

# THE DEMANDS AND THE BENEFITS OF A MANAGERIAL SYSTEM FOR THE ENVIRONMENT

Daniela POPESCU, Prof., PhD  
University of Craiova

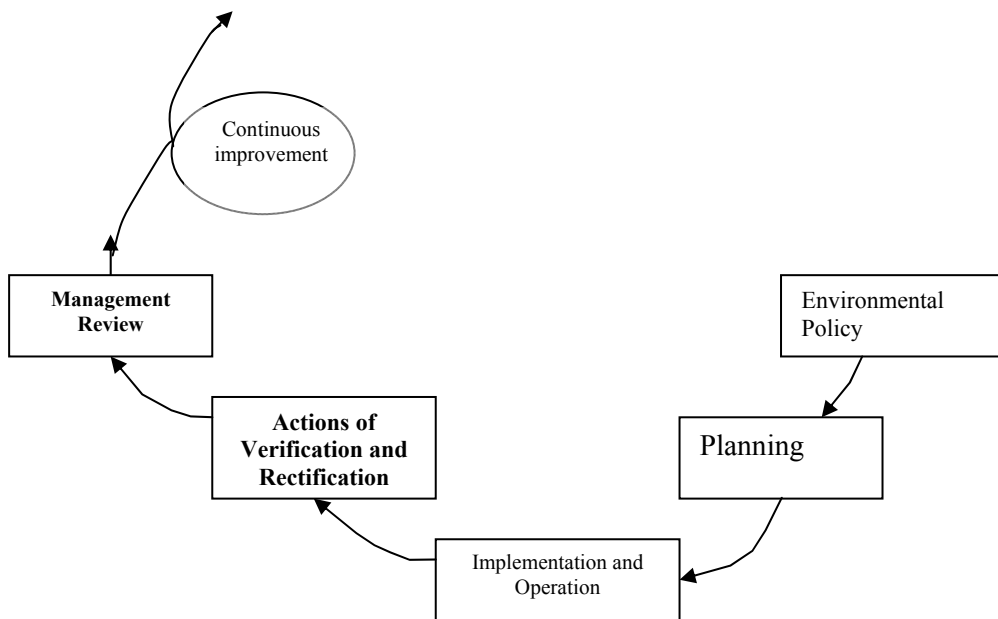
**Keywords:** environmental management, objectives, demands, implementation, audit.

**Abstract:** One of the vital problems for the existence of mankind is also the protection of the environment, especially if we take into consideration the more intense action of the environmental pollution factors whose intensity and amplex are more and more present. This was also the reason for which in the present study I aimed to emphasize some angles, less thorough regarding the environmental managerial system, which also proves that protecting the environment also extends to the modern leadership methods. In order to thoroughly study some conclusions within this area, I took into account the USA experience which is more and more accepted in the entire world. Thus, the environmental managerial standards accentuate the existence of 6 parts and 18 demands which are further deepened in the study, revealing their different components presented in our country. We mention that within the analysis of the 18 demands of the environmental managerial system are developed, especially, their new angles and which are accepted in the today theory and practice.

After a thorough study of the demands of the environmental managerial system, we move on analyzing the benefits of such a system. Thus, these benefits are categorized, first globally and organizationally. On these two directions we deepen the different analysis of the benefits of the environmental managerial system. For example, at global level, the benefits of such a system are analyzed on three big directions: 1. facilitating the change and eliminating the barriers which oppress the change, 2. improving the environmental performances of the planet and 3. building a consensus that we need environmental management and a common technology for the environmental managerial system. In a similar way there are being analyzed the profits of an organization as a consequence of the environmental managerial system obtained through the organizational system.

Standardization offers to the organizations the elements for a environmental managerial system (EMS), which can be integrated within other management systems in order to help achieve the environmental and economical objectives of the organization.

The basic EMS approach is presented in Fig. 1. It starts with the environmental policy, which is followed by the planning and the implementation of the operations, actions of verification and orientation, and of managerial review. It is a logical sequence of events in order to obtain a continuous improvement. Many of the demands can be developed compositionally and can be changed at any moment. The general purpose is to maintain the protection of the environment and to prevent pollution in balance with the social and economical needs.



**Fig. 1: Model of Environmental Managerial System**

The standard does not intent to create nonprice barriers or to change the legal obligations of the organization. Moreover, it does not include aspects health or safety management, although an organization may include such aspects in its documentation. There are four sections at this standard – purpose, normative references, definitions and EMS demands – and an informative appendix. The EMS demands are given in Sections 4 of the standards (ISO 14000).

At the same time, the standardization has six parts and a total of 18 demands. The numbering system is identical with the standard.

**A.General demands.** The organization will establish and maintain an environmental managerial system which includes policies, planning, implementation and operations, actions of verification and rectification, and managerial review. These demands are given in the rest of the standards. Due to the fact that the document is available to the public as well as to the shareholders, the organization will want to include a short description of the company as well. Moreover, this location is a good place to put manual control and distribution.

**B. The environmental policy.** Announcing the policies of the organization should be based on its mission and values. It should the constancy of the management, of leadership in general, and it should also point the direction for an activity which implies protecting the environment. The statement should be relevant regarding the nature of the organization, the dimension, and the environmental impact of its activities, products and services. It should also include an assurance towards continuous improvement, preventing the pollution and adopting regulations and everything else necessary for maintaining the actual environment or improving it. The statement contains the

program for establishing and reviewing the objectives and goals for the environment. Moreover, the top management should gather documentary evidence, implement, maintain and communicate towards all its employees the company's policy. This statement of the company's policy should also be available to the public.

**C. Planning.** This part contains four components: aspects of environment, laws and other demands, objectives and goals and environmental managerial programs.

**Aspects of environment.** The relation between the aspects of environment, the impact of environment and standards is necessary the success of standard implementation. *The environment* is defined as the natural surroundings within which the organization operates and they include the water, the land, the natural resources, the flora, the fauna, the people and their actions. *The aspects of environment* are defined as an element of the company's activities, the products and services that can interact with the environment. The examples are overflowing dirty water into rivers, the emissions of polluted air, using electrical and thermal energy. *The impact of environment* is defined as the consequences, intentionally or not, totally or partially resulting from the company's activities, its products and services. The examples are the impact over habitat, the water resources and the erosion of the earth.

The standards demand that the aspects of environment of the activities, products or services of an organization must be identified in order to determine the impact over the environment. These aspects which identify themselves with significant impact must be considered as objectives. The information must be updated as often as possible.

**Legal demands and of other kind.** The standards demand for the organization to have a procedure to identify itself with and also to have access to other demands it has adhered to, for example the codes of industrial practice and nonregularized general lines. The number and complexity of regulations all over the world can make the procedure very complex; but the organization needs only those aspects applicable in its area of activity, products and services. Examples of laws which could be applied are the Procedure of the Clean Air (USA), the Procedure of Public Health (USA) and the Procedure of Chemical Products (Sweden), etc.

**Objectives and goals.** *An objective of environment* is defined as a global desire of the environment which comes from the environmental policy that the organization plans to achieve and that is practical and quantifiable. *A goal of environment* is defined as a detailed environmental demand, quantifiable and practical and applicable to the organization or only to a part of it, which comes from the objectives and demands of environment which are established and must be fulfilled in order to achieve these objectives. In other words, the objectives are established, and they determine the goals (the detailed performance demands). The organization will establish and maintain these objectives and goals, and they will be in conformity with the organization's policy, especially the part which concerns pollution. An example of an objective for a paper factory would be „reducing the cutting of trees", and goals could be „cheapening the production with 10% until 2000" and increasing material recycling with 25% until 2010".

**Environmental management programs.** The organization will establish and maintain a program or more programs in order to achieve these objectives and goals. It will include designating the responsibility function, of the team or individual, and of a period of time in order to achieve these desires.

**D. Implementation and operation.** This part consists of seven elements: structure and responsibility; training, conscience and competence; communication; EMS documentation; documentation control; operational control; training and the answer to urgent matters.

**Structure and responsibility.** The roles, responsibilities and authorities will be defined, gathered in documents and communicated for all the personnel implicated in the Environmental Managerial System (EMS). They have to be given the freedom and authority to take the necessary measures. A representative of the management must be appointed and authorized to ensure himself that these standards are carried off and to periodically report towards the top management the EMS study with some suggestion of improvement if necessary. The top management must offer resources consisting of people, technology and money.

**Training, conscience and competence.** The needs for training should be regularly evaluated, usually annually, in order to ensure their effectiveness. There are two types of training: the general conscience and the competence of the position. The general conscience includes the importance of conformity towards EMS, the relations of significant environmental impacts towards the work activities of employees, their responsibilities and roles, and the potential consequences of failure to follow the specific operational procedures. The personnel whose responsibility regards activities which may significant impact on the environment will be selected based on education, training or special experiences. The information must be maintained at the level of the documents that the training demands need.

**Communication.** A very important aspect in any management program is communication with all who own shares or have a certain interest towards that company. The standards demand that procedures must be established and maintained for interior communication between the company's employees and receiving, gathering documentation and responding external dialogue for the interested parts. Moreover, they should consider processes for the external communication of its aspects of environment and to register its decisions in order to implement or not those processes.

**The EMS documentation.** The processes and procedures must be gathered in documents and well informed. The organization must show that what is in writing documents exists in reality as well. In other words, „Say what you do, and do what you say". Also the documentation must show the interaction of the elements and must give information about related documents like diagrams, test papers and drawings.

**The documents' control.** It is necessary for the procedures to be established and maintained in order to control al the EMS documents. Examples are the execution projects, the procedure tests, the instructions of work and obviously the EMS manual. The regulations must be made for reviewing and approving documents before being

issued and before making any change. The purpose of document control is to ensure that document issuing is adequate and up-to-date, and that these find themselves in the proper locations. The old documents which do not represent any news must be destroyed or archived in safe places to be of help in different legal purposes. The documents must be noticeable, have their date written on them, be easy to identify and locate.

**Operational control.** This element aligns operations and activities, aspects of environment, environmental policies, identifiable and significant objectives and goals of environment. The organizations should plan these activities in order to ensure the procedures:

1. To cover the situations when their absence could lead to a deviation from the intended policy, objectives and goals.

2. Stipulating the operation criteria.

3. Performing the identification of environmental aspects of goods and services and communicating the relevant procedures and demands towards providers and contractors.

**Training and the emergency answer.** There are necessary procedures to identify and answer potential accidents and emergency situations. Also the procedures should avoid or minimize the impact of these accidents or emergency situations. Procedures should be reviewed, if necessary, especially after an event. If it's possible, the organization should test the procedures for a better effectiveness.

**E. Actions of verification and rectification.** This contains four elements: monitoring and measuring, actions of nonconformity, corrective and preventive ones, EMS registrations and audit.

Monitoring and measuring. Efficient decisions usually need quantifiable information. The organization is requested to monitor and measure the key characteristics of operations and activities in order to evaluate the performances which will sum up the objectives and goals of environment. An example of a key characteristic is the consumed energy, and it is measured in kilowatts and gigacalories. The measuring equipment is useless if it does not work properly. Procedures should be established in order to control, caliber and maintain the EMS equipments even if they belong to the organization, the employees or some outside agency. Moreover, procedures should be evaluated periodically regarding the regulations of functioning.

**Actions of nonconformity, corrective and preventive ones.** Procedures are requested defining responsibilities and authorities for: (1) evaluating and investigating nonconformities, (2) taking measures to minimize any impact, and (3) initiating corrective and preventive actions. Any taken measure for eliminating the causes should be adapted to the size of the problem measured according to the impact on the environment. Any change of procedures should be implemented and registered.

**Registrations.** Procedures are requested to identify, maintain and dispose environmental registrations such as training, audit and review. The registrations must have usable content; they must be protected against distinction, deterioration and loss.

**EMS audit.** The purpose of this audit is to ensure that EMS goes according to plan and is implemented and maintained properly. The audit information must be distributed to the top management in order to assist the process of management review. The audit procedures should cover purpose, frequency and mythologies, and also the responsibilities and demands in order to find out the results and the audit reports. The audit program should be based on the importance of the element and result of the previous audit.

**F.Management review.** Management review, if applicable, must ensure continuous adaptation and effectiveness of EMS. The reviews should use the information in the audit analysis, the performance information, the changing circumstances and the continuous improvement.

**Benefits of EMS** can be categorized from a **global** and **organizational** point of view.

**Globally.** There are three benefits at global level: (1) facilitating change and eliminating barriers that oppress change, (2) improving the environmental performances of the planet, and (3) building a consensus that there is need for environmental management and a common technology for EMS.

The proliferation of national and regional standards has lead to confusions and barriers in the way of commerce. This international standard will help for the unification of countries in their attempt for ticketing, environmental management and evaluating the cycle of life. This approach will try to eliminate the barriers in commerce and to facilitate this commerce. The designers of standards have been very careful to avoid creating a document to oppress the commerce. ISO 14000 gives the program which, if successfully promoted in all countries, when lead to progress which will restore the safety of international community. While EMS is promoted all around the world, it will satisfy more and more those concerned about the conditions of protecting the environment.

Although the standard does not specify anything about the performance, it is reasonable to expect that ISO 14000 will play a significant role at improving the surrounding environment. Based on the success of ISO 9000 for quality improvement, we can expect that a significant improvement will take place within the surrounding environment.

Just like the environmental standards are developed and implemented in all the world, this will create an international consensus that there is need for ISO 14000. Moreover a common technology makes possible the communication between people from different countries, they share ideas of improvement, useful information on how to prevent some problems, and system problems.

**Organizationally.** The profits of an organization as a consequence of the environmental managerial system can be emphasized in many ways, some of them are listed below:

- Ensuring the clients about adopting a management which guards the environment;
- Satisfying the clients' demands;
- Maintaining a good image and a good relation with the public;

- Satisfying investors' criteria and improving the access to capital;
- Obtaining insurances at a reasonable price;
- Increasing the level of market as a result of competitive advantage;
- Reducing incidents which lead to insecurity;
- Reinforcing the defensive in case of litigations;
- Preserving materials which go into production and energy;
- Facilitating getting authorizations and licenses;
- Improving the relations with the government or the industry.

Moreover there is the feeling that the organization does something good.

The organizations are more and more concerned with achieving and proving their environmental performances, controlling their own activities, products or services upon the environment. These aspects register in the context of the more and stricter legislation, of the development of economical policies and other measures destined to promote protecting the environment, of the increase of the enterprises' concern referring to environment, including durable development. Adopting and implementing in a systematic way a set of techniques for the environmental management according to the ISO 14000 standards, can contribute to obtaining some optimal results in the benefit of the enterprise.

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