



University of Jordan
School of Engineering
Department of Chemical Engineering

ISO-18000 (OSHA) Summary
Quality Control and Management
Dr. Ali Matar

Isra'a Abu Zakam -0135676
Doa'a Kefah - 0135733
Heba Barhma -2121279
Nour Chodari Makri -0131747
Rand Al-Mahruq -0137456

Introduction

In 1970, the United States Congress and President Richard Nixon created the Occupational Safety and Health Administration (OSHA), a national public health agency dedicated to the basic proposition that no worker should have to choose between their life and their job. Passed with bipartisan support, the creation of OSHA was a historic moment of cooperative national reform. The OSHA law makes it clear that the right to a safe workplace is a basic human right.

ISO-18000 Certification Requirements

As a basic information every company can make its own health and safety program, but at general OSHA18001 by its last version 2007 simplified the main structure by 6 sections:

1. General requirements which is Consist of Hazards Control levels:
 - Personal protective equipment.
 - Administrative controls.
 - Engineering controls.
 - Substitution.
 - Elimination.
2. Legal obligations: The company's commitment to the requirements of legal health, whether to prevent accidents or provide treatment
3. Planning: By identifying work environment hazards, and the major potential risks.
4. Implementation and operation: Recourses, responsibilities, and roles are distributed and take place, to ensure that training, and awareness are established for the function of OH&SMS.
5. Checking: The importance of verification lies in knowing the changes that have occurred and how to correct them and develop them to make sure that things are on track.
6. Management Review: One of the reasons for maintaining the certificate is the awareness of the general management of any company of the importance of proper application of health and safety requirements.

Benefits of OSHA 18000

There are a several benefits that make the organization more efficient, by improving the quality of work in the organization, and make it able to meet its legal requirements and to ensure that people have a safe environment to work in, some of these benefits are:

- Improve efficiency and consequently reduce accident and production time loss.
- Increase a reputation for safety and occupational health.
- Demonstrate legal compliance.

- Increases employee motivation through the provision of a safer workplace and participation process.
- Improves the incident investigation process.
- Create the best possible working conditions across the organization.
- Savings cost.

OSHA in Chemical Engineering

In chemical industries, OSHA standard is necessary because of the seriousness of the safety and health problems, that come from the chemical hazards and toxic substances that the employees are handling or are exposed to, and because many employers and employees know little or nothing about them, the Occupational Safety and Health Administration (OSHA) issued the Hazard Communication Standard (HCS) also known as the Worker Right to Know or simply HazCom. The basic goal of the standard is to be sure employers and employees know about work hazards and how to protect themselves; this should help to reduce the incidence of chemical source illness and injuries.

The information about the identities and hazards of the chemicals must be available and understandable to workers, to ensure chemical safety in the workplace, two obvious results and requirements of this regulation are proper labelling of containers and availability of material safety data sheets (MSDS). The MSDS must list the substances, their known hazards, and procedures for proper handling of the material and for proper actions in an emergency.

OSHA Training Programs

The most common injuries and accidents as identified by OSHA are slips, trips and falls. Usually these accidents occur of poor housekeeping, poor design and/or poor work practice. Therefore, it is important all employees must be aware of how to work safely and in a safe condition this can be achieved by training. OSHA organization provides training for workers, employees, supervisors and managers.

The training available are for different industries are construction industries, maritime, disaster time, and general industries that are not included in agriculture, construction or maritime.

The benefits of the training are:

1. Knowledge and skills important to do their work safely and avoid creating hazard in the workplace.
2. Awareness and understanding of workplace hazards and how to report, control and identify them.
3. Worker will be able to properly response to injuries and accidents after occurrence.