

## Section 5: Hazard Identification (2010.06.16 version)

### 5.1 Introduction

#### Purpose

The hazard assessment process is a system to identify health hazards, occupational factors or illnesses, arising in and from the workplace which may cause impaired health and well being, sickness or significant discomfort and this inefficiency must be identified, monitored and controlled.

#### Scope

The overall process is comprised of four basic components including:

- a) Controlling potential loss exposure;
- b) Evaluating the loss potential;
- c) Identifying the source;
- d) Recognizing the hazard exposure or potential hazard exposure.

### 5.2 Hazard Assessments

#### Hazard Recognition and Control

The identification process of occupational hazards must be implemented and maintained throughout the organization. The recognition and control involves:

- a) Assessing the level of risk for the hazards identified;
- b) Determining what hazards are present in the workplace;
- c) Implementing strategies to eliminate or reduce the risk involved; and
- d) Monitoring and following up to ensure the control strategies chosen are implemented and effective.

It is very important to recognize that the hazard assessment does not deal strictly with things that are wrong at the present time. Rather, this assessment must deal with what could go wrong.

The hazard assessment must be management/supervisor led, but the workforce may be involved. This would require bringing individuals into the process with the expertise in that particular task. The team approach will achieve the best results. *A “Workplace Hazard Assessment Form” can be found on the Health & Safety Website under: “Forms”.*

#### Types of Hazards:

- a) **Biological Hazards:** Mold, viruses, bacteria, fungi, parasites, insects, snakes, plants and animals that may cause adverse effects to the human body are classified as biological hazards.
- b) **Chemical Hazards:** Chemical compositions that come in contact with the human body causing harm. These chemicals may consist of mists, vapors, fumes, gases, dusts and liquids.
- c) **Ergonomic Hazards:** Physical disorders and stress which cause harm to the human body resulting from poor work posture, and improper handling of material. Improper work/rest cycles are also considered ergonomic hazards.

- d) **Physical Hazards:** Physical hazards causing harm or adverse effects to the human body include radiation, noise and temperature extremes, barometric extremes, illumination, vibration, lasers, humidity extremes, dusts and microwaves.

### **Conducting a Hazard Assessment:**

Every workplace consists of four major components. These are:

- a) The **Environment** they work in;
- b) The **Equipment/tools** they use;
- c) The **Materials** they work with; and
- d) The **People** (employees, visitors, clients, suppliers, subcontractors, etc.).

In conducting a hazard assessment, all four components must be examined and evaluated to see what risks are present. *A copy of a Job Hazard Analysis Worksheet can be found on the Health & Safety website under: "Forms".*

### **5.3 Control Measures:**

#### **a) Administrative Controls**

Administrative controls are administered through the organization's health & safety program that includes things like education & training, hazardous materials & substances, inspections, investigations, medical examinations, practices, policies, procedures, program evaluation, records & statistics, safety committee(s), supervision, and worker rotation.

#### **b) Elimination or Substitution**

Enclosures, guards, barriers and lockout mechanisms are good examples of engineering controls. Whenever possible, they should be built into equipment and systems. A careful inventory of parts necessary for safety should be developed and maintained. In addition, a preventive maintenance program should be established. Before purchasing machinery and equipment, safety requirements should be considered.

#### **c) Engineering Controls**

Ideally, hazards should be eliminated. On a stairway, for example, an uneven step that poses a tripping hazard can be replaced. Likewise, a cleaning solution that is irritating to the skin may be replaced by a non-irritating solution.

#### **d) Purchasing Controls**

It is the responsibility of the District to ensure that all items purchased meet or exceed all government standards. All equipment must meet provincial and federal safety standards, CSA standards or their equivalent.

## **5.4 Personal Protective Equipment**

When elimination, substitution and engineering or administrative controls are not feasible, then personal protective equipment must be worn. The use of personal protective equipment is necessary wherever a worker may be exposed to hazards. Training in the effective use and care of personal protective equipment is necessary.

## **5.5 Implementing Control Measures:**

Once a control method has been established, it must be implemented. Documents describing the control method, assigning the person primarily responsible for implementing it and fixing the date that the control method (corrective action) must be completed will be developed.

There must be a follow-up to confirm if the control method or corrective action was implemented and if it is effective in eliminating the potential hazard. Results of follow-ups must be documented for purpose of due diligence.

Some operations may have special hazards that are beyond the expertise of management's experience. In those particular circumstances a qualified and competent person (consultant) will be hired to act on these hazards.

## **5.6 Work Task Risk Assessment:**

Before commencing work on any task, do a risk assessment to ensure the safety of yourself, and others. Below is a flow chart that may help you determine the risk involved with any task.

# TASK RISKASSESSMENT BY WORKER



