

What is an Environmental Management System?

An Environmental Management System (EMS) is a globally embraced organizational management practice that allows an organization to strategically address its environmental issues and well as related health and safety matters. EMS implementation reflects accepted quality management principles based on the “Plan, Do, Check, Act,” model using a standard process to identify current activities, establish goals, implement plans to meet the goals, determine progress, and make improvements to ensure continual improvement. Implementation of an EMS begins with a comprehensive evaluation of an organization’s operations and activities to determine how they can or do impact the environment. The EMS process then establishes goals and programs to address those impacts and improve efficiencies in the environmental footprint of the organization. The resulting plans are deployed throughout the organization, usually through existing management mechanisms. As the system evolves, it is evaluated to determine whether the goals are being met and, if necessary, plans are amended to achieve the intended goals and continue the improvement process. Each of these elements also serves to make the organization more efficient and prepared to focus on its mission.

To some degree, all organizations consider environmental issues in their overall management processes. For some, it means dealing with a problem when a compliance issue is raised by an internal audit of compliance with environmental regulations. Alternatively, environmental considerations may take a commanding role in decision making due to the organization’s policies. Each of these approaches can be considered the existing environmental management system for those organizations, but they do not provide the benefits associated with a more formal approach shown in the figure below.

The goal of implementation of an EMS framework is to ensure that the approach taken is the most effective in order to enhance the capabilities of the organization to pursue its mission. Successful EMS implementation helps organizations avoid problems and improve efficiency by increasing awareness of the role that environmental issues play in supporting the mission of the organization.



THE BUSINESS CASE FOR EMS

Enhanced Mission Focus

When properly implemented, a formal EMS focuses on the relationship between environmental issues and the mission of a facility or organization. In order for the EMS to be an effective management tool, the process must reflect the activities that represent the mission of the organization. Facilities or organizations begin EMS implementation by addressing activities critical to mission execution and determining how to manage the related environmental aspects to sustain efficient, effective operations. The goal is to systematically identify and actively manage and improve all environmental issues that can potentially hinder mission accomplishment.

More Effective and Efficient Operations

The EMS concept represents a fundamental change from the traditional reactive, compliance-based environmental management programs to a proactive, impact-predicting *management system* that is focused on the mission and embedded in everyday business processes and mission activities. An EMS allows an organization to anticipate potential environmental problems early in the planning process, design activities to minimize or avoid problems, continually check performance, and make improvements where appropriate. While an EMS will certainly improve environmental performance, it has been proven to enhance performance in mission areas as well. Further, the detailed process of reviewing environmental issues associated with the installation's activities, often identifies redundancies, wasted effort, and coordination problems that lead to inefficiencies.

Addressing Future Challenges

Environmental issues are closely associated with some of the major challenges Federal leaders will face in the coming decades. Such issues include:

1. Increasing interests of communities located adjacent to or near Federal facilities. The public interest in activities on Federal lands will continue to impact decisions at Federal facilities. The Federal government is committed to being a good neighbor. Responding to community environmental concerns is critical to gaining and maintaining community support.
2. Environmental regulatory requirements will continue to grow. As new environmental information on possible concerns becomes available, regulations and other related requirements will be issued. An EMS will allow an organization or facility to identify and address concerns before they reach regulatory status. Further, the EMS will ensure that mechanisms are in place to achieve and maintain compliance when new regulations are enacted.
3. Site funding and manpower resources will not likely increase. Additional resources to address facility management issues are unlikely to occur and facilities will be faced with responding to issues by tapping already stressed operating budgets.

These and other challenges point to the need for a better method to reconcile mission, environmental, and community issues. In the past, environmental programs at Federal agencies

and facilities have focused on regulatory compliance as the goal and accepted standard for environmental management. That approach will not suffice in the future.

EMS implementation can identify issues that will affect operations and address program limitations through better, proactive, planning. Moreover, the EMS process requires an organization or facility to examine both current and potential future mission activities and requirements. This long-term perspective, provides a mechanism for effectively identifying and managing both current and future environmental issues. Further, the requirement to examine both regulated and non-regulated environmental aspects allows the organization to identify and respond to issues, such as community concerns, which otherwise might remain unnoticed until they became unmanageable.

Cost Savings

The costs associated with environmental issues can be significant. In addition to the cost of maintaining permits and records, cost associated with activities such as hazardous waste disposal can be substantial. Moreover, operational costs associated with energy use and maintenance can be significant. Implementation of an EMS identifies opportunities to reduce those costs through more efficient management and through pollution prevention efforts that reduce or eliminate the source of the problem. This approach also helps avoid costs by better managing risks.

Improved Environmental Accountability and Compliance

Properly implemented, the EMS process clearly outlines the responsibilities associated with achieving and maintaining compliance with environmental regulations. Moreover, the EMS ensures that all functional areas at a facility or within an organization recognize the relationship between their activities and potential environmental issues that could affect the mission of the organization. While this may appear to be an increased responsibility, ultimately it empowers each individual to contribute to the goal of environmental stewardship. Finally, by identifying environmental compliance as part of the foundation of the EMS, organizations are better able to identify regulatory compliance issues and address the root cause of the compliance problems to prevent recurrence.

Improved Interactions with Local Communities and Regulators

Local communities recognize and appreciate an open commitment to improved environmental performance. Communications with the public are usually improved and refined as a result of EMS procedures. Federal and state regulatory agencies respond positively to EMS implementation for similar reasons. A properly functioning EMS indicates to the public and regulator that environmental issues are being identified and addressed. With a properly operating EMS, key environmental information is well organized and easy to obtain, and compliance problems are usually reduced. Some sites that have implemented an EMS have noticed an improved relationship with regulatory agencies.