

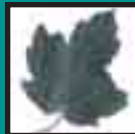


MANAGING HEALTH AND SAFETY



IN

FORESTRY





introduction

The *Managing health and safety in forestry* booklet was first launched in 1999 and has successfully improved health and safety standards in the forestry industry. This revised version clarifies the roles and tasks in relation to timber haulage.

Everyone involved in forestry work has health and safety duties and responsibilities. This booklet contains guidance to help employers, the self-employed and those in control of work in forestry meet their duties under the Management of Health and Safety at Work Regulations 1999.¹

Forestry work is a high-risk activity. The management issues involved in harvesting timber, getting it to the roadside and transporting it to the end user are complex. Whether you are a timber grower or purchaser, contractor or subcontractor, you have a part to play in making sure people's health and safety is not put at risk. When planning and carrying out commercial forestry operations you will be faced with a number of health and safety tasks that have to be tackled, such as:

- completing risk assessments;
- selecting suitable equipment for the job;
- protecting public health and safety;
- setting out safe working procedures;
- ensuring people are adequately trained;
- supervising the work.

To successfully manage health and safety in forestry and associated haulage, you need to co-ordinate your activities with others and pass information up and down the contract chain. To help this flow of information and to ensure that the right tasks are carried out by the right people, this guidance groups these health and safety tasks into four management roles:

- landowner;
- forestry work manager (FWM);
- contractor;
- subcontractor.

Within any forestry contract you need to identify which of these roles falls to you and carry out the appropriate tasks. Depending on how the contracts are organised for a particular worksite, you may pick up more than one role. Examples of how these roles fit with some of the more common forestry contract arrangements are shown in Appendix 1.

defining the roles



The table below sets out the definitions for the four management roles and gives some examples of who is most likely to take on each role.

Role	Definition	Examples of who may take on this role
Landowner	The person in control of the land on which the forestry work takes place	<ul style="list-style-type: none"> ● Timber growers such as farmers or estate owners with forested land. ● Forest Enterprise or other public bodies such as the Crown Estate and local authorities. ● Forestry management companies and land agents working on behalf of private and public owners.
Forestry work manager (FWM)	The person who commissions work on a forestry site	<ul style="list-style-type: none"> ● Anyone in the landowner role directly engaging forestry contractors as part of their business. ● Timber purchasers (merchants, processors or contractors). <i>If all harvesting has ceased</i>, and there is a separate contract with a purchaser of saw logs at the roadside, then that purchaser will be deemed to be commissioning the work activity and will undertake the FWM role.
Contractor	The provider of a forestry service	<ul style="list-style-type: none"> ● Contracting companies with their own employees or who take on subcontractors. ● Owner-operators. ● Hauliers.
Subcontractor	Anyone engaged by a contractor other than by direct employment	<ul style="list-style-type: none"> ● Anyone working under contract to a contractor. ● Anyone in any other role who works on the site.

Within each role the effort that needs to be put into a particular task depends upon the complexity and extent of the risks involved. The greater the risks, the more effort is needed and vice versa. The following guidance sets out the key tasks under each of the roles.



the landowner role

If the landowner role falls to you, then you have the following key tasks:

- Co-ordinate the activities of the overall forest environment for health and safety.
- Gather information about hazards on and around forestry worksites and pass to the FWM.
- Ensure that the work on a particular worksite does not affect the health and safety of other people.

Task: Co-ordinate the activities of the overall forest environment for health and safety

As landowner you have the task of maintaining an overall view of what is happening on your forested land and on land which provides access to forested areas. When planning for forestry work on land under your control, try to organise the work so that risks are avoided from the outset. Ask yourself the following questions:

- What else will be happening in the forest at the time this work is scheduled?
- Can the work be timed to avoid public access peaks?
- What effect does the timing have on the ground conditions that contractors will have to deal with?
- How will plant and/or timber be moved on and off the site and how does that fit in with other vehicle movements in the forest?
- How will this work affect the health and safety of people working in or visiting the forest?
- Do I need to liaise with others for this project (eg individuals or communities affected by timber transport)?

Task: Gather information about hazards on and around forestry worksites and pass to the FWM

The FWM has to plan the work on the site. To do this properly they will need information from you about hazards on and around the site that could give rise to health and safety risks. This is probably best presented as a map. Look at the proposed worksite and the access to it and identify the location of hazards such as:

- routes or areas of public access;
- overhead power lines;
- underground utilities;
- areas of steep or particularly hazardous terrain (mine workings, cliff edges etc);
- areas of windblown or diseased trees.

You also need to specify the access roads to the site and provide information about the condition, gradients and carrying capacity of those roads and the carrying capacity of any bridges and culverts over which those roads pass. You will need to discuss with the FWM and the haulage contractor the appropriate vehicle configuration, the location of suitable turning points and a one-way system (if appropriate).

the landowner role



Task: Ensure that the work on a particular worksite does not affect the health and safety of other people

This task relies on you discussing and agreeing with the FWM for the particular site how, together, you are going to protect the health and safety of other people who may be affected by the work. This includes not only members of the public but also other workers in the forest such as your own employees, the employees of others (eg tenants) and other contractors. Areas you will need to explore with the FWM include:

- measures to control the risks on the site affecting others, eg:
 - the levels of training and supervision the FWM will require for workers on the site;
 - restrictions on weekend working;
 - the measures to control access to the site, eg:
 - providing information to the public at the entrances to the forest;
 - applying for temporary diversion/closure of public footpaths;
 - erecting warning and prohibition signs or barriers;
 - the use of banksmen when working near areas of public access;
 - directional routes for timber movement, diversions and weight restrictions, as well as restrictions on road use/diversions and waymarking of routes;
 - who will check the measures to ensure they are working;
 - what action to take if measures to protect members of the public are not working.
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the forestry work manager (FWM) role

If the FWM role falls to you, then you have the following key tasks:

- Use the information from the landowner to prepare an outline risk assessment for the work on the site and for the haulage of timber away from the site.
- Select competent contractors who have made adequate provision for health and safety.
- Specify the health and safety measures for contractors working on the site and others who may be affected by the work activity.
- Liaise with the landowner.
- Monitor health and safety on the site.

The FWM is the person who commissions work on the site. In the case of timber sales (standing, at stump or at the roadside) this role will fall to the purchaser of the timber. Where a landowner directly engages contractors, the landowner will take on the FWM role. As the FWM you need to select the right contractor for the job, specify the measures for the contractor to do the work safely and make sure those measures are followed during the work.

The range and depth of effort you need to put into the tasks in this role will depend on the size and resources of your business and your relationship with the contractor. For example, a landowner who is directly engaging a contractor for a one-off job (and so picks up the FWM role) should put particular effort into selecting a competent contractor who has made adequate provision for health and safety. They need to do this as, for a one-off job, it is not reasonable to expect them to obtain all the knowledge to specify the health and safety measures for the contractor.

However, large estates with their own forestry expertise, timber purchasers who use contractors as part of their business, or people who provide professional forestry management services are expected to know the standards to which contractors should work and should specify those standards.

Task: Use the information from the landowner to prepare an outline risk assessment for the work on the site

The decisions you take as the FWM have a fundamental bearing on health and safety on the worksite. A risk assessment² will guide those decisions by helping you establish:

- the equipment and materials (eg pesticides) suitable for the terrain and the work;
- the level of training and competences needed to work the site safely;
- the physical control measures and safe working practices to protect the health and safety of those working on the site or those who may be affected by work on the site;
- the arrangements for the movement of timber from the site, eg matching the type of vehicle to the road configuration and the effect of slopes on timber loading.

Wherever possible select equipment and systems of work that avoid risks from the outset, eg mechanical handling of timber to eliminate the risk of back injuries. When considering the merits of two different systems, look to see if one system is inherently safer than another, eg where suitable using a tree harvester instead of a chainsaw operator to clear windblown trees.

It is a good idea to write down your risk assessment so that you can pass it to others in the contract chain. This will help contractors see the standards they will have to meet. It will also help landowners see how the work on your site may affect others in the wider forest environment.

the forestry work manager (FWM) role



Task: Select competent contractors who have made adequate provision for health and safety

When selecting contractors you will be considering a number of factors (eg price, availability etc) and health and safety performance should be treated as equally important. Establish their competence in terms of forestry safety skills needed for the site and their ability to manage the health and safety of themselves and others. You may find some of the following questions useful when engaging new contractors or ensuring that your regular contractors are up to standard.

Forestry safety skills

- What experience have you had?
- What training have you had - where and when?
- Have you had any health and safety awareness or first-aid training?
- Do you hold any certificates (eg chainsaw certificates) relevant to your work on this site?
- Can you show me the AFAG leaflets for your work and the work of your subcontractors (see 'Further reading' section)?
- Can you supply references?
- Do haulage contractors and their drivers have experience of working in the forest environment?

Management skills

- What features will machines and vehicles need to access and work the site safely?
- What other tools and personal protective equipment will be needed on the site?
- How is your equipment maintained?
- How do you ensure that your subcontractors are competent?
- How do you prepare them for working safely on the site?
- Can you show me completed AFAG checklists for your work and the work of your subcontractors?

Your outline risk assessment will have already led you to decide upon some specific health and safety requirements that your contractors will have to meet, for example, certain levels of training for chainsaw operators on the site, particular standards of protection for machines on the site or certificates for pesticide application. Make sure the contractors you select can deliver what you want.

Task: Specify the health and safety measures for contractors working on and visiting the site

Once you have selected competent contractors who can meet your initial health and safety requirements, you will need to specify the health and safety measures for the site.

To do this, there needs to be an exchange of information between you and your contractors.



the forestry work manager (FWM) role

They will need information from you about the site (the site map and your risk assessment).

You will need information from them about how they are going to work the site safely. Where a contractor employs:

- five or more people, get them to provide you with the significant findings of their risk assessment in writing, for example, a method statement referring to relevant AFAG leaflets;
- less than five people, discuss with the contractor how the information about the site (the site map and your risk assessment) will affect the safe working practices (such as those set out in AFAG leaflets) for the site.

From these exchanges, agree with the contractor the appropriate control measures that need to be applied on the site, including the site safety rules to be observed.

Site safety rules should be relevant to the work on the site. Some rules will be common to many sites and operations, but these will need to be supplemented by others specific to a particular site or work on that site. They will usually need to cover:

- measures to protect public safety (eg signs, taping off areas);
- the risk zones in respect of machines and other hazardous work (eg tree felling);
- suitable personal protective equipment (PPE) to be worn generally and for specific work (eg using chainsaws or applying pesticides);
- systems of work to deal with specific dangers (eg hung-up trees, hazardous terrain, overhead power lines or windblow);
- lone working restrictions and communications (eg procedures for 'last person in the forest');
- measures to deal with emergencies (eg first-aid arrangements on the site and access by the emergency services);
- arrangements for vehicle recovery;
- reporting of incidents (eg accidents and near misses);³
- notifying changes to agreed systems of work;
- co-ordination of activities on the site and enforcement of the site safety rules.

Set the rules down in writing and make sure you provide enough copies for your contractors (including hauliers) and their subcontractors.

It is important that while the site is being worked there is someone who ensures that the agreed standards of health and safety are being met and can act as a point of contact for visiting contractors such as hauliers. Where there is a sole contractor for the site, the job of site safety co-ordinator will be theirs. Where there are a number of separate contractors engaged for the work, the job will be yours as the FWM.

Unless you are picking up both the FWM and contractor roles, it is unlikely that you will be on the site all of the time. When you have engaged more than one contractor, you need to appoint someone on the site as your deputy and tell them exactly what you expect them to do, for example, stopping any work which breaches the site safety rules. The person you select to be site safety co-ordinator should be someone with a good knowledge of health and safety practices in forestry. It is important that everyone working on and visiting the site understands that they are acting on your authority.

the forestry work manager (FWM) role



Task: Liaise with the landowner

You should now have an overall picture of exactly how the site is to be worked. At this point you need to pass to the landowner information that may affect the health and safety of others working in or using the forest and sort out any control measures that need their co-operation. Significant issues include:

- measures to control access to the site during the work;
- arrangements for reporting the failure of measures to protect the public and others;
- movement of plant and equipment on and off the site;
- movement of timber away from the site including the vehicle configuration;
- arrangements for dealing with hazards left on the site after the work has finished (eg timber stacks);
- arrangements for hauliers working on the site after the forestry work has finished.

Task: Monitor health and safety on the site

This is a very important task in managing health and safety. If you fail to monitor health and safety on the site, all your work on planning a safe working environment will be of little value. You must be prepared to look critically at what is happening on the worksite and take action when contractors fail to meet health and safety standards.

It is impossible to give precise guidance on how often you should check on your contractor's work. A critical check needs to be made at the start of work on the site. You should satisfy yourself that contractors are working safely and that the arrangements for co-ordination of activities on the site are effective. The frequency of further site visits will depend on your knowledge of the contractor, their experience of the type of work for which they have been engaged and the standards shown at your previous visits during this contract.

There may also be some areas of work on the site which may require you to make more frequent visits for a time, eg work near areas of public access or areas of greater risk such as windblown trees.

When visiting the site, lead by example - make sure you follow your own site rules. Be proactive in your approach - remind contractors of the safe working practices you have agreed. Learn from your monitoring - when things are not going as planned, discuss the problems with your contractor, put the job right and make sure you tell the right people (landowners, other contractors, hauliers) of any changes you have made.

Keeping records of your monitoring is a useful way of assessing the overall health and safety performance of contractors at the end of the contract and for future reference.

the contractor role

If the contractor role falls to you then you have the following key tasks:

- Work with the FWM to ensure health and safety standards are met.
- Select subcontractors who are competent and have made adequate provision for health and safety.
- Manage your subcontractors to promote good health and safety practices.

Contractors and their subcontractors are the people most at risk in forestry. Whether you are the sole contractor for the site or have been engaged to work alongside others, it is you and your workmates that will suffer because of poor health and safety standards.

Task: Work with the FWM to ensure health and safety standards are met

The FWM will specify certain health and safety conditions that you and your subcontractors will have to meet (eg levels of training, first-aid provision, protection on machines etc) and provide you with information about the site. In exchange, you will have to provide the FWM with information about how you are going to work on the site. Haulage arrangements can be diverse and you must consider the wider environment that may be affected by heavy traffic movements. It may be necessary to agree specific transport routes on public highways.

If you employ five or more people, provide the FWM with the significant findings of your risk assessment in writing, for example, a method statement referring to relevant AFAG leaflets.

If you employ less than five people, discuss with the FWM specific aspects of the site and how they affect safe working practices (such as those set out in AFAG leaflets and, for haulage, the *Road haulage of round timber Code of Practice*⁴).

These exchanges should help you and the FWM to agree on the appropriate control measures for the site including the site safety rules to be observed.

As the contractor you are expected to ensure that you and your subcontractors:

- meet the health and safety conditions specified by the FWM;
- apply the control measures agreed with the FWM; and
- work to the site safety rules.

If you are the sole contractor for the site you will take on the job of site safety co-ordinator. If you leave a site where subcontractors are working, appoint a deputy to be the site safety co-ordinator. Give them your authority to enforce the site safety rules.

Where you are engaged with other contractors, the FWM will appoint the site safety co-ordinator. Make sure you co-operate with the FWM's arrangements on the site.

Hauliers and others visiting the site should make contact with the site safety co-ordinator, be made aware of the site safety rules and follow those rules.

the contractor role



Task: Select subcontractors who are competent and have made adequate provision for health and safety

Just as the FWM has to select competent contractors, you have to select subcontractors who are competent and have made adequate provision for health and safety. Think about the following:

Chainsaw operators

- Have they got the right certificates of competence for the work?
- Do they know and practice safe procedures for taking down hung-up trees?
- Have they got the right felling aids to fell and handle timber safely
- Do they wear the correct chainsaw PPE and keep it in good order?

Sprayer operators

- Have they got the pesticide certificates for the equipment they are using?
- Is their equipment correctly designed for the job?
- Do they have the right PPE for the chemicals they are using?

Machine operators

- Have they got any evidence of their competence with their machine?
- What is their experience in relation to the work they are going to do on the site?
- How is their equipment maintained (guards, brakes, tyres, steering etc)?
- Is their equipment fitted with a well-maintained rollover protective structure (ROPS), falling object protective structure (FOPS) and operator protective structure (OPS) against penetrating objects?

Haulage contractors

- Have they got experience of working in the forest environment?
- Are they familiar with the *Road haulage of round timber Code of Practice*?
- Are drivers adequately trained and experienced in timber haulage?
- Are drivers trained in the use of loaders (if applicable)?
- Have they established emergency and lone worker procedures?
- Do they have procedures for vehicle recovery?

Task: Manage your subcontractors to promote good health and safety practices

You need to manage the work of your subcontractors on the site. Inform them of the working methods, control measures and safety rules that need to be observed. Arrange their work so they do not put each other or anyone else at risk. Check that they are working safely and complying with the site safety rules.

the subcontractor role

If the role of the subcontractor falls to you then you have the following key tasks:

- Co-operate with the arrangements for health and safety on the site.
- Manage your own health and safety.

This role does not involve any management of other people - it is a self-management role. It will fall to anyone who is engaged by a contractor other than by direct employment and anyone who works on or visits the site.

Task: Co-operate with the arrangements for health and safety on the site

It is vital that you co-operate with arrangements for health and safety on the site. There is a legal obligation on you to follow the instructions given by the contractor and abide by the site safety rules. Do not put yourself or others at risk by taking dangerous short cuts. Make sure that you tell your contractor or the site safety co-ordinator of any accident, near miss or change to the agreed system of work.

Drivers must follow specific routes and co-operate by reporting road defects as part of any road defect report schemes. They should familiarise themselves with the emergency, vehicle recovery and lone working procedures.

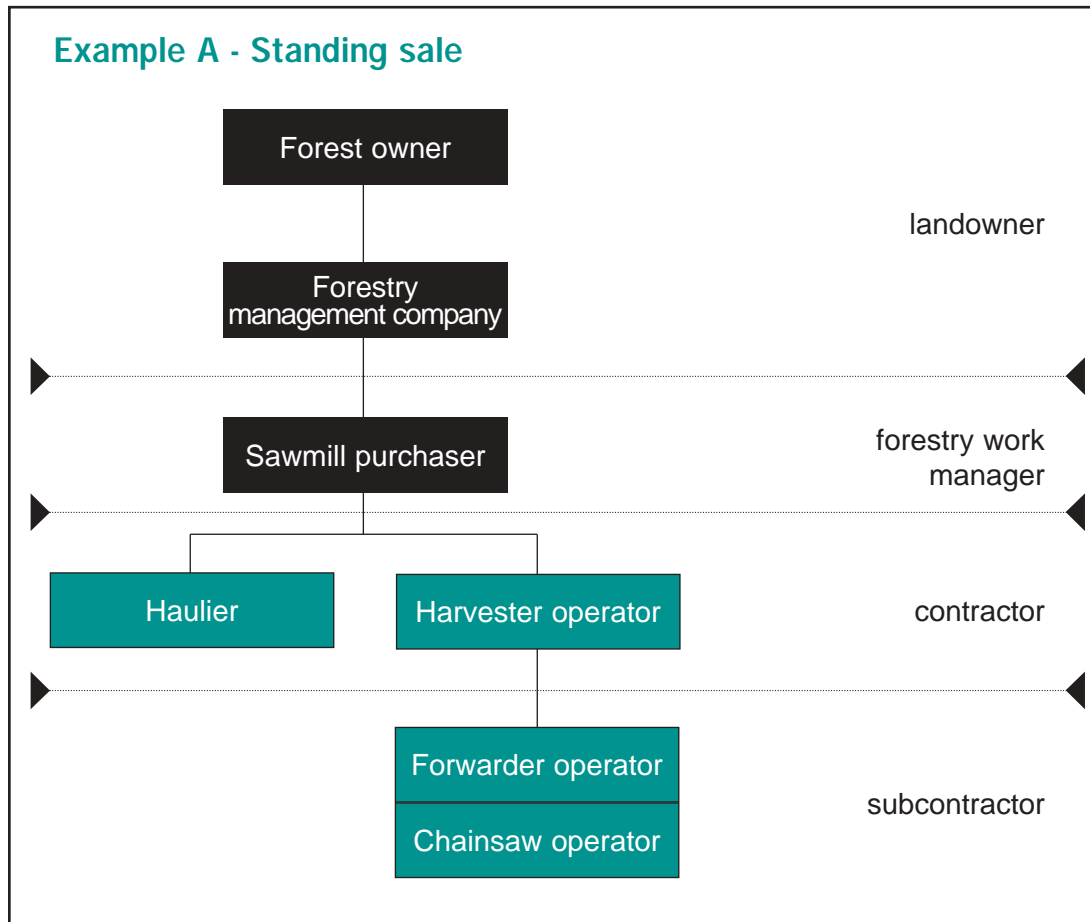
Task: Manage your own health and safety

Everyone who works on a forest site has a duty to meet the requirements of relevant health and safety legislation. Check that your machines have:

- proper guarding;
- suitable protection against rolling over (ROPS), falling branches and trees (FOPS), penetrating objects such as branches, breaking cables and chain shot (OPS);
- brakes, tyres, steering and other control systems that are in good working order;
- booms, grapples, cables, shackles, linkages and chokers designed and maintained to cope safely with the loads they have to deal with and that they comply with relevant statutory requirements for lifting equipment, eg the Lifting Operations and Lifting Equipment Regulations 1998.⁵

There is also a duty for you to wear and maintain the correct personal protective equipment specified by the site safety rules. Additional advice on these areas is in the 'Further reading' section.

appendix 1



Example A shows a standing sale. The owners use a forestry management company to manage their forests. The forestry management company put a stand of trees up for auction and it is bought by a sawmill. The sawmill puts out contracts for harvesting the site and haulage to the mill. The harvesting contract goes to a harvester operator who then subcontracts the extraction to a forwarder operator and the brashing to a chainsaw operator. The haulage contract goes to a local contractor.

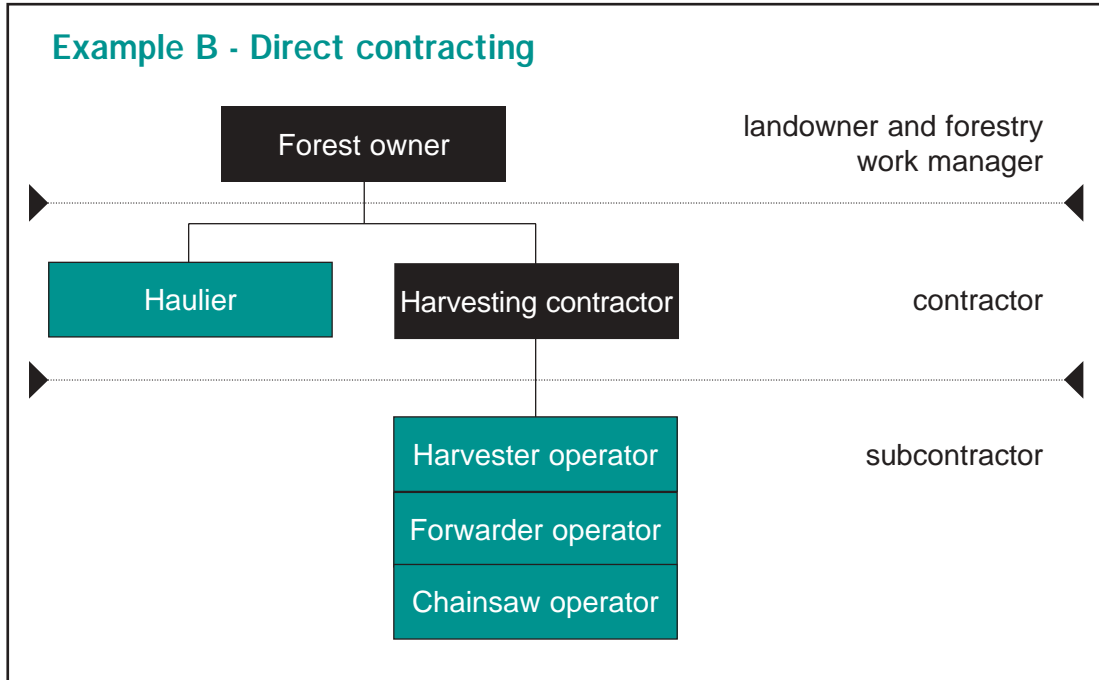
Your business and your relationship to others in the contract chain determines your role. In this case:

- the forest owner (through their agent) is growing timber for sale (landowner);
- the sawmill purchases the timber and commissions the harvesting and haulage (FWM);
- the harvester operator is harvesting the timber under contract and subcontracting the extraction and brashing (contractor);
- the haulier transports timber under contract to the sawmill with no subcontracting (contractor);
- the forwarder operator is extracting timber for the harvester operator (subcontractor);
- the chainsaw operator is brashing the trees for the harvester operator (subcontractor).

Those highlighted in green are working on the site. Anyone working on the site, no matter what other roles they have, will automatically pick up the subcontractor role.



appendix 1



Example B shows how the roles are set out under direct contracting. The forest owner puts out the contracts for the work. Here the forest owner picks up both the landowner role (as the controller of the land) and FWM role (as the person who commissions work on a forestry site).

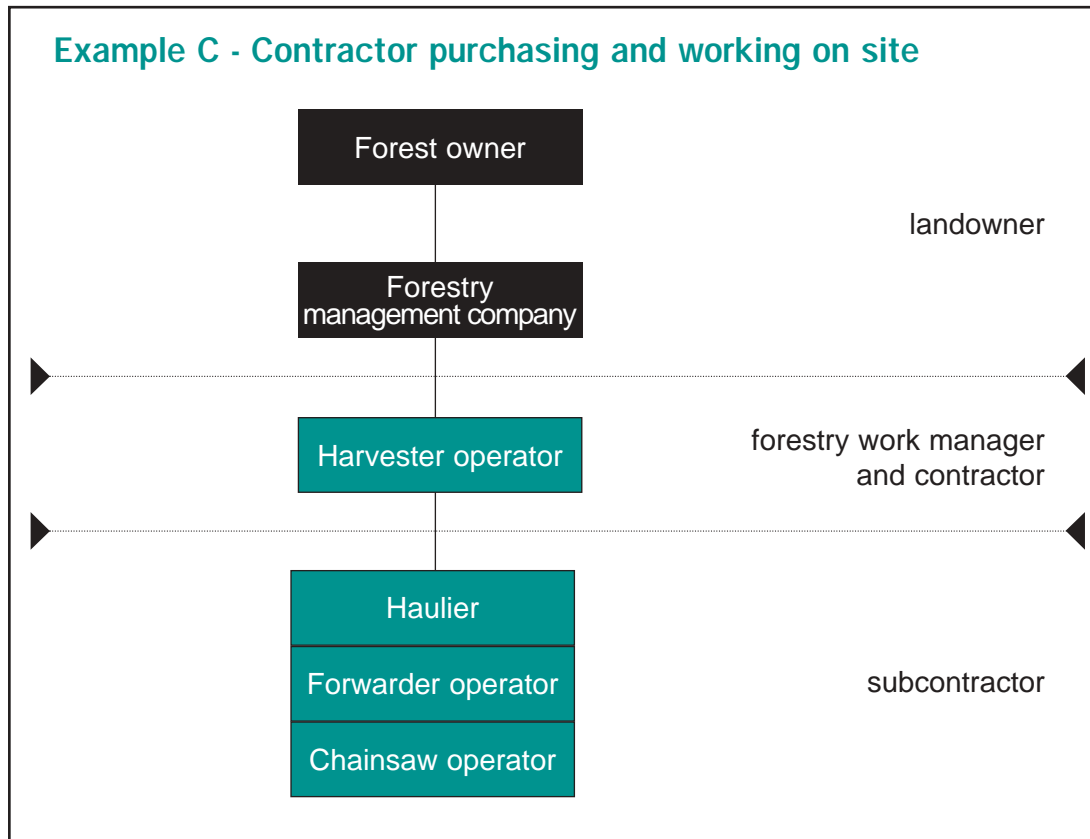
When picking up both roles, the forest owner will need to integrate the tasks of each role.

The harvesting contractor who won the contract has subcontracted out all the work and is not actually working on the site, so retains the contractor role but does not pick up the subcontractor role.

The haulier is working on site, so will pick up both the contractor and subcontractor roles.

The harvester operator, forwarder operator and chainsaw operator are all subcontracted by the harvesting contractor and will pick up the subcontractor role.

appendix 1

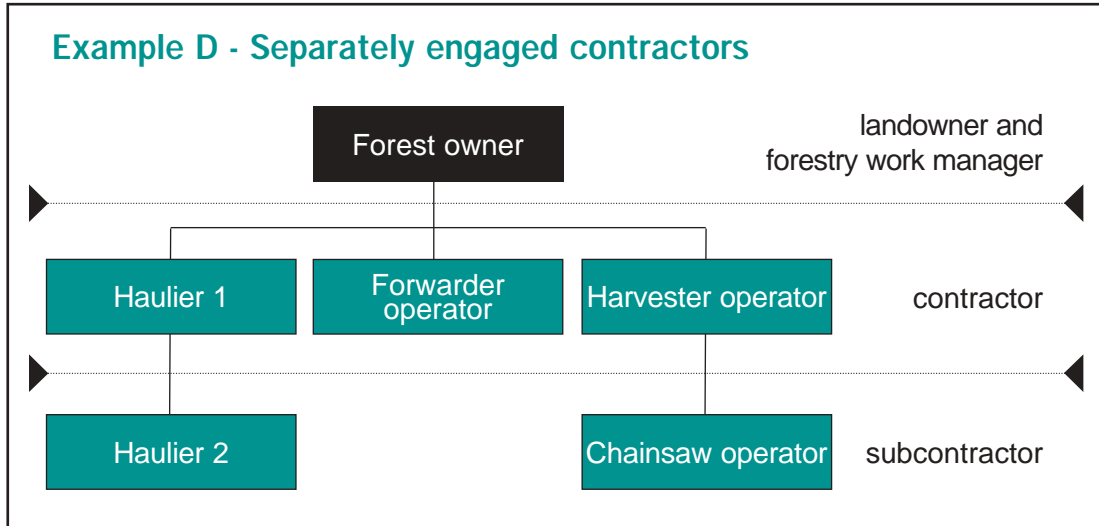


Example C shows another standing sale. As in Example A, the owner uses a forestry management company to manage their forests. The timber is bought by a local contractor who operates a tree harvester. The local contractor subcontracts the rest of the work on the site to other local operators.

In this instance the local contractor commissions the work on the site and provides a forestry service, so picks up both the FWM and contractor roles. As the local contractor is also working on the site, they pick up the subcontractor role, giving a total of three roles they need to satisfy.

Examples A, B, C and D show how a person (or a business) can pick up more than one role at any one site.

appendix 1



Example D shows another direct contract. As in Example B the forest owner will pick up the landowner and FWM roles. However, this time the forest owner has engaged the haulier, forwarder operator and harvester operator on separate contracts. The haulier has subcontracted some of the work to a friend. The harvester operator has subcontracted the brashing to a chainsaw operator.

All the contractors will pick up the subcontractor role as they are all working on the site.

The forest owner as the FWM will be responsible for appointing one of the contractors as a site safety co-ordinator to enforce the site rules when the FWM is not on site.

Where there is a single contractor for the site (see Example C) they will be the site safety co-ordinator. If they leave the site then they should appoint a deputy to be the co-ordinator in their absence.

On all sites, someone must always be charged with ensuring that the site safety rules are being followed.

references and further reading



References

- 1 *Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice L21* HSE Books 2000 ISBN 0 7176 2488 9
- 2 *Five steps to risk assessment* Leaflet INDG163(rev1) HSE Books 1998 (single copy free or priced packs of 10 ISBN 0 7176 1565 0)
- 3 *RIDDOR explained: Reporting of Injuries, Diseases and Dangerous Occurrences Regulations* Leaflet HSE31(rev1) HSE Books 1999 (single copy free or priced packs of 10 ISBN 0 7176 2441 2)
- 4 *Road haulage of round timber Code of Practice* Third edition 2003 (Available free from Forest Industries Development Council, 53 George Street, Edinburgh EH2 2HT Tel: 0131 220 9290 or download it from www.fidc.org.uk/timber_transport or www.ukfpa.co.uk)
- 5 *Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice and guidance L113* HSE Books 1998 ISBN 0 7176 1628 2

Further reading

Farm and estate forestry operations Leaflet AS15(rev) HSE Books 1996
Power take-off and power take-off drive shafts Leaflet AS24(rev) HSE Books 1996
PUWER 98: How the regulations apply to agriculture and forestry Agriculture Information Sheet AIS27 HSE Books 1998
LOLER: How the regulations apply to forestry Agriculture Information Sheet AIS29 HSE Books 1998
LOLER: How the regulations apply to arboriculture Agriculture Information Sheet AIS30 HSE Books 1998
Watch your back: Avoiding back strain in timber handling and chainsaw work Leaflet INDG145 HSE Books 1993 (single copy free)
Working alone in safety: Controlling the risks of solitary work Leaflet INDG73(rev) HSE Books 1998 (single copy free or priced packs of 15 ISBN 0 7176 1507 3)
A short guide to the Personal Protective Equipment at Work Regulations 1992 Leaflet INDG174 HSE Books 1995 (single copy free or priced packs of 10 ISBN 0 7176 0889 1)
Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance L22 (Second edition) HSE Books 1998 ISBN 0 7176 1626 6

AFAG leaflets

HSE's Arboriculture and Forestry Advisory Group (AFAG) has produced a comprehensive set of leaflets on safe working practices for forestry and arboricultural operations. (These replace the old FASTCo safety guides which are no longer available.) Members of the group are from across the forestry and arboriculture industry, with representatives from major industry bodies and organisations.

Single free copies of the leaflets are available from HSE Books. They are also available in priced packs of 15 or can be printed direct from HSE's website at www.hse.gov.uk/pubns/forindex.htm.

Managing public safety on harvesting sites (formerly a FASTCo priced publication) is now available from HSE Books, ISBN 0 7176 2671 1



further information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995 Website: www.hsebooks.co.uk (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: www.hse.gov.uk.)

For information about health and safety ring HSE's Infoline Tel: 08701 545500 Fax: 02920 859260 e-mail: hseinformationservices@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

This leaflet is available in priced packs of 5 from HSE Books, ISBN 0 7176 2717 9. Single free copies are also available from HSE Books.

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