



LEAFLET 39

HEALTH AND SAFETY RISK ASSESSMENT

AMENDMENT RECORD

Amnd No	Date	Text Affected	Authority and Date
1	December 2007	All	CESO(RN) – December 2007
2	February 2008	Creation of two new MOD Forms 5010a – Risk Assessment and 5010b – Hazard Survey Form	Risk Assessment Working Party February 2008
3	June 2007	2.2 new section added detailing the need for training.	CESO(RN) – June 2008
4	June 2008	5.1.1 new section added that Trades Union Safety Representatives can assist during risk assessments	CESO(RN) – June 2008

REVISION NOTE

Leaflet 39 was wholly revised by the Risk Assessment Leaflet Working Party and now incorporates a revised Risk Assessment Matrix which is in common use across industry. This leaflet also introduces two new MOD Forms 5010a and 5010b.

Risk Assessment Working Party commenced work in December 2007 and concluded in February 2008

First Internal consultation carried out during March 2008

Second internal consultation was carried out during April 2008.

TU consultation was carried out during May. Comments received

Revised version circulated to TUs during - June 2008.

HISTORICAL RECORD

Original Leaflet was introduced in October 2001

LEAFLET 39**HEALTH AND SAFETY RISK ASSESSMENT****Contents****FOREWORD**

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FOREWORD

This leaflet is published under the authority of the Chairman of the Defence Occupational Health and Safety Board (OHSB). This leaflet is for application across all areas of MOD and the Armed Forces and reflects recent changes in legislation and or MOD practices.

1. SCOPE

1.1 This leaflet is intended for use by Line Managers, both Service and civilian, who are responsible for the assessment of significant work related hazards. The aim of this leaflet is to provide a system for assessing risks across all work activities involving MOD personnel, equipment, buildings and or land.

1.2 Within this Leaflet Hazard and Risk have the following meaning:

- **Hazard** - Potential to cause harm.
- **Risk** - Likelihood that harm will occur and its consequences.

1.3 The term "Line Manager" is used throughout this Leaflet to mean the person with direct responsibility for the safe conduct of the work activity. For military activities this will usually lie within the chain of command.

2. INTRODUCTION

2.1 A Risk Assessment is simply a careful examination of what, in your work, could harm people, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm to yourself, your colleagues, contractors, visitors or anyone else who may be affected by your work.

2.2 Risk assessment is a process that becomes easier with training and experience. TLBs and TFAs will have their own methods of delivering training and those conducting or accepting risk assessments are advised to take advantage of this training to ensure correct and effective application of the risk assessment process.

3. REQUIREMENT

3.1 Risk assessment helps employers to focus on the risks that really matter in the workplace, the significant ones with real potential to cause harm. The Management of Health and Safety at Work Regulations and the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations require employers to undertake suitable and sufficient risk assessments. However they do not necessarily require the elimination of all risk, but employers are required to protect people so far as reasonably practicable. Part of this protection involves an informed, rational and structured evaluation of the risks presented by working practices and or the working environment. The MoD through its Line Managers is legally required to assess the risks in the workplace so that an effective plan to control the risks can be put in place.

3.2 Risk assessment is not a substitute for making things safe e.g. spilled liquids should be cleaned up rather than a risk assessment produced warning of the slip hazard.

Types of Risk Assessment

3.3 All significant risks shall be assessed, however, although the principles of assessment remain the same their application can differ. There are 3 recognised methods of assessment;

- **Dynamic** - A mental assessment of risk for use when any delay would increase the risk of harm. Dynamic assessment can also be used as the initial step in formal risk assessment.
- **Formal** - A written method of evaluating the risk of harm e.g. in accordance with MOD Form 5010a.
- **Generic** - An evaluation of risk that can be applied to common tasks.

3.4 Dynamic risk assessment allows for immediate mental safety assessments to be made without implementing the formal risk assessment process e.g. the decision to tackle a small fire, a task with obvious safety risks

which would increase if delayed by formal assessment. Therefore dynamic risk assessment can be effectively used in emergencies where any delay increases the risk of harm, it is not to be used purely to save time or avoid additional work.

3.5 Dynamic risk assessment can be used as an initial step in establishing which risks are significant and require further assessment. It can also be used prior to the use of generic assessments to identify if the assessment is suitable and sufficient for the task in hand.

3.6 Formal risk assessment is a documented process of assessing risks and involves a process of measuring the likelihood of an event occurring with its likely consequences.

3.7 Some common tasks, tasks that share the same hazards and controls e.g. routine maintenance or cleaning activities, can be assessed and a generic risk assessment produced. These assessments can only be used when the influencing factors are the same and the Line Manager considers that the control measures identified and implemented adequately reduce the risk of harm.

3.8 Guidance on which method of assessment is appropriate is provided in the flow diagram at Fig 1.

3.9 The risk assessment methods described shall only be deviated from where alternative legislation applies.

4. RESPONSIBILITY

4.1 Line Managers (both Service and Civilian) are responsible for ensuring all hazards in their areas of responsibility have been identified and all significant risks are assessed.

4.2 Hazard identification and risk assessment, although a Line Management responsibility, can be conducted by a third person providing they are competent¹ to do so. The establishment of competency is particularly important when conducting risk assessments that require specialist knowledge, such as those covering the use of hazardous substances etc.

4.3 Other legislation e.g. the Control of Substances Hazardous to Health and the Work at Height Regulations require specific risk assessments to be conducted. Where a task involves activities already assessed under such legislation it is not necessary to repeat the assessment, providing it is referenced in the overall assessment.

4.4 Line Managers are responsible for ensuring that all those who might be exposed to a hazard are made aware of the risk assessment and the identified

¹ It may be necessary for more than one person to be involved to ensure competency, in these instances one person should be appointed as the responsible assessor and it is this person that signs the risk assessment form as the 'Assessor'.

control measures. They are also responsible for ensuring that the control measures identified by the risk assessment are effectively implemented and complied with.

4.5 Line Managers are responsible for maintaining the suitability and effectiveness of risk assessments and their control measures. Therefore risk assessments should be treated as 'live documents' which should be reviewed and updated if necessary on a regular basis. If there are changes to be made it is not necessary or desirable to wait until the review date to change the assessment, it is to be done at the earliest opportunity.

4.6 Employees are responsible for complying with the findings of the risk assessment and for informing Line Managers when a process or task changes or it is felt the risk assessment fails to identify appropriate control measures.

5. WHAT NEEDS TO BE DONE (The 5 Steps)

5.1 Risk assessment is a subjective but logical process which can be broken down into 5 Steps:

- Step 1 Identify the hazard
- Step 2 Decide who might be harmed and how
- Step 3 Evaluate the risks and decide on precautions
- Step 4 Record your findings and implement them
- Step 5 Review your assessment and update if necessary

5.1.1 When conducting a risk assessment involvement of staff or their representatives will provide useful information about how the work is done, this will make assessment of the risk more thorough and effective. Advice and guidance may also be available from the unit safety advisor or safety committee representatives.

5.2 Identify the hazards

5.2.1 Review the task and or work area, talk with the persons involved and identify any hazards. Assessment is not limited to normal work activities, open days, displays etc if organised by a MoD department or taking place on MoD property or using MoD owned equipment, shall be subject to risk assessment. Remember to include hazards arising from normal activities and potential hazards if things go wrong. Focus on the reasonably foreseeable (that is an event that can logically be predicted to occur and which could result in harm) not remote possibilities. Tasks/activities that pose trivial safety consequences should not be subject to risk assessment. It is helpful to record the hazards, the Hazard Survey Form (MOD Form 5010b) is an acceptable template for recording, this will help ensure hazards are not missed during the risk assessment process.

5.2.2 It is important to remember that an effective risk assessment looks at the whole activity not individual hazards. For instance, if the work activity is to load

a vehicle onto a transporter, consider each element of the operation and include these in one single risk assessment covering the whole process. This avoids the need for unnecessary paperwork and subsequent additional review and will in the end show a complete picture of how the hazards and associated risk are to be managed. There is a tendency to break risk assessments down into bite sized chunks for simplicity, but it is sometimes more effective to manage the hazards collectively thereby making the risk easier to manage overall.

5.3 Decide who might be harmed and how

5.3.1 For each hazard establish who might be harmed, it will help to identify the best way to manage the risk. This does not mean listing everyone by name, but rather identifying groups of people, e.g. store room staff, visitors, members of the public etc.

5.3.2 In each case decide how they might be harmed, i.e. what type of injury or ill health might occur. For example, stores personnel may suffer back injury from repeated lifting of boxes.

5.3.3 Some workers have particular requirements, e.g. new and young workers, women of child-bearing age, new or expectant mothers and people with disabilities may be at particular risk.

5.3.4 Shared workplaces present particular problems. Risk assessments should consider the effect of the activity on other workers. Line Managers should also ensure that they are familiar with the risk assessments produced by other groups within the workplace that may affect their staff.

5.4 Evaluate the risks and decide on precautions

5.4.1 Evaluating the risk is a subjective process which becomes easier with experience. To help assessors a 'Risk Rating' calculation matrix is provided on the MOD Form 5010a and is shown at Table 1. Tables 2 and 3 provide guidance on definitions of 'likelihood' and 'consequence'.

Table 1- MOD Risk Matrix

Hazard Consequence	3	3 MED	6 HIGH	9 HIGH
	2	2 LOW	4 MED	6 HIGH
	1	1 LOW	2 LOW	3 MED
Risk Rating (Consequence X Likelihood)		1	2	3
		Likelihood of occurrence		

Table 2 – Likelihood Criteria

Likelihood		Criteria
High	3	Common, regular or frequent occurrence
Medium	2	Occasional occurrence
Low	1	Rare or improbable occurrence

Table 3 – Consequence Criteria

Consequence		Criteria
High	3	Fatalities, major injury or illness
Medium	2	Serious injury or illness
Low	1	Minor injury or illness

5.4.2 If the product of the hazard severity and likelihood of occurrence is 1 or 2, then the item being assessed is categorised as Low risk. Similarly if the score is 3 or 4 then the risk category is Medium while scores of 6 or 9 signify a High risk category. When recording the Risk Rating include the individual “Likelihood” and “Consequence” scores, this allows resources to be targeted at the right areas.

5.4.3 Table 4 identifies the actions to be taken depending on the severity of the Risk Rating.

Table 4 – Action to be taken

Risk Rating	Action to be taken
High	Improve control measures; consider stopping work. Conducting work at this level of risk is to be reported up the Line Management / Command chain.
Medium	Review control measures and improve if reasonably practicable to do so, consider alternative ways of working.
Low	Maintain control measures and review if there are any changes.

5.4.4 The legal requirement for most health and safety Regulations is to reduce the risk of harm so far as is reasonably practicable². The level of acceptable risk is dependent on circumstances, the perceived risks of working in an office environment are different to those of working in a military front line hostile environment. It is the Line Managers responsibility to decide when the level of risk is acceptable, a well constructed risk assessment will aid in this decision.

² Some Regulations, such as the Electricity at Work Regulations, require a higher degree of compliance and therefore do not allow the use of ‘so far as is reasonably practicable’. These Regulations are limited to high risk activities and guidance should be sought if there is any doubt regarding compliance.

5.4.5 The first step in evaluating the risk is to establish what controls are currently in place, it is important that this is based on what is actually being done not what is thought to be done. The second step is to decide whether anything else can and needs to be done, this could involve the introduction of additional control measures or better implementation of existing control measures.

5.4.6 If the need for additional control measures is identified their implementation needs to be managed, this will require identification of ownership and the setting of implementation dates. Large numbers of additional control measures should be addressed in priority order, the most effective being implemented first. Once additional controls have been identified the risk rating is to be recalculated and recorded in the "Residual Risk" column. If existing controls are considered adequate the "Additional Controls" section of MOD Form 5010a should be marked "Controls Adequate".

5.4.7 When assessing risks the following points should be considered:

- Can the hazards be eliminated altogether?
- Can the risks be controlled so that harm is 'most unlikely'?
- Is there a less risky option?
- Can access to the hazard be eliminated or reduced e.g. barriers, guards etc?
- Can the work be reorganised to eliminate or reduce the risks?
- Are additional welfare facilities required e.g. first aid or washing facilities for removal of contaminants?
- Is Personal Protective Equipment (PPE) required? The use of PPE is a last resort and should not be preferred to other forms of risk elimination or reduction.

5.5 Record and implement findings

5.5.1 On completion of the risk assessment the details shall be recorded and the assessment brought to the attention of all those who are at risk or are responsible for implementing the control measures.

5.5.2 The recording of the risk assessment shall be clear and concise, it is to be easily read with the minimum use of acronyms. Control measures should be clearly identified without excessive reference to large documents with embedded information which is difficult to extract. MOD Form 5010a provides an acceptable format for recording the assessment.

5.5.3 It is best practice to record dynamic risk assessments retrospectively and at the earliest opportunity. By recording these assessments it may be possible to use the findings as a starting point for future similar tasks, thus improving the control of risks and reducing workloads. It also provides an auditable record of decisions allowing for more effective accident investigation

and helps provide assurance during the audit of safety management systems. MOD Form 5010a can be used for the recording of dynamic risk assessments.

5.5.4 The most important part of any risk assessment is effective implementation of the control measures. Once implemented Line Management is to ensure that the control measures remain effective and that staff are compliant with the risk assessment requirements.

5.6 Review and update

5.6.1 Risk assessments are to be regularly reviewed to ensure they remain suitable and sufficient.

5.6.2 A review is to be conducted:

- Annually.
- If there is reason to doubt the effectiveness of the assessment.
- Following an accident or near miss.
- Following significant changes to the task, process, procedure or Line Management.
- Following the introduction of more vulnerable personnel, e.g. persons who are not familiar with the process, task or environment, persons who may have special needs.

5.6.3 If following review there are no changes to be made to the assessment, the Line Manager is to sign and date the original assessment confirming that it is suitable and sufficient.

6 RETENTION OF ASSESSMENTS

6.1 Retention of risk assessments is to comply with the requirements of JSP 375 Vol 2 Leaflet 55 Retention of Records.

7. RELATED DOCUMENTS

7.1 The following documents should be consulted in conjunction with this leaflet:

JSP 375 Vol 2:

- | | | |
|----|------------|---|
| a. | Leaflet 11 | Safety in Military Training and Exercises |
| b. | Leaflet 23 | Site Risk Assessment |
| c. | Leaflet 26 | Lone Working |
| d. | Leaflet 32 | Health and Safety on Multi-Occupier Sites |
| e. | Leaflet 35 | The Health and Safety of Young Persons |
| f. | Leaflet 36 | New and Expectant Mothers at Work |
| g. | Leaflet 55 | Retention of Records |

JSP 375 Vol 3

- a. Safety Rules and Procedures for working on the Defence Estate

Other documentation -Legislation and guidance

- a. Management of Health and Safety at Work Regulations
- b. Merchant Shipping and Fishing Vessels (Health & Safety at Work) Regulations
- c. HSE 5 Steps to Risk Assessment INDG163

8. DEFINITIONS

Common Tasks	Common repeatable tasks that share the same hazards.
Competence	Competence requires sufficient practical experience and technical knowledge and understanding to carry work in a safe and efficient manner to a recognized standard on a regular basis. It requires the ability to communicate understanding to all people in a clear and comprehensible manner, and the awareness of personal limitations.
Consequence	Effect or outcome.
Control Measure	An item, procedure or system introduced to eliminate or reduce risk.
Dynamic Risk Assessment	A mental assessment of risk for use when any delay would increase the risk of harm or as an initial step in identifying significant risks.
Formal Risk Assessment	A written method of evaluating the risk of harm.
Generic Risk Assessment	An evaluation of risk that can be applied to common tasks.

Harm	Injury to persons or damage to equipment or the environment.
Hazard	Something with the Potential to cause harm.
Line Manager	A person, military or civilian, with direct responsibility for the safe conduct of the work activity.
Reasonably Foreseeable	Something that should be apparent to a reasonable person who has knowledge and experience of the work to be undertaken.
Risk	Likelihood that harm will occur and its consequences.
Risk Assessment	A process for evaluating risk.
Significant	Important, noteworthy not trivial.
Significant Risk	Risks that if not properly controlled are likely to cause harm.
So far as is reasonably practicable	The degree of risk in a particular situation which must be balanced against the time, trouble, cost and physical difficulty of taking measures to avoid the risk.

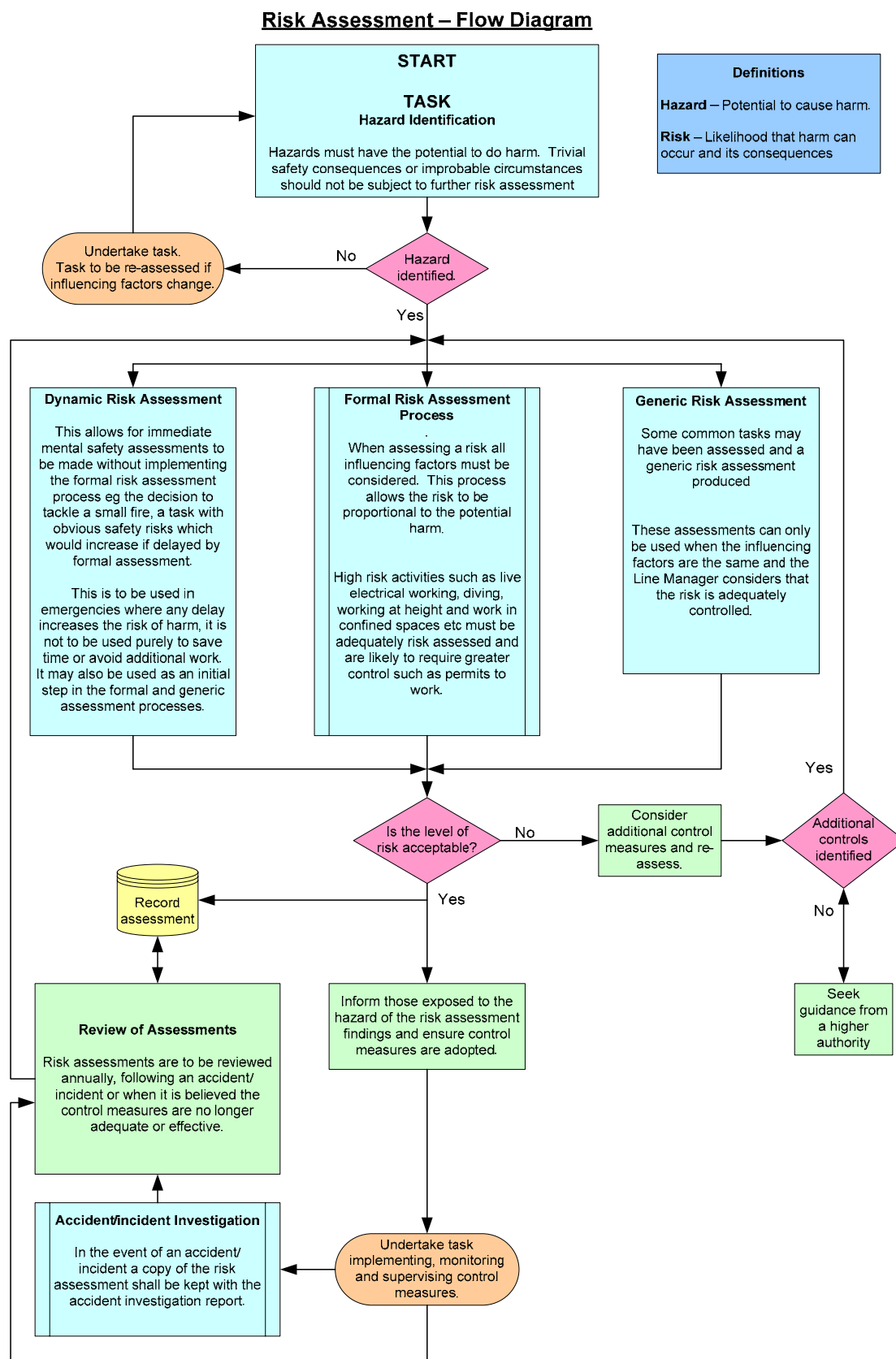


Fig 1

MOD Hazard Survey Form**MOD Form 5010b**
Introduced April 2008

Establishment/Unit/Ship:							
Section/Department:							
Activity/Process:							
Hazard Survey Reference Number:							
Person conducting the survey				Line Manager			
Name:				Name:			
Date:				Date:			
Hazard				RA Req		Priority ³	
				1	2	3	
1		Y	N				
2		Y	N				
3		Y	N				
4		Y	N				
5		Y	N				
6		Y	N				
7		Y	N				
8		Y	N				
9		Y	N				
10		Y	N				
11		Y	N				
12		Y	N				
13		Y	N				
14		Y	N				
15		Y	N				

³ The priority score should be used to identify which hazards need to be assessed first.

MOD Form 5010b
Introduced April 2008

The following list includes potential hazards that may be encountered in the workplace, however it is not exhaustive and assessors and Line Managers need to stay alert to other hazards that may be present or that can develop.

- Manual handling.
- Exposure to hazardous substances.
- Noise.
- Vibration.
- Working at height.
- Lifting operations.
- Confined spaces.
- Exposure to electricity.
- Transport.
- Exposed machinery.
- Construction activities.
- Radiation.
- Excessive stress.
- Pressure systems.
- Exposure to blood borne viruses.
- Explosive atmospheres.
- Fatigue.
- Excessive heat or cold.
- Storage systems, racking etc.
- Fire.
- Lighting levels.

MOD Form 5010a
Introduced April 2008

MOD Risk Assessment Form

Establishment /Unit/Ship:				Assessment No:		Assessment Date:		
Section/Department:				Assessment Type (Delete as appropriate; see Note 1)				
				Specific	Generic	Record of Dynamic Assessment		
Activity/Process:								
Assessor				Line Manager Acceptance (See Note 2)				
Name:				Name:				
Rank/Grade:				Rank/Grade:				
Signature:				Signature:				
Hazards (Include Hazard Survey Number where applicable)	Who is at Risk?	Control Measures (Specific existing Control Measures)	Risk Rating (Likelihood X Consequence) (See Note 3)	Additional Controls (Each Control Measure is to be specific and managed)	Residual Risk Rating (See Note 4)	Management Plan		
						Owner	Target Date	Comp Date

Line Manager Assessment Review (See Notes 2 and 5)							
Review Date:		Review Date:		Review Date:		Review Date:	
Name:		Name:		Name:		Name:	
Rank/Grade:		Rank/Grade:		Rank/Grade:		Rank/Grade:	
Signature:		Signature:		Signature:		Signature:	

Notes:

- 1 If using a 'Generic' risk assessment, Assessors and Line Managers are to satisfy themselves that the assessment is valid for the task and that all significant hazards have been identified and assessed. If additional hazards are identified they are to be recorded and attached to the Generic assessment.
- 2 Line Managers are to note that they are responsible for production of the risk assessment and that they are signing to indicate that the risk assessment is suitable and sufficient and they consider the risks to be acceptable.
- 3

High	Common, regular or frequent occurrence.	3	3 Med	6 High	9 High
Medium	Occasional occurrence.	2	2 Low	4 Med	6 High
Low	Rare or improbable occurrence.	1	1 Low	2 Low	3 Med
Risk Matrix Likelihood X Consequence			1	2	3
			Minor injury or illness.	Serious injury or illness.	Fatalities, major injury or illness.
			Low	Medium	High

When recording the Risk Rating ensure that both the Likelihood and Consequence scores are included.

High	Improve control measures; consider stopping work. Conducting work at this level of risk is to be reported up the Line Management / Command chain.
Medium	Review control measures and improve if reasonably practicable to do so, consider alternative ways of working.
Low	Maintain control measures and review if there are any changes.

- 4 Record the residual Risk Rating to demonstrate that the risk has been reduced to an acceptable level; record Likelihood and Consequence scores.
- 5 Risk Assessments are to be reviewed:
 - Annually.
 - If there is reason to doubt the effectiveness of the assessment.
 - Following an accident or near miss.
 - Following significant changes to the task, process, procedure or Line Management.
 - Following the introduction of more vulnerable personnel.
 - If "Generic" prior to use.