IDENTIFYING THE HAZARD

There are a number of methods that are used for identifying hazards

• Observation - everyone keeping their eyes open for something that can cause harm and reporting it;

• Health and safety inspection conducted regularly in all work locations;

• Investigating incidents and injuries to see whether they have been caused by a previously unrecognized hazard, or the risk of the hazard not being properly controlled;

• Audits done by a person external to the work location – sometimes a fresh pair of eyes will see a hazard that has not been recognized before.

ASSESSING THE RISK

Once hazards have been identified we need to assess the risk of the hazard.

• Risk is defined as the likelihood that a hazard will cause harm and the consequence, or severity, of the harm.

•Risk assessment is the process for assessing the risk and Health and Safety Risk Matrix is the tool for doing this. Risk assessment is a **pro-active** way of preventing an accident or incident occurring or reoccurring

RISK MATRIX

Risk Matrix

Likelihood

Consequence

N.B. For more details regarding use of this matrix / definitions refer to final page of this document	Rare	Unlikely	Possible	Likely	Almost Certain
Severe *Eg. Potential Fatality or Injury or Illness with permanent disability*	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME
Major *Eg. Potential Lost Time Injury (but non-permanent disability)*	LOW	MEDIUM	MEDIUM	HIGH	EXTREME
Moderate *Eg. Potential Medical Treatment injury or illness (but no lost time)*	LOW	LOW	MEDIUM	MEDIUM	HIGH
Minor *Eg. Potential First Aid injury*	LOW	LOW	LOW	MEDIUM	MEDIUM
Minimal *Eg. Hazard or near miss requiring reporting and follow up action*	LOW	LOW	LOW	LOW	LOW

HOW TO USE THE RISK ASSESSMENT MATRIX

To properly use a Risk Assessment Matrix follow these four steps:

Step 1 – First consider the Likelihood of the hazard causing harm working from left to right, determine if this will be rare or anything else through to almost certain.

Step 2 – Next consider the Consequence of the harm by working from bottom to top, to determine how severe the harm (injury/illness) posed by the hazard would be from minimal to something that could cause death or permanent disability.

Step 3 - Follow the rows and columns to their meeting point to identify the level of risk.

Step 4 - Use the outcome (risk) to determine the risk controls and therefore the subsequent corrective and preventive actions.

THE RISK ASSESSMENT MATRIX

Depending on the outcome of the risk, action is determined according to the severity and depending on the level of risk, the matrix helps to determine the priority for action. For example, the hazards that have the potential to cause the greatest harm are addressed first.

RISK FACTORS TO CONSIDER

More than one person should always be involved in a risk assessment as it is not always easy to come to the right conclusion when thinking about the likelihood and consequence. Input from others will help to bring a mixture of ideas and experiences to the process which will result in a more accurate assessment. The people affected by the risk assessment should always be consulted during the process.

It can be helpful to consider a number of factors when assessing the risk of a hazard. For example:

- The potential number of people that can be harmed
- The duration the risk can remain e.g. how long does it take to do the task that involves the hazard
- The same hazard can often cause a different level of injury/illness to different people (e.g. a person prone to allergies is more likely to develop an allergy to animal dander if they are required to handle animals).
- The risk of injury/illness can be different for similar substances e.g. solvent based paints are far more likely to cause illness than water based paints

• Not all hazards take the same time to cause injury/illness; the time duration and event frequency of hazards is often a determining factor when assessing risk potential (e.g. a carcinogen may take up to 30 years to show symptoms).

• People often have different perceptions of potential hazards and the damage the hazards can cause e.g. sitting at a desk working on a computer may not be seen as a hazard by a person operating a piece of machinery, but there a risk with this activity as well if not well managed.