

Identifying work place hazards construction essay



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Injuries at the place of work are of major concern for all people involved in the business operations for an organization.

The issues which cause accidents took place in the workplace and work-related ill health are called as Hazards. The demand for methodical organization of OHS hazards and their associated risks applies to all business/unions/organizations etc and all activities and functions within an organization.

It is of worth importance to differentiate b/w hazard, risk and exposure when undertaking risk management.

Hazard is the probable for harm, or unpleasant effect on an employee's health. Everything that can cause injury or illness to anybody at or near the place of work may be called as hazard.

Risk is the likelihood that a hazard will cause injury or ill health to anyone at or near a workplace. The level of risk increases with the severity of the hazard and the duration and frequency of exposure or vulnerability.

'Vulnerability/exposure' happens whenever anybody comes into contact with a hazard.

Risk management process consists of four steps;

Identifying the Potential Hazards

Assessing The Risks Associated With The Hazards

Controlling the risk

Reviewing the process

The first and most significant step in reducing the probability of an ‘accident/mishap’ is hazard identification. This means recognizing all workplace situations or events that can lead to cause an injury or illness.

The second step is an evaluation of the level of risk of the hazards that have been identified during the first step. This step engages in collecting information and building conclusion. It is imperative you consider the level of the damage/destruction or consequence from a hazard and the likelihood of harm occurring. If your assessment is that an unacceptable risk to health and safety exists, you must introduce controls to reduce the risk to an acceptable level.

There are three categories of, you might take, while control measures. You can;

get rid of the hazard

reducing the risk

introducing “ back-up” controls (this point will be applied, after all other options in the last two categories have been worn out).

The third step in successful risk management is to initiate and maintain systems which provide opportunity for day to day evaluation and review procedures.

Evaluation means examining control measures to ensure risks are eradicated or minimized and no unacceptable risk is being caused by new hazards. The <https://assignbuster.com/identifying-work-place-hazards-construction-essay/>

assessment system applies to the risk management process on the whole and checks the process is working efficiently to identify hazards and manage risks.

Management of the Risks is an organizational issue and a productive program needs the assurance and cooperation of all. All the “ program managers” and their staff need to recognize the fundamental importance of OHS risk management, for it to work. The most valuable practice is implanting OHS risk management into daily usage at all levels of an organization. Best practice can be achieved if you can integrate risk management principles and practices into everyday business practice.

1. IDENTIFY THE HAZARDS

Hazard identification

The 1st step in minimizing the probability of an “ accident/mishap/disaster” is hazard identification, which relates to identify all situations or events that may cause to an injury or illness. Eliminating/minimizing place of work hazards requires a methodical approach. It is necessary to try and anticipate all potential hazards at the workplace – recognized as the “ what if?” approach.

What is of Hazard?

It is a source or potential source of any individual’s “ injury, illness or disease”. Anything which might cause to an injury or illness to anyone at or near the place of work is a hazard. While a number of hazards are quite clear and easy to recognize, others are not; for example “ exposure to noise, chemicals or radiation”.

Classes of hazard

Hazards are classified into five different types. They are

Biological hazards comprises of animals, Bacteria, Insects, Mildew, Mould, Vermin, Viruses.

Chemical hazards comprises of chemical stuff such as acids or poisons and those that may cause to fire or explosion, cleaning agents, dusts and fumes from various processes such as welding.

Mechanical and/or electrical hazards comprises of cranes, dangerous goods, Electricity, Equipment, fork lifts, hoists, Machinery, pressure vessels.

Physical hazards comprises of air quality, excessively loud and prolonged noise, falling objects, fire, Floors, heat and cold, ladders, manual handling (lifting, pushing, pulling), poor lighting, radiation, slippery surfaces, Stairs, steps, ventilation, vibration, work platforms.

Psychosocial environment hazards comprise of workplace stressors occurred due to a variety of sources.

Note: – some chemical and physical hazards can direct to explosion, fire and other safety hazards.

METHODS FOR IDENTIFYING HAZARDS

The 1st step in control of a hazard is to recognize and list them. Many other methods which are useful for identifying hazards, includes;

benchmarking against or liaising with similar workplaces.

considering Occupational Health & Safety implications, when analyzing work processes.

consulting with workforce, health & safety responsible persons and OHS Committee members

receiving feedback from workers can often give precious information about hazards, since they have hands on experience in their area of work

“ injury and ill health records” – evaluate your employee’s compensation data and ensure the occurrence, mechanism & agency of injury, and the cost to the organization. The organization can be altered to examine the information of presence of hazards

investigating workplace incidents and ‘ near hits’ reports – in some cases there may be more than one hazard contributing to an incident

performing walkthrough surveys, checking or safety audits in the workplace to review Health & Safety system of the organization.

2. ASSESS THE RISKS

Assessment of risks

When a hazard has been identified, do a risk assessment. A risk assessment process means you

collect information about every identified hazard

consider the number of people exposed to each hazard and the duration of the exposure

use the information to assess the likelihood and consequence of each hazard

use a risk assessment table to work out the risk associated with each hazard

Factors for consideration

The following factors should be considered during the risk assessment process;

the hazard's nature posing the risk

“ combinations” of hazards

“ injuries or illnesses types” predictable from exposure

consequences of duration and exposure to the hazard

layout of workstation & workplace

working stance and position

new work processes introduction

employees skill & experience level

personal characteristics of employees exposed to the risk (colour blindness or hearing impairment)

existing control measures in place such as the use of clothing and personal protective equipment.

TABLE FOR RISK ASSESSMENT

Using risk assessment table is the one method of assessing risks. Record the risk rating for each hazard you have identified. To construct an assessment matrix, you can;

set up a specialist risk assessment team

get expert/specialist recommendation

brainstorm within the workplace, particularly with employees, health and safety representatives and OHS committee members – they are often a valuable source of information and experience.

Before introducing new or changed work practices, substances or plant – review your original assessment. It is good management to do regular reviews.

CONSEQUENCES

LIKELIHOOD

Very Likely

Likely

Unlikely

Highly

Unlikely

Fatality

HIGH

RISK

HIGH

RISK

HIGH

RISK

MEDIUM

RISK

Major

Injuries

HIGH

RISK

HIGH

RISK

MEDIUM

RISK

MEDIUM

RISK

Minor

Injuries

HIGH

RISK

MEDIUM

RISK

MEDIUM

RISK

LOW

RISK

Negligible

Injuries

MEDIUM

RISK

MEDIUM

RISK

LOW

RISK

LOW

RISK

Risk Assessment Table

USING A RISK ASSESSMENT TABLE

By using risk assessment table, assessments of likelihood and outcomes can be translated into levels of risks. High risk areas can be given first priority for removal or control in the place of work.

“ Consequence or extent of the injury or illness” were it to happen, can be rated in the following way;

Fatal accident

Serious or major injury (“ severe damage to health which may be permanent, wanting medical attention & constant treatment”). Such damage is likely to grip significant time off work

Minor injury (temporary health damage, which may need medical attention but partial ongoing treatment). This is less possible to involve significant time off work

Insignificant injuries (first aid only with little or no lost time). Unlikely to involve more than 1 day off work.

Likelihood, or the chance of each of the situations or events actually occurring, can be rated in the following way.

Very likely (bared to hazard continuously)

Likely (bared to hazard occasionally)

Unlikely (could occur but only rarely)

Highly unlikely (could occur, but probably never will)

This categorization would be used very rarely.

Acting on the findings

The probable conclusions which might be drawn from risk assessment process and the actions that might be taken are listed below;

1. Risks are not significant now and not likely to increase in future.

“ Actions”

end current assessment and record assessment details

review assessment if situation changes or in 2 years

provide induction and ongoing training

follow safe working procedures

2. Risks are considerable but already effectively controlled, could increase in the future.

“ Actions”

conclude safety measures to retain controls and reducing the chances of higher exposure occurring

conclude extra measures for regaining control if a high risk event occurs, despite safety measures

conclude if monitoring or health observation is required to check efficiency of controls

if situation changes or in 2 years then review assessment

give orientation & continual training

reassure that safe & secure working measures are followed.

3. Risks are significant now, and not adequately controlled.

“ Actions”

recognize and employ instant measures for stopping or controlling exposure

consider stopping the process

commence review of longer term control requirements

re-evaluate exposures when the upgraded control measures are in place

determine if monitoring or health surveillance is required

provide induction and ongoing training

ensure that safe working measures are followed

But if there is still uncertainty about risks and not enough information is available or unsure about the level of exposure, then the following actions should be considered.

Acquire more/additional information. Apply good practice to minimize exposure until more information is available

Get specialist advice if necessary

Arrive at conclusion 1, 2 or 3 and take the appropriate actions.

Summary of key points

Assess all reasonably foreseeable workplace hazards which may affect the health or safety of employees or other persons at work. Ask yourself

how serious could it be?

what is the likelihood of its occurrence?

what is the significance of the risks?

are risks assessed following the hazard identification exercise?

are risks to others considered?

are records of assessment maintained?

which identified hazards create a significant risk?

3. CONTROL THE RISKS

Control measures

Once a hazard has been identified then the correct course of action is to use control measures which normally fall into three categories which are as follows;

get rid of the hazard

reduce the risk

use ' backup' controls when all other options in the previous categories have been exhausted.

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The best way to control a hazard is to eliminate it. The elimination of a hazard is the first choice in a system called the ' hierarchy of controls'.

Hierarchy of controls

The order of priority in hazard control is as follows;

“ get rid of the hazard” from the place of work completely. This is considered to be the best method to control a hazard. Removal of a noisy machine from a quiet area is an example of exclusion.

“ Substitute or modify the hazard.” This can be done by replacing it with something less dangerous, for example, by using a paint which does not contain asthma- encouraging agents.

“ Isolate the hazard.” This can be done by physically eliminating it from the place of work.

“ Use engineering methods” to control the hazard at its source. The tools and the equipment can be redesigned and the local exhaust ventilation systems could be used to block the cause of a hazard.

“ Use of administrative controls” is management strategies that can be introduced to ensure the health and safety of workers.

“ introducing personal protective equipment (PPE)” as a provisional measure for reducing exposure to a hazard.

4. MONITOR AND REVIEW

A continual and repeated process

Risk management programs are recurring; once the hazards related to current workplace are controlled successfully, then the process does not stop. Systematic monitoring and reviews must be implemented because of the probable for new hazards to be introduced into a workplace. These hazards can be due to

a change in work environment (moving to a different office, staff reduction)

the introduction of new staff with different skill/ knowledge levels.

the introduction of new work practices or procedures

the use of new technology, equipment or substances

Planning

Effective forward planning is an integral part of monitoring and reviewing risk management. You must address all issues before introducing new equipment and work procedures. For example, planning allows you to include OHS compliance into tender specifications for new equipment or services.

Record keeping

Record keeping is an important part of monitoring and review. Systematic records will help to identify hazards and review the effectiveness of risk controls. Keep records which show

details of workplace inspections

worksheets/checklists used to identify hazards

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methods used to assess risks

control measures implemented

reviews of workplace systems of work, or health and safety audits

any action that has been taken to fix particular hazards

instruction or training done to ensure staff competency

health surveillance of staff

maintenance of plant and equipment.

Achieving the desired results

It is important to keep checking that solutions to your workplace hazards are achieving the desired result. You can only ensure your control methods are working by regular monitoring and review.

Meeting best practice

Good hazard management will result in compliance with set performance indicators. This is a positive sign that your agency is on the way to OHS “best practice”. Achieving best practice in OHS risk management results in

increases in staff morale

decreases in workers’ compensation costs

promotion of a ‘ safety-conscious’ culture in the workplace.

Summary of key points

Has the program achieved its purpose?

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Does it work?

Is it being adhered to?

What has been done to control the hazard and what remains to be done?

Are new hazard control measures required?