

## **Human capital and ISO 14001 EMS of the company: If Nestlé factory El Jadida**

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### **Abstract**

The integration of the environment into daily business practices is a relatively new approach, a direct result of the recent popularization and democratization of the concept of sustainable development. The company seeking this development has to organize and manage the impact of its activities on the environment and establish an environmental management system "EMS" according to ISO 14001. Apply the requirements of the standard allows to highlight the conditions of the integration of EMS in the overall activity of the company.

However, its application requires the involvement of human capital in this strategy. Indeed, human capital management is a priority with regard to management of the environment to the extent that environmental policy must be consistent with all the human, technical and financial. In this sense, the human dimension is at the heart of the success of the strategy and the SME beyond the purely binding nature of the protection of the environment, in favor of an approach based on voluntary participation and collective cooperation of any the company's personnel.

The purpose of this work is to show that the integration of environmental management in the company's strategy provides the means of developing the human capital and environmental performance in the Nestlé El Jadida factory.

**Keywords:** Environmental Management System, ISO 14001, Human Capital, Sustainable Development, Manufactures Nestlé El Jadida, Environmental Performance.

### **Introduction:**

In the field of the environment, business management is subject to regulatory pressures that may affect their legitimacy (Bansal and Roth,

2000; Hoffman, 1999 Boiral , 2006). The implementation of an EMS is to rationalize the overall management system of the organization as it is supposed to increase the efficiency of the entire system (Boiral, 2006). This is supposed to optimize the company's work processes by making a coherent set of ecology -friendly, while maintaining the characteristics of the company's production system. By opting for this system, the organization is asked to review these operating procedures and re-elaborate them to minimize environmental harmfulness's (Reverdy, 2005). The objective of this set of actions is part of the environmental management of the business that requires reaching a maximum level of environmental protection and to strive for "zero pollution" (Morin, 1992).

In this perspective, the EMS is a key to the creation of a true corporate culture, defined as the set of rules, customs, preferences and beliefs of its own.

### **1. Theoretical background of the study:**

The EMS is based on the continuous improvement of the business and it is clear that environmental responsibility led companies to develop distinctive human capacity in this area (Boiral, 2006). EMS works as a cycle in stages:

- Analysis of the situation,
- Based on the results of this analysis, the establishment of a program of actions,
- Implementation of the action on the field program
- Monitoring the running of the program and adapt if necessary in relation to the reality on the ground.

Thus, the EMS is the organization of the entire human, technical and financial to the knowledge and control of the environmental impact, direct and indirect, of the company. It is primarily a management technique, which is based on a systematic approach and specific objectives. This assumes the decision of commitment at the highest hierarchical level. This is why an EMS is

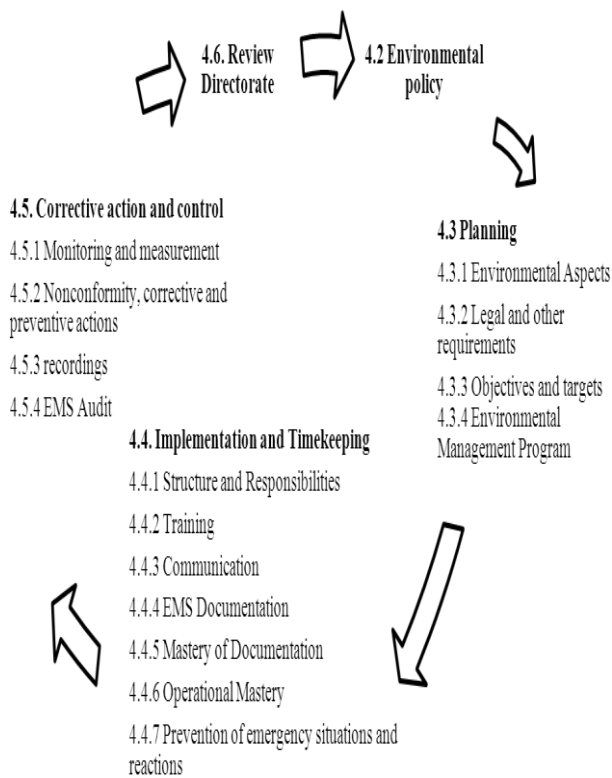
based on a real environmental policy, essential starting point of the process.

### **1.1 EMS according to the requirements of ISO 14001:**

EMS is an internal management tool that facilitates the early integration of environmental objectives into other management systems and corporate decision making. It establishes the organizational structure, responsibilities, practices, procedures, processes and resources. EMS is the organization of the entire human, technical and financial to the knowledge and control of the environmental impact, direct and indirect, of the company.

According to the requirements of ISO 14001: 2004 EMS works as a cycle that allows continuous improvement in several steps (Figure 1):

- 1) Analysis of the situation;
- 2) Based on the results of this analysis, the establishment of a program of actions,
- 3) Implementation of the actions on the ground program;
- 4) Monitoring the running of the program and adapt if necessary in relation to the reality on the ground.



**Figure 1: Wheel of Deming and ISO Standard 14001**

ISO 14001 requires is for its users to set goals , establish policies , develop action programs , develop work procedures, involving staff , etc. to control the action, that is to say, the coordinate, make calculable and predictable (Boussard, 2008). It is as much a carrier of an injunction to communicate: it explicitly invites players to "*share freely the know-how and experience* "; "*to openly discuss problems and issues* "; to "*trace information* "; to become "*environmental drivers.*"

### **1.2 EMS staff integration factor**

Implementation and operation of the EMS allows the company to address the concrete because of the approach is to implement or environmental management programs. It requires the development of an organizational structure, distribution of responsibilities, training and awareness of staff, internal and external

communication, EMS documentation, document control and prevention of emergency situations.

#### **1.2.1 Management Involvement:**

In the implementation process of an EMS, senior management is the "fuel" of the process; the text of ISO 14001 insists repeatedly on the key role of management. Several tasks assigned to it, it must "*define environmental policy* ", "*ensure the availability of resources essential* ", "*provide information on the results of audits*" .The responsibilities assigned to it are important; their level of involvement determines the success or failure of the process.

The Directorate has to work and collaborate with all of the organization's services. It appoints one or officials responsible for ensuring that the EMS is implemented in accordance with ISO 14001, as well as to account for the performance of the system to the entire company staff. The implementation of this approach requires a strong upstream advocacy work or training to all staff. The company creates communication channels to inform him of all employees at all levels on actions and results. In terms of internal communication, three aspects are concerned:

- Upward,
- Transverse,
- Descending.

According to the ISO standard, these three forms of communication should be a specific procedure to ensure the communication "**between different levels and different functions in the body**". The various communication vectors may take the form of working groups associated with the EMS , collective communication sessions , use of media.

In external matters, the company is also required to have communication channels to publicize its policy, objectives, outcomes, and to answer all relevant information requests from interested parties. This is to control both the outgoing and incoming external call.

#### **1 .2.2 Involvement of people:**

The company's commitment to an ISO 14001 certification process is being very well received by its employees as it is to set up a joint project uniting all staff. To engage the best employees in the process, the company introduces many education and training systems.

On several occasions, the text of ISO 14001: 2004 refers to the need for training. It requires first that "*skills*" should apply "*to all (s) people (s) performing tasks for the organization or on its behalf*", task causing significant environmental consequences. The requirement applies equally to staff, subcontractors, suppliers and clients of the organization. In addition, the ISO 14001 standard specifies the content of the notions of "*awareness*" and "*training*":

**Awareness** key to "*giving consciousness ...*" the repository requires that all persons working for the company or on its behalf aware.

**Training** requires the organization to be able to "*prove competence*" of all persons performing tasks that impact the environment.

- Supports training and awareness : they are the internal communication processes and recurrence of certain devices :
- Working Groups
- Staff involvement in the drafting of guidelines or environmental instructions
- collective communication sessions,
- Use of awareness materials (videos, films, CD- rom ... )
- Implementation of fun games ,
- Written Transmission of information in hiring ,
- Approach of " environmental suggestions "
- Creation of meeting points
- Conferences and debates.

The implementation of EMS in the field is to take a census of all the company's activities in order to deduce their environmental impact. This analysis can not be conducted without the cooperation of all employees who are responsible for establishing the list of all of their activities and the impact thereof on the environment.

In fact employees are often best placed to understand the environmental problems specific to

the company and find appropriate solutions adapted to its operation.

The management of environmental issues does not call the introduction of universal solutions; each entity that engages in the process must be able to have a "core competencies" able to respond in a manner appropriate to the specific environmental challenges it faces. The organization of the entire enterprise mode is challenged by the requirements of the ISO standard, each person sees his activity directly transformed by the action program implemented, and each develops a capacity for innovation and is aware of its role within the organization.

he involvement of all employees in the continuous improvement process is a condition that determines the success of the project . The staffs is more responsible in his report to the company, it contributes directly and individually to the operation of the environmental management system. The commitment of all staff in the process creates a motivating and unifying dynamics, strengthening the cohesion of the group.

## **2. Study of employee involvement Nestlé factory in El Jadida implementation of EMS ISO 14001:**

Environmental protection is everyone's business. Each employee , associate, or someone working for and on behalf of Nestlé will ensure the application of environmental protection principles , including the achievement of objectives , compliance with procedures , instructions and adherence to programs continuous improvement of environmental aspects .

### **2.1 Purpose of the study:**

The theoretical study has shown that the implementation of EMS can be done without the involvement of the entire company staff. The objective of the study is to analyze the involvement and contribution of the staff of the Nestlé El Jadida factory in the success of the

implementation of its Environmental Management System according to ISO 14001.

**2. 2 Methodological approach:**

For data collection, we have paid visits to the company and conducted a series of interviews with officials and departments concerned, based on an interview guide adapted to the nature of the information sought. We also used the annual reports of the factory and it’s Quality Manual.

**2.3 Presentation of the study area:**

Nestlé factory in El Jadida currently has an important unit in the region in the agri-food sector:

**Table 1: Overview of the company Nestlé factory in El Jadida**

Industry	Agri-Food
Date of project initiation	1992
Date of entry into business	December 1992
Legal status	Société Anonyme (SA)
Investment	675 MDH
Share capital effective	313.866.000
area	Factory El Jadida 246 employees
Address	6 Ha
Head Office	B.P 123 – Zone Industrielle, EL Jadida 24000
certification	Park Casa Nearshore shore 10, N° 401-402-502, 1100 Bd AL QUODS, Sidi Maarouf 20-270, Casablanca. Morocco
	ISO 14001, Nestlé standards OHSAS 18001

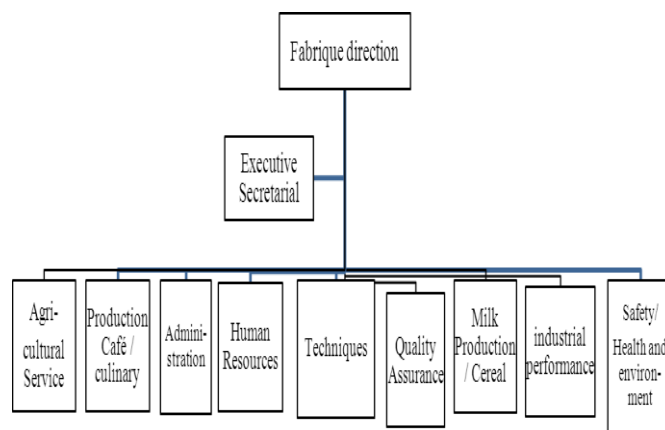
Manufactured in the industrial unit of El Jadida

- Pole 1: dairy products (NIDO).
- Pole 2: soluble coffee (NESCAFE)

- Pole 3: culinary products (MAGGI Broth Soup beef, mutton, chicken).
- Pole 4: lacteal flour (CERELAC wheat, fruit, honey and dates).

Milk is provided through a network of 16,000 producers’ ranchers and Chaouia Doukkala Abda region. Financial aid is granted for the construction of collection centers whose management is later entrusted to producer cooperatives from the villages. In total, more than 170 collection centers that were created by Nestlé around its plant in El Jadida.

El Jadida factory Nestlé works with a traditional hierarchical organization rake type. New departments and services come directly from the factory Branch (Figure 1):



**Figure 2: Flowchart -Nestlé -El -Jadida manufactures**

This organization of services and departments allows the realization of commitments Nestlé -El Jadida factory as part of its environmental policy: respect and protection of the environment, as well as the quality, hygiene, health and safety are among the priority concerns of the Nestlé Management.

**2.4 Awareness and training for the implementation of EMS:**

In order to develop a training program that meets the requirements of the EMS methodology is

implemented to prepare specific training modules for target individuals whose tasks include significant impacts to the environment; it is in this context that the steps in this preparation were observed as follows:

- Step 1: Identification required;
- Step 2: Define objectives;
- Step 3: Identification of training;
- Step 4: Implementation of the training program;
- Step 5: Evaluation of trained personnel.

#### **2.4.1 Identification of needs:**

Identify training needs for environment of the entire staff. After completion of the Environmental impact studies, SHE Officer stock of necessary training, he asks via the HR managers of the departments to offer staff requiring the necessary training, they also validate the choice of modules, the Human Resources Department schedules training related to activities or operations that generate significant environmental aspects on site.

Namely that environmental awareness training is cascaded to all staff, contractors and third parties operating the site for or on behalf of the factory including staff and contractors operating in the site, during the integration of new recruit's session. All staff is concerned:

- Operator: Scrap, distorted or contaminated products, water and energy consumption;
- Technicians: maintenance waste, water and energy consumption;
- Managers: Water consumption and energy (sanitary water, computers ...).

#### **2.4.2 Definition of objectives:**

A meeting is established with the responsible SHE Officer whose purpose is to determine the objectives of the planned training, training objectives are listed as follows:

- To help staff understand their role in minimizing environmental impacts of their activities obtained by changing their behavior;

- Present the functioning of the EMS, including the environmental policy, the new procedures and the annual environmental action plan;
- Expand the role of each employee for the entire SME or a given operation;
- Explain a particularly important point related to the environment, for example the inclusion of a new regulatory requirement, or to explain the inclusion of one or more significant impacts identified by the environmental analysis;
- Provide information on general issues related to the environment in each department.

#### **2.4.3 Identification of the training offer:**

This step is to identify the person responsible for training, develop the program and the training modules, which are approved by the SHE Officer.

#### **2.4.4 Implementation of the training program:**

The effectiveness of the training activities depends on the efficiency of the methods used. Methods that are prepared for the training sessions are as follows:

- **Presentations**: 4 topics related to training (solid waste, liquid waste, water, energy) with photos, figures on the problems and environmental issues of the company;
- **Organization of visits**: both solid waste dumps of the factory: the technical dump and dump General Store, a visit to the WWTP (wastewater treatment plant wastewater);
- **sheet of the top 10 best practices**: at the end of each training session, conducting a brainstorming session to develop the "**10 good environmental practices**" taking specific precautions will prevent any risk of pollution, reducing the impact of aspects significant environmental, at the end of the training program, the best 10 good practices will be illustrated in a poster and published in the factory; the

level of production lines and corridors ; encourage all staff to suggest ideas for improvement and treatment

- **A Video:** Screening of a film on environmental issues of the planet and put the company in this context and its implications at the global level ;
- **Direct training at the place of work:** these are courses that last between 20 to 30 minutes; this method is effective for the adoption of good environmental practices in daily tasks.

#### **2.4.5 Evaluation of trained staff :**

The evaluation of trained personnel is performed via the HR department.

#### **2.4.6 EMS -Nestlé documentary system:**

The documentation system is the heart of the EMS. Nestlé documentary pyramidal system has 5 different types of documents:

- **Policy:** Formal Expression by management at the highest level of its overall intentions and direction of the organization relating to its environmental performance.
- Quality Manual
- **Procedure:** Specified way to perform an activity or process. Procedures can be documented or not.
- Documents
- **Records:** document stating results achieved or providing evidence of activities performed. It keeps, validate and / or protect the data on this activity, regardless of the form (paper, computer support). It is intended to provide tangible evidence of conducted and evidence-based activities.

### **3. Discussion:**

EMS according 14001 is a tool that helps the company to build a systematic approach to identify, control, prevention and reduction of

environmental impacts of its activities, with a view to continuous improvement (ISO, 1996a). The specifications of this standard require companies to identify and address the training needs of all staff whose work may have a significant impact on the environment, as well as to educate all staff on the one hand to environmental impact of the company's activities and secondly , the development work approach (ISO, 1996a).

The course requires the participation of the EMS or education of all staff. An exploratory study of factors influencing the empowerment of workers in the implementation of an EMS company notes in passing that the training needs emerging from the SME fall within a "continuous process of training all staff " (Piette and Versailles , 2000).

The guidelines of ISO 14004 emphasizes the importance of bringing the staff to base its actions on shared environmental values , to encourage people to make suggestions and to bring everyone to adopt a responsible attitude in prospect of continuing education (ISO, 1996b).

The implementation of EMS ISO 14001 in the Nestlé factory El Jadida can lead to cyclic changes in techniques, tasks or procedures, requiring new knowledge or skills of the staff. In this context, staff changing its own behavior so that it can:

- Identify and locate its role in the company ,
- Identify and locate its role in the EMS,
- To have the necessary knowledge ,
- Build useful skills ,
- Anticipate the consequences of his behavior,
- Log in as head of the action and its consequences,
- Adjust their behavior appropriately.

New achievements in terms of knowledge, skills and behaviors are expected to contribute to the vitality and performance of the EMS and must continue to pay off in the long run. Indeed, staff training is, in descending order, the second largest in terms of implementing an EMS cost by the company (Rider, 2000).

**Table 2 : Identification of the various categories of staff of their role in the EMS**

<b>Workers</b>	<b>Managerial staff</b>
Changing work habits	Analyze and solve problems
Apply the procedures in place	Leading by example
Learn to master new	Manage system and coordinate actions between staff , departments
Proceedings	Communicate and motivate (welcome suggestions, listen, explain, train, motivate, reassure, counselor, etc.) Communication and top down top down
Make up useful information	

Indeed, the performance of the EMS can be built collectively. So they put the locus of control not in themselves but in the heart of collective action, and therefore fall all obstacles to the success of this collective action. Thus motivated, involved, responsible and able to communicate contributes to effective management, environmental as economic performance (De Backer , 1999).

**Conclusion:**

EMS to ISO 14001 is an integration tool and staff involvement, it produces a clear impact on the environmental performance of the company: the most integrated employees are more loyal to their company and thus more productive. The aim is to give a prominent place to the liberation of collective intelligence and collaborative practices. The company did not itself the responsibility to provide answers to the challenges mentioned. Nevertheless, it must, in collaboration with all other stakeholders, contribute if development is not sustainable and effectiveness will not be assured.

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