plan, and where they are going.

The third step is to check and take the proper corrective action. Here you would wait a proper amount of time, say on quarter to one year, and review what has happen in that time. The subcategories in this section are 4.1) monitoring and measurement, 4.2) non-conformance and corrective and preventive action, 4.3) records, 4.4) environmental

management system audit. On the basis of these four subcategories we would observe and assess the EMS during the period, watch for problems that may arise and take the proper corrective actions, record all observances and changes, and finally audit the way things are being done to ensure that the best actions are being taken. This step gives you a chance to look at how things are working and make the necessary adjustments to perfect them. You should continually monitor how the implemented EMS is going but at least once a quarter to once a year audit your EMS to ensure that things are being done the way they are supposed to be and if changes need to be made to conform to new advances or to conform with the original plan. I would also suggest auditing the plan once a year to see how you are in line with the original idea and if some changes need to be made as to the EMS goals.

So the final step in the ISO 14001 is for management to review the process similar to step 4 and start all over again with step 3. This is the process of continual improvement. Every organization should make every effort to achieve environmental excellence not only for the environment but for the bottom line of the company as well. The ISO 14000 gives an organization a chance to maximize the use of scarce resources, implement recycling programs, and get national and possible global recognition for environmental policies, all of which can contribute to the bottom line. But what companies actually use the ISO 14000 standards?

Ford Motor Company is a large supporter of the ISO 14001. All of Ford's manufacturing facilities became ISO 14001 certified as of the end of 1998. Also, to take it a step further Ford required that at least one manufacturing site to be ISO 14001 standardized by the end of 2001 and all manufacturing sites shipping products to Ford by

July 1, 2003 be ISO 14001 standardized. This is an aggressive step taken by Ford to show its commitment to the environment. However, Ford also intends to provide awareness training to its suppliers and hopes to make tools available to assist in the process of developing an EMS. Just as a side note, Ford has over 5000 different suppliers. So this is just a small example of how organizations are recognizing the need to have an EMS plan. With companies such as Ford and IBM on board you can see the importance for a company to adopt some form of an EMS.

This report has been a very brief introduction to the ISO 14000 standards. If you are interested in finding more information on the subject I would suggest some sites on the internet and some books. www.iso.com is a great starting point to find out about the ISO 14000 and 9000. This site also offers you a place to register your company as an ISO 14000 user. I would also suggest the American National Standards Institute web page at <http://www.ansi.org/>. This site offers you information on establishing an EMS and provides information on the ISO 14000 and other environmental standards. Some books of reference that are great sources of info are *Green Profits: The Manager's Handbook for ISO 14001 and Pollution Prevention* by Avrom Bendavid-Val and Nicholas P. Cheremisinoff. This book provides information on the principles behind EMS concepts, tools and techniques, and steps you can follow in implementing them. Finally, for further information you can contact the American Society for Testing and Materials by mail at ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, Pennsylvania, USA 19428-2959. They will provide you with pamphlets and information on training seminars you may attend.

Work Cited

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