STFC QUANTITATIVE RISK ASSESSMENT PRO-FORMA

LEVEL OF RISK

There will be some instances where you may need to assign priorities to actions from an assessment or you may be responsible for managing the actions from a number of assessments. In either case you will need a coherent method for assigning a priority to actions. This Quantitative Risk Assessment pro-forma gives you this option.

There are three additional fields available when entering or editing any task in an assessment:

- Harm,
- Likelihood and
- Risk.

For each hazard, you choose options for the Harm and Likelihood categories.

Use the information contained in Step 2, categorise the harm that might be caused:
As a general rule you are looking for 'the most likely reasonably foreseeable injury' **not** just the worst case.

Decide How Someone Might be Harmed	
Major	Fatality.
High	Amputations; multiple serious injuries; major fractures; major burns.
Moderate	Lacerations; burns; concussion; serious sprains; minor fractures.
Slight	Superficial injuries; minor cuts and bruises; eye irritation from dust.

Below are the phrases that are used in the risk database to describe the likelihood of something happening and how someone might be harmed:

How Likely is it to Happen?	
Very Unlikely	The hazard is very rarely experienced and exposure will seldom result in injury.
Unlikely	The hazard is rarely experienced and exposure will seldom result in injury.
Likely	The hazard is persistent but exposure may not always result in injury.
Very Likely	The hazard is persistent and exposure will undoubtedly result in injury.

Then use the matrix below to obtain a 'risk factor' from the likelihood and harm categories for each hazard (e.g. if you decided the *harm* category was 'moderate' and the *likelihood* was 'unlikely' the *risk factor* would be 'medium'). This risk category is then used to determine what priority should be given to reducing the risk factor for that particular hazard.

STFC QUANTITATIVE RISK ASSESSMENT PRO-FORMA

Risk Factor

To manually calculate the risk factors use the table below:

Harm	Major	High	High	V High	V High
	High	Med	Med	High	V High
	Moderate	Low	Med	Med	Med
	Slight	Low	Low	Low	Low
		Very Unlikely	Unlikely	Likely	Very Likely
		Likelihood			

	Low Risk - No additional controls are necessary unless they can be implemented at very low cost (in terms of time, money and effort). Actions to further reduce these risks can be assigned low priority.
	Medium Risk - Consideration should be given as to whether the risks can be lowered, where applicable, to a low risk level, but the costs of additional risk reduction measures should be take into account. The risk reduction measures should be implemented within a defined time period.
	High Risk – Substantial efforts should be made to reduce the risk. Risk reduction measures should be implemented urgently within a defined time period and it might be necessary to consider suspending or restricting the activity, or to apply interim control measures, until this has been completed. Considerable resources might have to be allocated to additional control measures.
	V High Risk - These risks are unacceptable. Substantial improvements in risk controls are necessary. The work activity should be halted until risk controls are implemented. If it is not possible to reduce risk the work should remain prohibited.