



United States
Environmental
Protection
Agency

Environmental Management Systems

Incorporating DfE Into Your Gap Analysis—DRAFT

If your company already has an EMS, or parts of an EMS, you probably are familiar with the concept of a gap analysis. An EMS gap analysis is a self-evaluation, usually a series of questions that helps a company compare its current environmental management practices against a standard EMS model. By making this comparison, the company can identify the EMS elements it needs to develop or enhance and the steps it needs to take to get there.

The gap analysis can also help your company understand how well DfE principles are incorporated into your EMS. This understanding is dependent on both the type of questions contained in the gap analysis and the way in which it is carried out. The DfE program offers the following suggestions:

- # Involve employees from many company functions in your gap analysis. (page 2)
- # Integrate DfE principles into your existing gap analysis questions or add several new questions that directly address DfE's approach to EMSs. (page 4)

Functions to Include in Gap Analysis

As your company assesses its environmental management practices by answering the questions in a gap analysis, be sure to include people who have direct knowledge of as many relevant functions as possible. This inclusion is important so that employees from different departments within your company are exposed to the EMS development process, and because each employee brings specific knowledge about environmental practices in his or her functional area.

Below is a list of functions (your company may name them differently) you should consider including, along with the skills and contributions they have to offer to the gap analysis and EMS development as a whole.

Function	Knowledge/Skills Needed	Potential Contribution to EMS
Production	Knowledge of production process	Management of environmental aspects of production process
Maintenance	Knowledge of maintenance operations and procedures	Management of environmental aspects of equipment and building maintenance
Facilities Engineering	Knowledge of procedures for new construction and equipment installation or modification	Management of environmental aspects of new construction and equipment installation and modification
Storage/Inventory	Knowledge of storage/inventory procedures	Management of environmental aspects of raw material and product storage and in-facility transportation
Shipping, Receiving, Transportation, Logistics	Knowledge of shipping, receiving, and transportation procedures	Management of environmental aspects of shipping, receiving, and transportation
Product Design	Knowledge of product design process	Incorporation of environmental concerns into design
Quality	Knowledge of quality management and document control procedures	Integration of environmental management with quality control system and documentation procedures

Human Resources	Knowledge of training and performance measurement procedures and policies	Development of environmental training programs and integration of environmental criteria into performance measures
EH&S	Knowledge of current environmental, health, and safety procedures	Integration of current practices with EMS development; provision of technical assistance to EMS
Purchasing	Knowledge of procurement process (including screening of suppliers, material composition of components, and development of specifications)	Integration of EMS considerations into procurement process
Sales/Marketing	Knowledge of company's sales and marketing procedures and goals	Communication of company EMS practices to customers; gathering of customer feedback
Public Relations	Knowledge of resources and policies for public relations	Communication with stakeholders on environmental issues
Accounting/Finance	Knowledge of company's financial tracking system	Tracking of environmental costs of operations and savings achieved by EMS projects

Sample Gap Analysis Questions

The following questions, grouped according to EMS element, are examples of the types of questions that you might include in your gap analysis. Questions (or parts of questions) that directly address the DfE approach to EMSs are italicized.

EMS Element	Question
Commitment and Policy	Do you have an environmental policy?
	Is the policy appropriate to the business?
	Does the policy include commitments to <i>prevention of pollution, use of cleaner technologies, compliance, and continual improvement in environmental performance?</i>
	<i>Does the policy make a commitment to reducing risk to human health and the environment, specifically reducing exposures to workers and the surrounding community?</i>
Planning	Do you identify your significant environmental aspects?
	Do you identify the legal requirements pertinent to your environmental aspects?
	Have you set environmental objectives and targets?
	<i>Do you ensure that your product designs are reviewed for their environmental implications throughout the life cycle of the product?</i>
	<i>Do you evaluate the human health and ecological risks of the chemicals and products you use and/or produce? If so, does your company incorporate this information into its process for setting environmental priorities?</i>
	<i>Do you identify and evaluate alternative processes and materials that potentially have a lower worker safety and environmental risk than those currently employed?</i>
	<i>Are representatives from all appropriate departments (including EH&S, purchasing, design, accounting, production, etc.) included in the process of evaluating alternatives?</i>
Implementation	Have you defined roles and responsibilities of your employees in the EMS?
	Have you identified training needs?
	Do you communicate adequately internally and externally about your EMS?
	Are you documenting the key features of your EMS?
	Have you established operational control procedures related to the significant environmental aspects you identified?
	Do you have an emergency plan?
Evaluation	Do you measure and monitor your environmental performance?
	Do you have a process for ensuring compliance?
	Do you audit your EMS?
	Do you take corrective action when you find a "hit" in your compliance or EMS audits?

Review	Does your management regularly review your EMS?
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