Analysis of Current Strategies and Opportunities for Further Enhancement of Safety Standard in Operations Floors of a Multinational Manufacturing Industry

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ABSTRACT

Safety has become the most important thing to be considered in today's business world, because employee health and safety directly influence the productivity of the organization. Manufacturing industry is one of the most physically challenging environments to work in. Workers can encounter many hazards that compromise their safety and cause injury to them. The research was conducted to reveal the prevailing issues which negatively influence the employee health and safety and identify steps to enhance employee friendly working environment.

KEY WORDS: Behavioral Change, Manufacturing Industry, Safe Work Environment, Safety

INTRODUCTION

The selected company is a world spread multinational company, which manufactures fast moving consumer goods. It is one of the world's most culturally diverse companies, with top leadership from 32 nations. It is established presently in 150 countries around the world. The Company has well known brands about 37, spanning categories of home, personal care and food products. Today it is home to 26 strong brands that are leaders in all the categories that they operate in. The company's main site is a complex manufacturing site with multiple production plants and a total annual capacity of about 80,000 metric tons. They are extremely mindful of their employee health and safety and currently practising various kinds of safety standards.

Company considers the health and safety of all employees as a primary business objective and they are committed to the continuous improvement of their record of health and safety at work. Their aim is to

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prevent all incidents of personal injury and occupational ill health.

Therefore the research is conducted to analyze the effectiveness of the current safety programs and propose steps to improve and enhance safety of the working environment.

LITERATURE REVIEW

Principles of Risk Assessment and Risk Management

In most manufacturing organizations the safety is the first. With right safety policies and procedures can achieve the safety environment and safety behaviors in work place. By doing that, organization can improve its productivity in greater extent.

Risk assessment and risk management is one of the methods that enhance the safe work environment in a company.
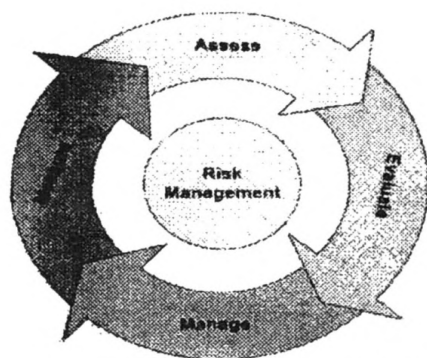
If there is a risk to the health and safety of the employees or the community; a risk assessment should be done by the organization. Good risk management begins with hazard identification. When looking for a risk it is important to avoid the mistake of overlooking the obvious situation. And also it is important to assess and take necessary actions to minimize or remove the risk after identifying the hazards. (Human Resources

Articles)

Figure 1: Risk Management Process (Olzak & Tom, 2006)

Hazard and Operability Study (HAZOP) Concept

Identifies hazards and operability problems in a process plant. It is a tool for the identification of hazards due to process parameter deviations. The concept involves investigating how the plant might deviate from the design intent. HAZOP is based on the principle that several experts with different backgrounds can interact and identify more problems when working together than when working separately and combining their results (Asit, 2010).

Change Management

Change management is a systematic approach to change individual persons, groups and organizations from the remaining state to a desired future state. It is a process which aimed at motivating employees to accept and hold the changes in their current working environment. Change management refers to as a project management process where changes to a project are properly introduced and accepted. (Change Management)

METHODOLOGY

This research is mostly based on qualitative data. Here some conclusions are made based on the previously gathered data. Therefore the research study is based on a logical process. In this research data gathering is done by using modified liker scale and survey method.

Quantitative data analysis method is used to analyze the gathered data. The purpose of this research is to find out the effectiveness of the current safety programs in the company and propose some solutions to improve those programs furthermore.

Basically this research can be divided into three phases. In the first phase, it discusses about the background of the research and explains what research problems are. The details about data collecting strategies, data collecting tools and data analyzing methods are discussed in the second phase. Finally in the third phase, the research study identifies the root causes of the problems and gives possible solutions to overcome those problems.

DATA COLLECTION AND ANALYSIS

Risk Assessments

The most recent risk assessment program in the company was done in year 2007. This program has covered all the departments in the company. Each and every department maintains a document regarding the risk assessment. After doing the risk assessment program the company did not plan a review to be conducted in a fixed period of time. The observed details of the past risk assessment programs was considered in doing this research.

Standard Operation Procedure (SOP)

A standard operation procedure provides instruction about all the steps and activities of machinery, equipment, process or a procedure. All the production departments use this document when they introduce a new thing to the department. According to the analysis most of the employees do not know the real importance of this document.

Informal discussions

The progress and the effectiveness of the current safety programs were clearly understood by having informal discussions with the work force and the staff.

Questionnaire

The questionnaire consists of 22 questions. Survey covered to all the work level one and work level two managers who are participating in Value Life Value Safety (VLVS) sessions. 344 employees were expected to participate in this survey. However it is only 211 employees who participated in the survey. Therefore the response level is 61.33%. As the survey covered majority of the targeted employees, the final result is considered as the idea of all the employees.

DATA ANALYSIS

The analysis part was done basically from the weighted average method to data obtained from modified liker scale. The maximum and the minimum value can be taken in this analysis are 2 and (-2) respectively. The results were categorized into five sections; same as in the questionnaire. The results for the whole company are shown in Table 1.

Table 1: Average Results of the Company
*Value can vary between (-2 to +2)

Category Name	All Company
Visible felt leadership	0.92
Adequacy of the safety rules & programs	1.04
Individual commitment to the safety program	1.17
Implementation effectiveness	0.73
Safety organization	0.87

As seen in Table 1, 'Implementation Effectiveness' takes the minimum value than the other four categories. This implies that the employees of the company believe that the current safety programs of the company are not effectively implemented. Thus indicate that safety program are not properly communicated to employees, and employees are not educated and trained appropriately.

RESULTS AND DISCUSSION

According to the analysis many factors are evaluated and identified that cause negatively on efficiency level in current safety programs and procedures. There are listed below;

- Not doing the reviewing activities of the current safety programs
- Workers attitudes and behaviour
- Management commitment towards the safety
- Inadequate knowledge about individual safety and its importance in improving productivity in the organization

It is important to have a safe work environment in every organization. Although it is difficult task to have 100% accident free working environment; it is important to have the maximum effort of all the employees and the management to avoid any unsafe work behaviour in the organization. Safety should be a part of the human lives, and it should be a regular part of the day to day business.

Feasible Solutions

To avoid the above mentioned issues following solutions are being identified.

- Maintain a clean work area.
- Use guards and engineered solutions wherever possible instead of relying on personal protective equipment (PPE)
- Give clear work instructions, educate and train employees.
- Look for appropriate and latest equipments, materials and processes which minimize hazards in employee working environment.
- Do not just focus and settle on worst case scenarios but focus on what is most likely to occur.
- Maintain a good relationship between the management and the employees.
- Conduct a safety briefing in each department as a daily routine.

- Management can spend some time with the employees of their department to identify the issues regarding their safety
- Maintain the machinery in good working order.
- Regular inspection of unsafe conditions and behaviour should also be established in the company.
- All employees should have a practical hands-on training on the job.
- Appoint a Health and Safety officer in each department.
- It is important to implement effective preventive safe management strategies before the actual incident happen.

By doing a feasibility study on above mentioned solutions, following solutions have been selected as the best feasible solutions.

- Maintain a clean work area. This will helpful to the company to increase the productivity as well as improving its safe work environment.
- Use guards and engineering solutions wherever possible instead of relying on personal protective equipment (PPE).
- Look for new equipment, materials and processes which minimize hazards in the working environment.
- Give clear work instructions. Make sure the employees know the right way to do what the company expects of them. Include safety instructions in every procedure new procedure the company writes.

CONCLUSION

In conclusion, this research proposed that effectiveness of any safety program mainly relies on the individual commitment of the employees. And also the current safety programs and the procedures are not practically implemented and do not meet the requirement of the modern industries safety challenges. As per objectives of the research study, it is identified that the effectiveness of the current safety programs is directly affected by the following factors;

- Employee attitudes and behaviours.
- Not doing the reviewing programs in a timely manner.
- Inadequacy of the proper safety equipment when required.
- Commitment of the management towards a safe work environment.
- Employees do not have a proper knowledge about the safety procedures and equipment.

Therefore it is important to deeply consider proposed steps and take solid action to eliminate drawbacks so that the company can improve its safe work environment and also improve its productivity.

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