

Research Article

Industrial Hygiene and Safety

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Abstract

Industrial safety and hygiene is an area concerning the safety, health and welfare of people engaged in work or employment in industries and companies. It is to forecast, to assess, to identify and to control hazards. The unsafe working conditions affect worker's health and productivity. The industrial safety and hygiene improve people life, improve their work condition and increase productivity where they work. The care for each other is the right to do protecting every family's health, safety and environment. The workers have to be protected from the chemical, biological, physical, ergonomic and psychosocial hazards. This study provides the necessary information and facts about industrial hygiene and safety.

Keywords: *safety, welfare, productivity, hazards.,*

Introduction

Industrial hygiene and safety is essential in a company where health means the absence of disease and safety is the absence of risk of serious personal injury and hygiene is any practice that you do to keep things healthy and clean. The study of safety and hygiene involves study of different subjects including chemistry, physics, biology, psychology, engineering, sociology and law.

Barrier to Good Safety and Hygiene

The standard of health and safety may not be maintained in a industry do the barriers like complexity, conflicting demands and behavioral issues. The workplace can be complicated involving the coordination of many people performing many different activities finding a solution to a specific health and safety problem can be complex.

Objectives of the Study

The main objectives of industrial hygiene and safety are as follows:

- To create awareness among workers about safety and hygiene.
- To understand the workers' grievances and take necessary measures.
- To provide the facilities accordingly.

Research Methodology

This study is based on secondary data. For this study purpose many articles in both national and international level, government websites, working papers, e-papers, and reports on newspapers had been reviewed. Primary data collection is generally not possible as it involves data analysis and comparison over past data records on previous surveys.

Reason for Maintaining and Promoting Good Standards of Hygiene and Safety

Firstly we must understand the size of the problem if the standards are not maintained.

According to the International Labor Organization -

- There are 270 million occupational accidents in 160 million occupational diseases recorded each year
- Around 2 million people die every year from occupational accidents and occupational diseases.
- 4% of the world's gross domestic product is lost each year through the cost of injury and absence.

These figures relate to the number of accidents and cases of disease which are reported and recorded globally not everything is reported and rewarded. However, the real figures are almost higher.

The three main reasons why an organization has to manage safety and hygiene are moral, social and economic. Firstly when hygiene and safety is not managed properly get insured and killed or suffer terrible diseases that have a massive impact not only on them but also dependent families, friends and colleagues.

Society as a whole considers these wants to be morally unacceptable and injury or ill health should not be a price that has to be paid in order to generate revenue.

Next is social expectations, this is also known as legal expectations most countries have laws that set standard for our organization should conduct themselves with regard to health, hygiene and safety.

Failure to achieve these standards can lead to enforcement actions or prosecutions before courts.

The last one is economical reasons in an organisation health and safety is maintained simply because accidents and ill health costs money. When an accident occurs, there will be direct and indirect cost. These three reasons are vital for an organization to maintain and promote good standards of health, hygiene and safety.

Industrial Hazards

According to the occupational safety and health administration.

There are five different hazards at workplace.

- safety hazards
- chemical hazards
- biological hazards
- physical hazards
- ergonomic hazards

Safety Hazards

A Safety hazard encompasses any type of substance condition or object that can injure workers. In many types of workplaces, they can include spills on floors walk ways blocked by chords or boxes falls from heights, machinery with moving parts confined spaces an electrical hazard such as warren chords.

Chemical Hazards

Workers can be exposed to chemicals. Chemical hazards include acids, pesticides, carbon monoxide, flammable liquids, welding fumes, and silica dust and fiberglass fibers.

Biological Hazards

Employees who work with other people with animals, infectious materials can be exposed to biological hazards such as blood fungi, mild viruses, animal droppings etc.

Physical Hazards

Physical hazards can injure workers with or without contact. These types of hazards include radiation working in extreme heat or cold spending hours under the Sun or being constantly exposed to loud noise.

Ergonomic Hazards

It is related to musculoskeletal disorders account for 33% of all employees' injury and illness cases. These types of hazards occur when repetitive work, this type of work or a certain position strains the body. These are the most difficult hazards to spot because problems build up over time.

Six Steps to Control Workplace

The six steps to determine the most effective measures to control workplace hazards and to minimize risk:

- It is cheaper and practical to eliminate hazards at the design or planning stage of a product process,
- Minimize risk if it is not reasonably practical to eliminate the hazards and associated risks,
- Physically separating the source of harm from people by distance or using barriers,
- Engineering control,
- Administrative controls and
- Personal protective equipment.

Adapting Total Worker Health during Covid-19

Infection controls

Utilizing participatory approaches

Increase efficiency of system

Improvement in communication and action

Following the legal and ethical standards

Usage of data to guide and evaluate the progress.

Four Pillar Policy Frame work

The four pillar policy framework based on international labor standard

Pillar 1: Stimulating the economy and employment

Pillar 2: Supporting enterprises, jobs and incomes

Pillar 3: Protecting workers in workplace

Pillar 4: Relying on social dialogue for solutions

Conclusion

I would like to conclude this study by bringing out the importance of industrial hygiene and safety. It is clearly visible how these hazards affect the worker's mental and physical health. It is essential to take necessary measures and improve the safety techniques as every lives matter. Surveys need to be taken from the workers regularly so that their grievances can be redressed and their suggestions can be taken as a step for better industrial hygiene and safety.

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