



INFORMATION LEAFLET 002-1214 Introduction to “Risk Assessment”

December 2014

Introduction to “Risk Assessment”

“Risk Assessment” is a process where hazards (things that cause harm) and risks (chances of being harmed) are evaluated and assessed by employers in order to remove, or lower, the chance of someone being harmed whilst working, or present/visiting on a worksite. It is a legal requirement under the Health and Safety at Work Act 1974, and Management of Health and Safety at Regulations 1999 that risk assessment is carried out, and anyone who employs more than 4 people must write down/record their risk assessments. It is always good practice to write down and record risk assessments, regardless of the size of a business, as this gives good evidence that the process has been done.

The Health and Safety Executive give guidance on preparing risk assessments and their free leaflet is available online at <http://www.hse.gov.uk/pubns/indg163.pdf>

The output from a risk assessment process will be normally be a written Risk Assessment, and this should focus on known issues and record the significant hazards/risks findings. The person who makes the risk assessment should involve all relevant people in the assessment process, and look at the machinery/equipment, the people (workers and others), the worksite and the proposed work methods and processes.

In forestry, FISA has published the Managing Health and Safety in Forestry Guidance – <http://www.ukfisa.com/assets/files/safetyLibrary/MHSF-2014.pdf>. This guidance describes how Landowners, Forestry Works Managers and Contractor should cooperate and coordinate in order to create and share risk assessments for specific worksites.

Assessing risk is inherently subjective, and there are many different methods of creating and recording risk assessments. The key is that the final assessment should be “suitable and sufficient” and focus on the key hazards and risks, and be shared and communicated to all relevant personnel and visitors to a worksite. The longer and more complex the risk assessment, the less likely it is to be read and understood. The objective of a good risk assessment process is that people on a worksite understand how to act and work safely and are “hazard aware”.

Example Risk Assessment

Below is an example risk assessment for mechanical harvesting which seeks to illustrate how a forestry risk assessment could look, including a blank and completed example using the information provided – there are other possible formats and outputs.



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

Setting the scene

Henry Brown, Forestry Contractor did the risk assessment in this mechanical harvesting operation, which employs him and five others.

The harvesting site is on a slight incline. An overhead power line enters the perimeter of the site and feeds an underground cable servicing a mobile telephone mast. Harvesting is by mechanical harvester and forwarder. Chainsaw cutting by machine operators when required.

How was the risk assessment done?

The Contractor first looked at relevant guidance on the FISA website, including;

- FISA Guidance on Managing Health and Safety in Forestry
- FISA Safety Guide 603 Mechanical harvesting
- FISA Safety Guide 503 Extraction by Forwarder
- FISA Safety Guide 501 Tractor units in tree work
- FISA Safety Guide 804 Electricity at Work
- FISA Safety Guide 301 & 302 Chainsaw
- others.....
- INDG 163 (Rev 3) Five steps to risk assessment

He then identified the hazards on the harvesting site. He did this by

- walking round the harvesting site noting what might cause harm
- talking to staff to learn from their knowledge and experience and listening to any concerns about health and safety
- discussing any recent incidents and near-misses

As he identified the hazards and thought about who could be harmed by them and how accidents might happen

He noted what he was already doing to control the risks and considered whether he needed to do anything more. He then recorded any further action required

Putting the risk assessment into practice, the manager set out what actions needed to be taken, who would do them and by when. He issued a copy of the risk assessment to the Landowner, Forestry Works Manager and other contractors working on the site, and discussed the findings with them.

He decided to review the risk assessment whenever there were any significant changes such as new work equipment, work activities, or staff.

How to use this example

This example risk assessment shows a wide range of hazards that might be present in this type of activity. It can be used as a guide to help you think through some of the hazards at your site and steps you need to take to control the risks

However, this is not a generic risk assessment. Every site is a little bit different. To satisfy the law you must identify and assess the hazards your activity poses, think through the controls required to provide effective protection to people who may be affected by them, and record the significant findings from the risk assessment of your activities.

THINK SAFE / STAY SAFE



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

Company name: Date of risk assessment: / /

Site Safety Coordinator:

Site Name: Postcode: Grid Ref: Nearest Town:

Latitude: Longitude:

	What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
SAFE SITE							
SAFE OPERATOR							



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
SAFE EQUIPMENT						

FISA Guides used as best practice on this site	
<ul style="list-style-type: none"> <input type="checkbox"/> 301 - Using petrol driven chainsaws <input type="checkbox"/> 302 - basic chainsaw felling and manual takedown <input type="checkbox"/> 303 - Chainsaw snedding <input type="checkbox"/> 304 - Chainsaw cross-cutting and manual stacking <input type="checkbox"/> 306 - Chainsaw clearance of windblow <input type="checkbox"/> 307 - Chainsaw felling of large trees <input type="checkbox"/> 310 - Use of winches in directional felling and takedown <input type="checkbox"/> 501 - Tractor units in tree work <input type="checkbox"/> 502 - Extraction by skidder <input type="checkbox"/> 503 - Extraction by forwarder 	<ul style="list-style-type: none"> <input type="checkbox"/> 504 - Extraction by cable crane <input type="checkbox"/> 603 - Mechanical harvesting <input type="checkbox"/> 605 - Roadside processing <input type="checkbox"/> 703 - Debogging and recovery of forestry machines <input type="checkbox"/> 704 - Excavators in tree work <input type="checkbox"/> 705 - Steep slope working in forestry <input type="checkbox"/> 802 - Emergency planning <input type="checkbox"/> 804 - Electricity at work: Forestry <input type="checkbox"/> 805 - Training and certification
<p>FISA guides in use should be placed face up behind this risk assessment. Guides not in use should be kept face down and retained in case they may be required</p>	



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

I have read and understand this risk assessment as part of my site induction :		Further information not covered above
<u>Print Name</u>	<u>Sign</u>	
<u>Print Name</u>	<u>Sign</u>	
Contact (Tel)..... in the event of any Health and Safety concerns, or		
..... Site Safety Coordinator, (Tel).....		



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

Company name: Henry Brown, Forestry Contractor Date of risk assessment: 18/09/14

Site Safety Coordinator: Joe Brown

Site Name: Larchwood Forest Postcode: DG1 4NL Grid Ref: NY082682 Nearest Town: Ruthwell
 Latitude: 54.999876 Longitude: -3.4366179

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done	
SAFE SITE	General Forestry operations	Forestry workers, hauliers, members of the public.	<ul style="list-style-type: none"> ■ Warning signs erected at all entrances to work site and checked daily ■ Copies of risk assessment , maps etc. kept on site at all times 	<ul style="list-style-type: none"> ■ No 			
	Slips & Trips	Forestry workers	<ul style="list-style-type: none"> ■ Tidy site to be maintained ■ Steps kept clean of hydraulic and other fluids ■ Parking on even ground where possible ■ Adequate footwear worn by all 	<ul style="list-style-type: none"> ■ Check spillage kits are available in machines and spares in Site-Safe storage unit 	HB	18/09/14	✓
	Falls from height Falls from any height can cause serious injury	Forestry worker Fall from vehicle Forestry worker or member of the public. Falls from log stack, or logs falling from stack	<ul style="list-style-type: none"> ■ Machine access footsteps and hand-holds maintained in good order ■ 3 points of contact maintained when personnel access or exit cab ■ Steps kept clean of hydraulic and other fluids ■ Log stack height 2m, or by further supplementary risk assessment, but kept as low as possible. ■ Log stack maintained in safe condition ■ "Do not climb on stack" sign posted 	<ul style="list-style-type: none"> ■ Regular checks by all operators ■ No ■ No ■ Regular monitoring by Forwarder Operator and FWM ■ Regular monitoring by Site Safety Coordinator and FWM 	All HB & FWM HB & FWM Fwdr	Ongoing Ongoing Ongoing Ongoing	



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done	
			<ul style="list-style-type: none"> Stack signs to be checked daily 				
Falling objects (including treetops, branches, and hung up trees)	Co-workers and members of the public being struck by falling timber section	<ul style="list-style-type: none"> All aware of dangers of falling tree section Hard hats worn by operators when outside cabs 	<ul style="list-style-type: none"> No 				
SAFE SITE	Public access	Member of the public in vehicles or pedestrians being struck by forestry machinery, falling trees, logs etc.	<ul style="list-style-type: none"> "Forestry Operations" warning signs maintained and checked daily Operations stop if anyone enters risk zone Signs "Wait to be acknowledged" posted in machine operation areas 	<ul style="list-style-type: none"> Complete near-miss report if members of the public access any forestry work risk zones Everyone to be vigilant to persons entering risk zone(s) 	All	Ongoing	
	Overhead Power Lines (OHPL's)	Forestry workers. Electrocution or burns from contact with overhead power cables	<ul style="list-style-type: none"> Goal posts erected and signs posted; checked daily Power outage to be arranged with SSE All harvested produce to be kept in the green zone to allow safe extraction by Forwarder 	<ul style="list-style-type: none"> No See "Supplementary Risk Assessment" for more details on colour zone operations 			
	Underground services	Forestry workers. Electrocution or burns from contact with underground power cables	<ul style="list-style-type: none"> Underground supply cable to mobile phone mast is clearly identified by marking tape on trees either side of the underground cable and signs on small wooden posts 	<ul style="list-style-type: none"> Supplementary risk assessment to be completed prior to cutting trees adjacent to underground cable Trees to be manually felled 	HB & FWM	tbc	
	Control of substances	Forestry workers risk skin problems such as	<ul style="list-style-type: none"> UREA Material Safety Data Sheet (MSDS) is kept by Site-Safe storage facility 	<ul style="list-style-type: none"> Toolbox talk on Urea MSDS 	HB	30/09/14	✓



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
hazardous to health (COSHH)	dermatitis from contact with chemicals, or breathing problems from vapour	<ul style="list-style-type: none"> Operators are trained in safe use, storage and spillage containment. 	<ul style="list-style-type: none"> Operators to be reminded to report any red or itchy patches to the skin 			
Fire	Forestry workers and others risk probably fatal injury from burns/smoke inhalation from fire	<ul style="list-style-type: none"> Fire extinguisher in cabs, checked annually by competent person 	<ul style="list-style-type: none"> Check extinguishers available in cabs & Contractors van 	HB	30/09/14	✓
		<ul style="list-style-type: none"> Operators have been given toolbox talk on the safe use of fire extinguishers 	<ul style="list-style-type: none"> Fire risk assessment to be completed by FWM 	FWM	30/09/14	✓
		<ul style="list-style-type: none"> No Smoking adjacent to fuel or chemical storage areas 	<ul style="list-style-type: none"> Also see FISA Guide 803 Firefighting Periodic checks on extinguisher gauge 	All Ops	Ongoing	
SAFE OPERATOR	General forestry Operations	Forestry workers <ul style="list-style-type: none"> Harvester and Forwarder operators have appropriate FMOC accreditation. Both operators have recently completed Chainsaw refresher training Site safety induction for all operatives 	<ul style="list-style-type: none"> No 			
	Lone working/ working in isolation	Forestry worker. Injuries from forestry machinery or equipment. Falling tree section. Slip, trips or falls. <ul style="list-style-type: none"> Machine operators have CB radio Sat phone available if required Regular checks by mobile phone will call..... every.....hours Failure to return after work procedure 	<ul style="list-style-type: none"> Demonstrate robust "Buddy System" to FWM Check all mobile signals Demonstrate procedure to FWM 	HB	30/09/14	✓
				All	30/09/14	✓
				HB	30/09/14	✓



RISK ASSESSMENT EXAMPLE for MECHANICAL HARVESTING

What are the hazards?	Who might be harmed and how?	What are you already doing?	Do you need to do anything else to control this risk?	Action by who?	Action by when?	Done
Manual handling Lifting and moving heavy objects or objects that are difficult to grasp	Forestry workers Service mechanics Risk of injury or back pain from handling heavy or awkward objects	<ul style="list-style-type: none"> ■ Most loads are handled mechanically ■ Fluids in 20 litre, or more, containers are decanted into smaller cans for topping up machine reservoirs 	<ul style="list-style-type: none"> ■ No 			
Hand-Arm Vibration Syndrome, or "White Finger" (HAVS)	Forestry Workers, particularly those engaged in chainsaw work. The cause of significant ill health (painful and disabling disorders of the blood vessels, nerves and joints).	<ul style="list-style-type: none"> ■ Operator Chainsaw training ■ Using sharp tooling and good maintenance ■ Daily trigger times kept to a minimum ■ Awareness of where to find vibration emission information on the equipment and in the handbook 	<ul style="list-style-type: none"> ■ Health Surveillance - All users to complete annual screening questionnaire (as laid out in HSE's L140 Appendix 3) ■ Seek medical advice if you experience tingling and numbness in fingers, or loss of strength in hands 	All All Users	30/09/14 Ongoing	✓
Lyme Disease	Forestry Workers. Lyme disease is spread to humans from animals (usually Deer) by a Tick	<ul style="list-style-type: none"> ■ Daily skin checks (particularly skin folds, armpits and groin) and the removal of ticks ■ Use of insect repellents 	<ul style="list-style-type: none"> ■ Keep skin covered if working in infected areas ■ Spare "Tick Kits" are kept in Site-Safe store 	All	Continuous	
First Aid	All persons	<ul style="list-style-type: none"> ■ First aid kit in cab ■ Operators trained in emergency first aid 	<ul style="list-style-type: none"> ■ No 			



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SAFE EQUIPMENT	Failure of machine or part of lifting device	Forestry workers Being struck by shattered machine component. Tree or log falling from crane due to failure of lifting device	<ul style="list-style-type: none"> ■ Harvester and Forwarder maintained regularly by..... ■ Serviced by..... ■ Thorough inspection of lifting equipment (crane) by competent person under the Lifting Operations Lifting Equipment Regulations 1998 (LOLER 98) 	<ul style="list-style-type: none"> ■ Copies of inspection sheets to be made available on request 	HB	As req	
	Rollover	Machine operators	<ul style="list-style-type: none"> ■ Cab roll over protection fitted 	<ul style="list-style-type: none"> ■ Seatbelts must be work during work on any slope 			
	Bogging	Forestry workers while Debogging & Rescue/Recovery	<ul style="list-style-type: none"> ■ Debogging strops kept in Site-Safe store 	<ul style="list-style-type: none"> ■ Keep FISA Guide 703 "Debogging and recovery of forestry machines" available on site in case required 	HB	18/09/14	✓

FISA Guides used as best practice on this site

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