Enhancing Workplace Inspections in Mechanical Companies

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Abstract- Workplace inspection is an important action process in mechanical companies operations. It must look at the relationships between the workforce, the equipment and the procedures in determining the standards that are being met and maintained. The paper examines an overview of workplace inspections, workplace inspection team, steps in conducting a workplace inspection, reasons for workplace inspection, the best time to conduct inspections, format for inspections and reporting, development of a recording and reporting system. It also encapsulates workplace inspection results producing pattern. It is therefore concluded that workplace inspection process requires all sectors of workplace to enhance standard performance of workforce in companies. The researchers thus recommended meaningful ways of internal policies, self-regulations, legislations as well as management of companies, establish effective and efficient inspection of workplace to maintain highest standards for work safety and healthy company operations.

Indexed Terms- Workplace, inspection, workplace inspection, workforce Equipment, procedures.

I. INTRODUCTION

All inspections have the potential to be beneficial provided by the management of such organizations, it is clear in the minds of those doing the inspection and those being inspected, as to what is to be achieved from the inspection process (Daiz, 2000) Stainaker, 2002).

Many workplace inspections tend to concentrate on the physical or visual aspects of the work environment, and in so doing limit the effectiveness of the time and effort put into the inspection process.

Workplace inspections must not be limited to identifying the origin of oil leaks or checking the integrity of lifting devices but must include the less obvious aspects including communication system, flow of information, identification of training needs and the effects of technological change. Inspections can also be divided into classifications such as formal or informal, planned or unplanned, general or critical. All are equally important in determining a safe work environment.

Large and small industries and companies are coming under increasing pressure to formalize and document their work safety and healthy activities. Examples include employee pre-employment checks, induction and training records, hazard reporting and the issuing of personal protective equipment. The use and application of inspection techniques can be viewed as an action of the trend to identify and document work safety and health initiatives and activities (Blewett et al (1996).

In workplaces of all sizes, there is a place for some type of formal and regular inspection system. In the modern companies, there are three types of inspection techniques including workplace inspections, safety audits and safety surveys. This study shall only ponder on workplace inspection and its circumstances relating to company operations.

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II. WORKPLACE INSPECTIONS: AN OVER VIEW

The workplace inspection addresses and primarily considers aspects of the work activity and how they compare with a set of predetermined standards (Butyn, 2002). Workplace inspections must look at the relationships between the people, the equipment and the procedures in determining if standards are being met and maintained.

Inspection in workplace can be seen in a continual state of change. Workplace inspections are seen as either formal or information. Formal inspections are generally planned and scheduled checks, which occur at regular intervals throughout the workplace. Usually these are conducted on a monthly basis and some type of official documentation is used to communicate the inspection results to the employees.

Informal inspections can be valuable, however, they tend to be less controlled and as a result often cover too many or too few issues. The results of informal inspections are often communicated verbally and much worthwhile information can be overlooked or forgotten. Typically the supervisor or manager will walk around the workplace and point out or discuss issues with workers. The informal inspection has the benefit of creating awareness and is often seen as less threatening than formal inspections.

Inspection may be considered under different classifications and each has a positive impart provided a proper inspection plan has been developed and objectives defined prior to commencement. Planned inspections are most common because they are less stressful thats workers can prepare. Two main points of view exist with planned inspections. The first is that knowing an inspection to be conducted at a predetermined time and knowing what is going to be inspected provides the workers and supervisors with the opportunity to "make things right" before any checks are carried out. The main reason is often to avoid criticism of the work group by other employees. The second main point of view is that, even if the planned inspection gives a false impression of normal workplace conditions at least once a month some action is taken to correct things.

Whilst unplanned inspections are often seen disruptive, this need not be correct it is however, necessary to determine whether the advantages gained by unplanned inspections outweigh the disadvantages caused by any possible disruptions. The benefits of unplanned inspections are gained from the opportunity for the inspection team to check the workplace under normal operating conditions, or as close to normal operating as possible. The inspection results are likely to be far more reliable and valid. It follows that decisions made as a result of observations made under normal work conditions will find greater support among the workforce.

Workplace inspections can also be classified into general and critical inspections.

General inspections relate to checks on matters such as housekeeping, chemical use, handling techniques, use of personal preventive equipment, machine guarding and noise exposure. General inspections tend to cast a wide net and requires careful attention in defining the scope of the inspection for the results of the inspection to be meaningful. To develop any practical solutions for improvement it is necessary to identify personal protective equipment in more specific terms, that is, eye protection, hearing protection, gloves, hard hats etc.

Critical inspections are more specific and often of a more technical nature than general inspections. A critical inspection would be used to check cranes, lifting devices, electrical systems, noise levels from a particular source; explosive handling, chemical storage, lighting levels around walkways and a wide range of other factors that have a direct influence on the employee's safety. Most workplace inspections will contain elements of both general and critical inspections.

Workplace Inspection Team

The workplace inspection may be carried out by a wide range of people using checklist. However, a healthy and safety representative or mechanical fitter may look at the ventilation system in a vastly different way from an industrial hygienist or a ventilation engineer or mechanical engineer in mechanical industry. The important issue in a workplace inspection is to identify if the ventilation system is

working properly and receives regular maintenance. In conducting inspections, thought needs to be given to the benefit of cross inspections. This is where people swap around inspection duties between different areas of the workplace to provide a new set of eyes for the purpose of identifying possible hazards and accident causation factors that could be over locked or underrated through familiarity or acceptance.

Most large organizations have some form of inspection procedure. Self-regulation legislation provides the right for health and safety representatives to inspect the workplace, provided certain conditions* are complied with. Further in some workplaces, inspections could be conducted by members of the constituted workplace inspections of the companies. *

• Steps In Conducting A Workplace Inspection
The key steps in conducting a workplace inspection include the following:

- There must be agreement among all those involved as to what is being observed. Every person participating in the workplace inspection process has to be aware of the inspection objectives and the performance rating criteria.
- Determine the time available to conduct the workplace inspection. The time available to carry out the actual physical inspection is not openended so by defining an acceptable time frame, such as four hours each week, it becomes easier to set priorities and draw up a checklist.
- Design a format that is clear and easy to use. Select a suitable scale and define each reference point to avoid confusion and to clarify performance standards.
- Conduct the inspection openly and assess items honestly.
- Evaluate the information gathered from the inspection and report the results clearly and accurately.
- The Reasons for Workplace Inspections.

Prior to conducting any type of inspection, there needs to be a plan developed that establishes the reasons for the inspection process and the method to be used when carrying the inspection out. most workplaces are complex environments that do not led themselves readily to the inspection process.

The workplace is generally in a constant state of change. It is dynamic. This is particularly true of mines and construction sites. Consequently, workplace inspections provide only a general overview of the working conditions and are used primarily to highlight areas where special attention may be necessary. Inspections are conducted to satisfy the following basic requirements.

- Identification of hazards
- Assessing the potential losses from these hazards Selecting control measures designed to eliminate or reduce the hazards to an acceptable level.

Monitoring the effectiveness of control measures. Reviewing compliance with established standards. Inspection done in workplace especially in mechanical companies are efficiently and effectively conducted so as to maintain standard against loss /wastage of costs.

• The Best Time To Conduct Inspections

The timing of workplace inspections is most important and at best, the only picture you are likely to get from the effort is a snapshot of the conditions as they existed at the time of the check. One hour earlier or later a different rating could result. Consequently, carrying out inspections after the area has been cleaned up, limits the opportunities to identify risks and reduces the effectiveness of the exercise.

The use of spot checks (unplanned inspections) is one method of overcoming the bias that appears in the analysis of some reports on workplace inspections. However, the use of this technique creates its own administrative problem and the stress, created by the uncertainty of when checks will be carried out, appears to have little effect on motivating people to change their behavior.

The best approach is to gain acceptance of the workplace inspection process through the promotion of positive outcomes. People at all workplace inspection process through the promotion of positive outcomes. People at all levels of the organization are concerned about criticism. If inspection procedures are going to be effective, they must be seen as beneficial

and be accepted as part of the normal operational system. If this can be achieved, the timing of inspection becomes a simple matter of scheduling.

Format For Inspections and Reporting Development Of A Recoding and Reporting System.

• Inspection documentation

The checklists used in workplace inspections and the resultant reports and supporting materials are important records that provide valuable information to assist in decision making.

The documentation should be seen as an organizational asset. As there is always considerable* effort and expense associated with workplace inspections, not to fully utilize the information is wasteful. The reports generated through workplace inspections could identify opportunities beyond the* identification of hazards and accident causation factors. Inspections can also identify production improvements, better maintenance techniques, means of reducing wastage, and increased efficiency all of which can contribute to an improved, more productive and safer work environment.

• Use of Checklists

The checklist is a widely used instrument and is ideal as a starting point in workplace inspections. The important criterion when using checklists is that they must be flexible enough to allow items that are not listed on the check sheet to be considered. Checklists are only a guide to assist in the process of inspections, they must not set the agenda, but rather be part of it.

The checklist is beneficial in providing a means of measuring performance against a predetermined standard in order to achieve some reliability, there must be consistency. Consistency is gained with practice by conducting workplace inspections and comparing results with others or against previous inspection checklists. The results attained through workplace inspections are often more beneficial than what is reflected simply by their information collected on checklists.

Reporting Details

The manner in which inspection results are reported will depend primarily on the reason for the inspection and the person conducting the inspection. The organization's safety officer the supervisor, the fitter and the health and safety representative could all use the same workplace inspection checklist and produce different reports. This is a normal and expected outcome as the reasons for conducting the inspection may be different in each case. The important point is that the performance criteria are correctly applied. There are two main methods of reporting workplace inspection results,

Evaluating the outcome of the findings and listing recommendations as to how improvements could best be achieved.

Tabulating inspection results and presenting the conclusions and any comments made by the employees involved.

- Producing The Results of Workplace Inspections
 The production of a report or summary of the results
 of the workplace inspection is often a delicate
 undertaking. At this stage in the process, the need to
 have an agreed set of standards becomes obvious. The
 essence of an inspection outcome is to have those
 involved focus their attention to the following findings
 of the workplace inspections such as;
- Guarding and protection devices
- Structural defeats and hazardous conditions
- Functional defeats
- Work environment
- Material storage and personnel exposure
- Practice and procedures

CONCLUSION AND RECOMMENDATIONS

From what is discussed so far, workplace inspection process requires all sectors of the workplace in order to be effective. The workplace inspection if an important part of the identification process, however it is the action taken by those responsible after the inspection has been completed and assessed that determines the effectiveness. The workplace inspection is a strategy to enhance standard of performance of workplace in companies which

virtually promote productivity, effectiveness, efficiency and consistency in all organizational activities.

In order to remedy such healthy and safety workplace, then the following recommendations are drawn such that the management of the companies will establish effective and efficient internal politics, rules and work system standards which call for a level of performance above statutory or industry standards.

Self-regulation legislation of the companies provides the impetus for employers and employees to establish and maintain the highest standards for work safety and health in every workplace. However, it is an industrial reality that the workplace standards will vary greatly between and even within organizations. The principle to adopt is that the acceptable standards should always be as high as reasonably practicable in each particular circumstance and with an eye to what is generally considered best practice within an industrial sector.

Again, the workforce must be provided with an opportunity to adjust to the likelihood of having their workplace, their job and even their behavior monitored and recorded, albeit by fellow workers.

There is a need to think out a strategy which includes arrangements for any action plans to follow the inspection as well as there is a need to develop credibility in the inspection process.

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