Appendix 4

Risk Management Steps

Step 1 *Identify the* ***Hazards***
List each of the steps involved in a process and identify any actual or potential hazards which could occur for each step.

Step 2 *Assess and Prioritise the* ***Risks***
For each hazard establish the level of risk of that hazard causing an incident using a risk matrix, and then prioritise risks based on the risk rating.

A risk rating is calculated using a risk matrix which assesses:

- How serious a risk is (consequence and severity): taking into account how often a person is exposed to the risk and for how long, as well as the experience of the operator;
- The likelihood of the risk occurring (probability);

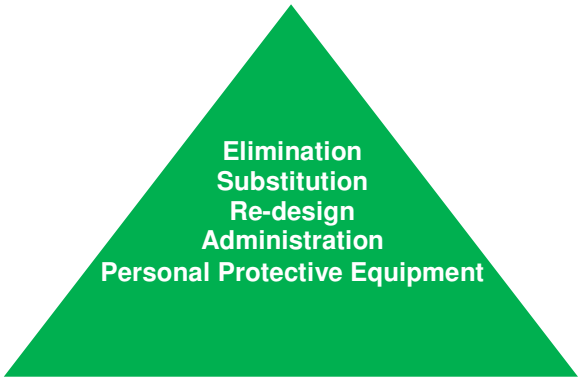
This risk rating assists in prioritising risk so that the higher priority risks can be managed first.

Step 3 *Decide which* ***Control Measures*** *to apply*
Each risk needs to have controls identified to reduce the risk so that it becomes manageable. The Hierarchy of Controls should be used in identifying the most suitable controls.

Hierarchy of control
When looking at controls to put in place to manage a risk, some controls are better than others.

The best option is always to eliminate the risk or hazard so that it no longer exists.

This is not always possible as jobs still need to get done; therefore there are other controls which protect against an incident occurring as a result of a risk.



Each step should pose a question in order:

- Can I eliminate the hazard?
- Is it possible to substitute the hazard?
- Can engineering controls be used to reduce the hazard?
- Will written procedures control the hazard?
- Will PPE control the hazard?

In most cases more than one method will be used to control a hazard.

Control Method	Examples
Elimination	Using materials of a different composition
Substitution	Substitution involves use of a less hazardous material, change of equipment, tool type, or machine
Re-design	Machine guarding, fences or rails Isolation of equipment
Administration	Safe operating procedures (SOP's) in conjunction with conduct of a Job Safety Analysis (JSA), developing checklists and reporting documents
Personal Protective Equipment (PPE)	PPE is always best used in conjunction with other control methods and must be designed to suit the type of hazard being controlled

Step 4 Implement *control measures*

Once a control measure has been selected, it must be implemented. During this stage, it will be necessary to consider one or more of the following:

- Time the control will take to complete
- Cost of the control
- Impact on work methods or procedures
- Effect on productivity
- Changes to documentation after the control is implemented
- Whether re-training is required
- Whether safety inspections are required before making the change
- What part (if any) of the original hazard remains
- The anticipated life of the control
- Maintenance schedules and costs of the control measure.

Step 5 Monitor*, record and review*

The currency and long-term effectiveness of the control needs to be monitored once it is in use to ensure that it remains effective. This process involves the use of original risk management strategies outlined above to evaluate the previous assessment and also to identify any new hazards.

The risk management process itself should also be reviewed for effectiveness, as should the control measures used.