Environmental Management System (EMS)

A Step-By-Step Guide: How to Develop and Implement an Environmental Management System in your Facility

WHAT IS AN EMS?

An EMS (environmental management system) is an industry-developed and driven concept that provides:

- A voluntary system for identifying, controlling, and monitoring the environmental issues that are important to your facility, and aids you in integrating your response with the remainder of your operations, including human resources, training, and management.
- A set of procedures and instructions that you develop to assist you in the control of those activities.
- A means for you and your employees to take a proactive approach to environmental programs affecting your business.
- A tool to encourage your employees to make environmental issues an everyday part of your operations.
- A means to incorporate your environmental responsibilities into the day-to-day operations of your facility.

WHY DO AN EMS?

There are a number of reasons to implement an EMS. Some of those identified by companies that have an active EMS are:

- Save money by identifying opportunities to reduce energy use and waste generation.
- Improve regulatory compliance and reduce your environmental risk.
- Improve environmental performance.
- Meet customer requirements and provide a competitive advantage.
- Provide a continuous improvement approach that adds consistency to environmental programs.

WHY DO IT USING DEQ GUIDANCE?

The Michigan Department of Environmental Quality (DEQ) has developed an easy-to-follow EMS guidance document for small- and medium-sized business that is based on ISO 14001. It can lead you through the process in a logical manner and remove many of the questions and fears of developing an EMS. By following this guidance, you also move your company toward possible entry into the Clean Corporate Citizen (C3) Program.

WHAT IS ISO 14001?

ISO 14001 is the international environmental management system standard that is increasingly being adopted and promoted by key US business sectors. ISO 14001 prescribes uniform requirements of an EMS for the purpose of certification to the standard.

WHAT IS C3 AND WHAT ARE THE BENEFITS?

The C3 Program can provide your facility with public recognition and serve as a tangible award to your employees for their environmental improvement efforts. To qualify for C3 designation, you must be in compliance with environmental regulations and have in place both an EMS and pollution prevention program.

WHAT IS IT GOING TO COST?

There is no set cost for developing an EMS; it will vary by facility and the present vitality of your environmental program. You should expect that it will require many focused hours by a designated team, plus training and application of the program by all of your employees.

CAN I DO IT MYSELF?

While some companies do hire consultants to assist in developing a formal EMS, many companies (including small businesses) have developed and implemented very strong programs internally. It is dependent, in part, on the availability of an internal project manager who is willing to learn and lead. The DEQ guidance document was developed with the intent of assisting companies preparing an EMS themselves.

WHERE CAN I GET MORE INFORMATION?

The best place to start is by contacting staff in the Office of Environmental Assistance of DEQ. They can be reached at 1-800-662-9278. The Michigan Manufacturers Technology Center in Ann Arbor is also another resource for obtaining EMS guidance.

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1. ORGANIZATIONAL CONTEXT
- a. Understanding the organization
- b. Understanding the needs and expectations of interested parties
- c. Determining the scope of the EMS
- d. Organizational EMS

2. LEADERSHIP *(Make sure you have management support before you start)*
- a. Leadership and commitment
- b. Environmental policy
- c. Organizational roles, responsibilities and authorities

3. PLANNING *(Assign a leader and team)*
- a. Address risks and opportunities
- b. Environmental aspects
- c. Compliance obligations
- d. Planning action
- e. Environmental objectives and planning to achieve them
- f. Consistent with policy, measurable, monitored, and communicated

4. SUPPORT *(Communication is key to ownership)*
- a. Resources
- b. Competence
- c. Awareness
- d. Communication – internal and external
- e. Documented information

5. OPERATION *(Training of your staff is key to success)*
- a. Organizational planning and control
- b. Emergency preparedness and response

6. PERFORMANCE EVALUATION
- a. Monitoring, measurement, analysis and evaluation
- b. Internal audit
- c. Management review

7. IMPROVEMENT
- a. Nonconformity and corrective action
- b. Continual improvement

Definitions

Aspects – Elements of your activities, products, or services that can interact with the environment (e.g., air emissions, waste generation).

Audit (Compliance) – Assessments, conducted either by you or a third party, to determine your compliance to environmental laws and regulations applicable to your facility.

Audit (EMS) – Assessments, conducted either by you or a third party, to determine the completeness, adequacy, and robustness of your EMS to a recognized standard.

Impacts – Any change in environmental conditions (either positive or negative) due to your activities, products, or services (e.g., decreased air quality, reduced stormwater discharges to surface waters).

Interested Parties – Your employees, neighbors, community members, and customers that seek information and involvement in the environmental conduct of your facility.

Objectives – Qualitative goals that a facility sets to reduce significant impacts leading to improved environmental performance (e.g., reduced wastewater discharges).

Helpful Hints

- Don't Do It All At Once
- Seek Management Buy-in and Support
- Learn the Value of Training
- Celebrate and Reward Small Victories
- Don't Do It All By Yourself
- Ask For Help – Questions? Call the Michigan DEQ's Office of Environmental Assistance at 800-662-9278.

Pollution Prevention – Eliminating or minimizing the generation of waste, or utilizing environmentally sound reuse or recycling practices.

Products, Services, Activities – All those things that your facility does or produces; initially compiled and examined to determine environmental aspects and possibly significant impacts.

Targets – Measurable, quantitative goals with set schedules to meet an objective (e.g., reduce wastewater solids discharges by 10 percent within one year).