

A green-tinted photograph of a logging machine in a forest. The machine is positioned in the lower-left foreground, with its tracks and mechanical components visible. A large log is being processed by the machine. The background is filled with tall, thin trees, creating a dense forest scene. A central text box with a black border contains the title and subtitle in white text.

CODE OF PRACTICE FOR

TIMBER HARVESTING

IN WESTERN AUSTRALIA

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April 1997

P R E F A C E

Occupational safety and health in the forest industry is a high priority for the Department of Conservation and Land Management (CALM). Accordingly, the Department has revised the Code of Practice for Harvesting (the Code) previously published with the Manual of Harvesting Specifications in the 1996 edition of "Timber Harvesting in WA".

The Manual of Harvesting Specifications (the Manual) is also being revised, but this Code has been issued as a separate document in the interim to ensure that improved safety procedures can be implemented without delay. Once the Manual has been updated, it and the Code will be incorporated in a new edition of "Timber Harvesting in WA".

The Code is a concise set of practice instructions for the conduct of timber harvesting operations on State forest and other Crown lands managed by CALM. The Code also applies to operations on any private property within those regions where CALM is responsible for managing timber harvesting operations.

Breaches of the Code are breaches of the appropriate Harvesting Contract or Forest Produce Licence. The Code and other policy documents referred to therein may be amended from time to time, as improvements to procedures are identified. Amendments will apply as dated and their effect on Harvesting Contracts will be taken into account by CALM.

The Code of Practice for Timber Harvesting in Western Australia is distributed to all CALM regional and district offices in the south-west, to all Forest Officers involved in timber harvesting and to all CALM harvesting contractors. Members of the public may purchase the Code at \$10 per copy.

The amendments to the Code published in this document now apply.



SYD SHEA
EXECUTIVE DIRECTOR

April 1997

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1

General

1: General

- 1.1 The practice instructions of this Code shall be observed by all contractors participating in any timber harvesting operation on land managed by the Department of Conservation and Land Management. If any such person breaches this Code, such a breach may be regarded as grounds for the Forest Officer in Charge raising objection to the continued employment of that person in the forest. In addition it may be regarded as a breach of the contract or licence.
- 1.2 (a) A contractor shall comply in all respects with the provisions of the Occupational Safety and Health Act 1984 (the OSH Act) and all provisions of this Code of Practice for Timber Harvesting, interim guidelines concerning in-forest hazards and all Acts and regulations of the State of Western Australia applicable to the contractor's operations under his contract for service to CALM.
- (b) In relation to the OSH Act the contractor shall ensure as far as practicable, that the workplace is free of hazards by:
 - (i) the provision and maintenance of appropriate workplaces, plant and systems of work;
 - (ii) the provision of appropriate information, instruction, training to and supervision of employees;
 - (iii) consulting and co-operating with health and safety representatives and committees where appropriate; and
 - (iv) provision of adequate and protective clothing and equipment in accordance with the Safety Code.
- 1.3 Under Part 2 of the Regulations, only persons in possession of a current Timber Workers Certificate of Registration may be employed in timber harvesting and transport of forest produce. One-off Forest Produce Licence holders are exempt from this requirement.
- 1.4 Within 48 hours of the commencement of an operation the contractor shall advise the FOIC either verbally or by notice in writing, the name and address of any employee who is engaged by the contractor in cutting and/or removal of forest produce or who for any reason ceases to be engaged by the contractor in cutting and/or removal of forest produce.
- 1.5 The FOIC reserves the right to limit or otherwise control the hours of work and days of work of all personnel working in the forest. A contractor will take due note of any instruction from the FOIC in this regard and such instruction will be deemed to apply until revoked and will apply equally to the contractor and any of his employees.
- 1.6 Responsibility for exercising strict supervision and control over the operations of all workers employed by the contractor resides with the contractor.

- 1.7 In particular, the contractor is responsible for:
- (a) preventing any breach of the Conservation and Land Management Act and Regulations, the TIR Act and Regulations, this Code of Practice and the Safety Code;
 - (b) preventing damage to other standing timber during timber harvesting and delivery operations in accordance with current silvicultural prescriptions;
 - (c) ensuring the provisions of the OSH Act are, at all times, complied with by the contractor or any person employed or engaged by the contractor to carry out or assist in carrying out the work.
- 1.8 All operations carried out by, or on behalf of, a contractor in forest areas shall be carried out as directed by the FOIC. **Any monetary penalties for breaches of this Code or for damage to or waste of timber in breach of the instructions of this Code will be deducted from any money due to the contractor, or failing that from the contractor's deposit.**
- 1.9 A contractor and all persons authorised by him, in carrying out all aspects of an operation, shall follow and use only such paths, tracks and roads in the forest areas as may be indicated to him by the FOIC.
- 1.10 A contractor shall not cut through, break down or otherwise interfere with any fencing or other improvements erected upon or adjacent to the forest areas.
- 1.11 A contractor shall keep closed all gates used and shall take all necessary action to prevent the ingress or egress of stock into or from any forest areas enclosed by fences which may have been damaged as a result of his harvesting operations.
- 1.12 A contractor must ensure that all major roads as nominated by the FOIC are left open at the cessation of work each day, or if required, during the day, to allow access for fire control and administrative purposes. All other roads and tracks in a coupe or sub-coupe may be blocked in the course of harvesting operations but access must be restored to the satisfaction of the FOIC upon completion of harvesting.
- 1.13 A contractor shall at his own expense and without delay make good any damage to fences, telephone lines or other improvements, resulting directly or indirectly from his operations.
- 1.14 When directed by the FOIC a contractor may fell, cut and remove forest produce, on areas of State forest or other Crown land controlled by the Department subject to pastoral or other lease or holding, provided always that the authority hereby given shall not relieve or be deemed to relieve the contractor from liability to lessees or holders in respect of any actionable damage caused by the contractor upon such pastoral or other leases.

GENERAL

- 1.15 A contractor is expected to have his work area in a tidy and workmanlike condition at all times but particularly when leaving the area. If a subsequent clean-up is required the work will be done at the contractor's expense.
- 1.16 A contractor shall dispose of all litter, food scraps, refuse, unserviceable equipment or machinery, or other debris resulting from his operations in the forest areas at such place and in such manner and time as the FOIC shall direct. The discharge of used engine oil onto the ground in any forest area is not permitted. If a subsequent clean-up is required the work will be done at the contractor's expense.
- 1.17 A contractor shall observe any instruction by the FOIC and comply with any procedures laid down to restrict the spread of dieback disease.

2 Felling, trimming and crosscutting

2: Felling, trimming and crosscutting

- 2.1 All fellers employed by the contractor must hold a current feller's identification code under the provisions of Part 4 of the Regulations.
- 2.2 A contractor is required to confine his felling activity to certain coupes, sub-coupes and/or fellers' blocks within the cutting areas. These areas must be felled to the satisfaction of the FOIC before further areas will be made available for felling.
- 2.3 Marking of trees:
 - (a) Trees to be retained will be marked or otherwise indicated by a person authorised by the Executive Director. All other trees in the coupe are to be felled if in the opinion of the FOIC they contain a log product designated as such under the conditions of the contract.
 - (b) A contractor shall not fell, damage or utilise any tree marked for retention.
 - (c) If a contractor wishes to remove a marked tree to assist his operation, eg to widen vehicle tracks or extend landings, he shall refer the matter to the FOIC for decision.
 - (d) Nothing in (a), (b) and (c) above limits the felling of a tree for the purposes of Regulation 20 of the Regulations.
- 2.4 A contractor shall incur penalties at rates determined by the Executive Director for any wood contained in any trees felled by him in breach of Clause 2.3. Any penalties will be charged under Clause 1.8 of this Code. Such trees shall remain the property of the Department.
- 2.5 All trees felled must be utilised to the satisfaction of the FOIC.
- 2.6 Trees shall be felled so that the stump height balances the need for maximum safety and utilisation.
- 2.7 All felling, trimming and crosscutting is to be carried out without damage to retained standing trees.

Where standing trees are damaged by him, a contractor shall be liable for such damage at rates determined by the Executive Director. Any penalties will be charged under Clause 1.8 of this Code. Such damaged trees shall remain the property of the Department.
- 2.8 All logs shall be trimmed to remove all limbs flush with the log including epicormic twigs and branches with foliage attached.

- 2.9 All felling, trimming and crosscutting shall be carried out to ensure maximum log utilisation to current log specifications as laid down by the Executive Director. Where in the opinion of an FOIC log preparation results in excessive waste, a contractor shall be liable for payment for such waste at rates determined by the Executive Director.
- 2.10 A contractor shall be liable to pay the Department for all wood not cut in accordance with Clauses 2.5, 2.6 and 2.9 at rates determined by the Executive Director.
- 2.11 Trees which have been scarfed or part-scarfed shall not be left standing. If this is not possible, eg because of a mechanical breakdown, the harvesting supervisor on the site and/or a Forest Officer must be informed immediately. Arrangements must then be made to fell the tree at the earliest possible opportunity.
- 2.12 "Hangups" shall be dislodged and cut-off tops shall not be left leaning against standing trees.
- 2.13 The tops and branches of any trees felled by the contractor which fall close to retained crop trees shall be cleared away from the crop trees into open spaces to the satisfaction of the FOIC.
- 2.14 All tops, slash and other debris generated by the operation shall be cleared from roads, firebreaks, creeks, landings and harvesting tracks as directed by the FOIC.

3 Extraction

3: Extraction

- 3.1 The FOIC may determine the priority of extraction of produce from time to time. A contractor shall comply with the FOIC's expressed priority of extraction. This priority may be expressed as type of log, point of removal, dieback hygiene requirements, and/or deadline for delivery.
- 3.2 A contractor is required to confine his extraction activity to certain coupes, sub-coupes and/or fellers' blocks within the cutting areas. These defined areas must be extracted to the satisfaction of the FOIC before further areas will be made available for extraction. Extraction in these cases may include associated erosion control work.
- 3.3 If a contractor wishes to construct temporary extraction tracks within the forest areas, the location of such tracks shall be approved by the FOIC before construction and all tracks shall be constructed to the satisfaction of the FOIC and at the contractor's expense.
- 3.4 All extraction is to be carried out without damage to retained standing trees. Where standing trees are damaged by him a contractor shall be liable for such damage at rates determined by the Executive Director. Any penalties will be charged under Clause 1.8 of this Code. Such damaged trees shall remain the property of the Department.
- 3.5 In the interests of dieback hygiene, extraction may be restricted or prohibited under Section 6.
- 3.6 The FOIC may at his discretion prohibit all extraction or particular methods of extraction or particular items of equipment used for extraction, at such times and places as in his opinion are causing, or are likely to cause, excessive soil damage or excessive crop tree damage. A contractor shall not carry on extraction at such times or such places, or by methods or equipment which the FOIC has prohibited, until such prohibition has been revoked by the FOIC.
- 3.7 At the completion of extraction or during temporary cessation of extraction, erosion control work must be completed. All extraction tracks and temporary roads subject to erosion will have cross drains installed as prescribed by the FOIC.

4

Roading

4: Roading

- 4.1 Unless otherwise decided the location, construction and maintenance standard of all timber harvesting roads shall be as determined and directed by the FOIC.
- 4.2 Unless otherwise indicated by Act of Parliament or by the Executive Director, all roads constructed on State forest or other Crown land controlled by the Department, shall be deemed to be Departmental roads, irrespective of the organisation responsible for the cost of construction and maintenance of such roads.
- 4.3 Any contractor involved in road construction and/or maintenance shall observe any instruction and comply with any procedures laid down to restrict the spread of dieback disease (see Section 6).

5 Loading and delivery

5: Loading and delivery

- 5.1 The contractor shall, so far as practicable, make suitable arrangements for ensuring the handling, loading, transportation and delivery at the workplace is carried out in a manner such that his employees, or any person employed or engaged by the contractor to carry out or assist in carrying out the work, does so in a manner such that those persons are not exposed to hazards.
- 5.2 The FOIC may determine the priority of loading and delivery of produce from time to time. A contractor shall comply with the FOIC's expressed priority of loading. This priority may be expressed in type of log, point of removal, dieback hygiene requirements and/or deadline for delivery.
- 5.3 The Department, at all times, maintains control of access to and egress from the workplace on Departmental roads. This control extends to the use of sealed and unsealed roads.
- 5.4 A contractor is required to confine his loading and delivery activity to certain coupes, sub-coupes and/or fellers' blocks within the cutting area. Produce from these areas must be loaded and delivered to the satisfaction of the FOIC before further areas will be made available for loading and delivery. Loading and delivery in these cases may include associated log landing rehabilitation work.
- 5.5 Access to the loading points within the forest areas may be restricted by the FOIC at any time by:
 - (a) nomination of the route to be followed by loaded and empty trucks when entering and travelling through areas controlled by the Department;
 - (b) nomination of hours of any day during which work may be carried out;
 - (c) nomination of the days of the week during which work may be carried out; and
 - (d) suspension of delivery because of disease control requirements, road conditions and/or weather conditions.
- 5.6 Loading and delivery of logs and timber shall be carried out with a minimum of damage to standing trees. Where standing trees are damaged by him a contractor shall be liable for such damage at rates determined by the Executive Director. Any penalties will be charged under Clause 1.8 of this Code. Such damaged trees shall remain the property of the Department.
- 5.7 A contractor shall observe any instruction and comply with any procedures laid down to restrict the spread of dieback disease (see Section 6).

- 5.8 The FOIC may at his discretion prohibit loading and delivery or particular methods of loading and delivery at such times and places as in his opinion are causing, or are likely to cause, excessive soil damage, excessive crop tree damage and/or excessive road damage. A contractor shall not carry on loading and delivery at such times or places, or by methods or equipment which the FOIC has prohibited under this subsection, until such prohibition has been revoked by the FOIC.
- 5.9 Truck drivers are responsible for the safe loading of their trucks in regard to overloading, overwidth and height, overlength and load security and are responsible for the loss of a load or part thereof.
- 5.10 Protruding limbs, loose bark or trailing debris of any kind on trucks are not permitted and must be removed by the driver before leaving the loading point or immediately when noticed "en route".
- 5.11 The driver should stop and check the safety of the load at least once while travelling to his destination. The driver must stop and check the safety of the load at least once if a major public road is part of the haul route.
- 5.12 The loss of any log or logs from a load during hauling must be recovered promptly by the contractor and any cost incurred in the recovery is the responsibility of the contractor.
- 5.13 Speed limits as laid down by the Police Department will apply on both public and forest roads. The Executive Director reserves the right to introduce lower speed limits on any or all forest roads in the interests of greater safety of operation or to lessen damage to the road. All speed limits must be adhered to.
- 5.14 Where drivers come under notice of a Forest Officer for speeding on forest roads, or are persistent offenders, the provisions of Clause 1.1 of this Code may be invoked.
- 5.15 The FOIC and/or Inspector under the Timber Industry Regulation or Occupational Health Safety and Welfare Acts may require a contractor to provide and install suitable signs on Departmental roads to warn road users of the presence of log hauling trucks (see also Clause 5.16).
- 5.16 Any traffic control signs required to be displayed by the contractor shall conform with the standard for traffic control signs laid down by Main Roads Department of WA (MRWA).
- 5.17 On dusty roads, drivers are to keep a suitable distance apart to allow other traffic and road repair crews better visibility.

SECTION

5.18 Standard double-sided reflective warning triangles shall be carried by all haulage vehicles and shall be displayed, if a vehicle breaks down, as follows:

- (a) one triangle 100-150 metres in front of the vehicle and 1.5 metres out from the road edge on the same side as the vehicle;
- (b) as for (a) but to the rear of the vehicle;
- (c) one triangle alongside the mid point of the vehicle on the side nearest the centre of the road.

5.19 When haulage takes place on privately maintained roads, any road user regulations or road maintenance charges in force for such roads must be adhered to strictly.

6 Environmental protection

SECTION

6: Environmental protection

Dieback disease

- 6.1 The most important principle regarding dieback disease in relation to timber harvesting is the need to minimise the risk of soil being transported from areas infested with the dieback pathogen to areas free of dieback.

The necessary timber harvesting procedures required to maintain this principle involve all or any of :

- (a) the complete separation in time of the extraction and loading phases of harvesting;
 - (b) the use of stationary (heel-boom) loaders;
 - (c) the use of a physical barrier at the front and/or rear of landings to separate the extraction and loading components of timber harvesting;
 - (d) the cleaning down of all timber harvesting machinery before movement between coupes.
- 6.2 Within areas free of dieback, movement of soil during extraction may be permitted subject to:
- (a) Clause 6.1 above;
 - (b) the dieback hygiene requirements contained in Specification 5.1 of the Manual of Harvesting Specifications; and
 - (c) the soil protection requirements contained in Specification 5.2 of the Manual of Harvesting Specifications.
- 6.3 A contractor will comply with instructions from a Forest Officer concerning inspections and cleaning down of machinery or equipment. During dry soil conditions cleaning down equipment is either an air compressor with hoses of adequate length and appropriate nozzles, or an acceptable alternative to remove soil from machinery. During moist soil conditions a portable pumper unit and a portable washdown ramp constructed to the specifications approved by the FOIC may be required. Water used for cleaning down may need to be treated with chemicals as specified by a Forest Officer.
- 6.4 To restrict the spread of dieback a contractor shall observe any instruction applying to the movement of light vehicles, timber harvesting equipment, road haulage equipment, road construction equipment and the winning and carting of road materials, such as gravel and shale.
- 6.5 The Executive Director may require that all or some of the employees of a contractor working in the forest areas be trained to a level of competence in dieback hygiene acceptable to a Forest Officer.

Fire - all forest areas

- 6.6 Particular attention must be paid to the Sections of the Conservation and Land Management Act and the Bush Fires Act and to regulations made under those Acts for the purpose of controlling fires. In particular all vehicles and equipment used by a contractor must be equipped to meet the fire prevention requirements of those Acts.
- 6.7 No fires are to be lit in any forest area without the express permission of a Forest Officer.
- 6.8 A Forest Officer may exempt a contractor and his employees from the requirements of Clause 6.7 when in the opinion of the Forest Officer weather conditions allow. This could normally be expected in winter.
- 6.9 A contractor shall take all necessary precaution to prevent the occurrence or spread of fire in any forest area. A contractor shall be liable to the Executive Director for suppression costs and damage caused within the said areas or on any State forest, timber reserve or Crown land by any fire on, or extending from, the said area unless the contractor can prove to the satisfaction of the Executive Director that such fire or fires, without any act or omission on the part of the contractor, originated outside the said area and/or arose through some cause beyond his control.
- 6.10 A contractor and all his employees shall co-operate with officers of the Department in preventing and suppressing bushfires and shall, when called upon by a Forest Officer, act under his instructions in fire fighting or preventing outbreaks of fire.
- 6.11 A contractor shall not use or permit the use of any chainsaw or other internal combustion engine in any forest area unless the engine is fitted with an exhaust system of a type and design approved by the Executive Director. The exhaust system must be inspected regularly by the contractor to ensure that its efficiency is maintained. Spark arresters of a YUBA or equivalent type must be fitted to all petrol and diesel engines other than turbo charged diesels.
- 6.12 Every timber harvesting machine involved in felling, extraction or loading must carry a suitable fire extinguisher (Bush Fires Reg 37).
- 6.13 The contractor shall keep all timber harvesting machines free of accumulated combustible material, particularly the spaces between the engine and engine guards.
- 6.14 The contractor may establish in any forest area not more than one dump of fuel per harvesting unit on a site and of a size approved by the FOIC. The ground around such dump shall at all times be clear of all vegetation or inflammable debris for a distance of not less than six metres.
- 6.15 Smoking shall not be permitted within six metres of the closest point of a fuel dump.

SECTION

- 6.16 A Forest Officer may prohibit any or all types of timber harvesting operations at such times and for such periods as is necessary when in the Officer's opinion such action is warranted by the Department's fire danger ratings.
- 6.17 If a Large Fire Organisation is declared in a Departmental administrative region, any or all timber harvesting operations in that region may, at the direction of the FOIC, be suspended for the whole or part of the duration of that Large Fire Organisation.
- 6.18 If a fire starts in a contractor's work site, the contractor's crew must immediately endeavour to suppress the fire with their own equipment under the leadership of the timber harvesting supervisor. As soon as a Forest Officer arrives at the fire, the contractor's crew must work under the direction of that Officer. The whole of the contractor's manpower will continue to operate under the Department's control until relieved or until the fire is declared safe by the senior Departmental Forest Officer directing the fire suppression operation. Costs incurred by the contractor must be borne by the contractor.
- 6.19 If a fire starts outside a contractor's work site but within the forest area the provisions of Clause 6.18 will apply. However, if in the opinion of the FOIC the fire was not caused by or did not arise from any negligent act or omission or any want of co-operation on the part of the contractor or any of his employees, the costs incurred by the contractor in fighting the fire will be borne by the Department. Certification for payment will be by the senior Departmental Forest Officer directing the operation. In the event of dispute, the Executive Director's decision will be final.
- 6.20 A contractor and his crew(s) working within a forest area will not normally be called on to fight fires outside the forest area, but if this is necessary, the provisions of the Conservation and Land Management Act and the Bush Fires Act will apply.
- 6.21 A contractor will at all times, at the contractor's own expense provide on-site and maintain in good working order to the satisfaction of the FOIC, firefighting hand tools and equipment complying with the current Department specifications on the following basis:
- (a) For every five men or part thereof employed in the forest area (excluding personnel engaged solely in log delivery operations):-
 - 1 chainsaw
 - 2 knapsack sprays with water
 - 2 squared off round mouth shovels
 - 1 rake hoe

Knapsack sprays and chainsaws provided as part of the normal equipment for fellers under the Code will be considered as equipment for this purpose.
 - (b) One fire suppression unit for each group of ten workers employed on the contract at any one forest area worksite (excluding personnel engaged solely in log delivery operations) with a minimum of one unit on each worksite.

This fire suppression unit will be of a standard acceptable to the FOIC, and should be similar to the standard 450 litre patrol unit currently used by the Department.

The unit will be either the “slip-on” type mounted on its own prime mover, or mounted on a trailer which must be capable of being towed by the contractor’s **onsite** machinery.

(c) The contractor will at all times and at his own expense maintain each of the fire suppression units specified in Clause 6.21(b) to an operational standard acceptable to the FOIC. If in the opinion of the FOIC the condition of a unit makes it unsuitable for fire suppression the FOIC may either:

- (i) suspend operations until the unit is repaired to his satisfaction; **or**
- (ii) arrange the repair of the unit to his satisfaction and the supply of a replacement unit all at the contractor’s expense until such time as the contractor’s own unit is passed as suitable.

6.22 The Executive Director will accept no liability for the loss or damage by fire, however started, of any equipment or property owned or operated by a contractor or any of his employees.

6.23 A contractor must ensure that all of his bush employees receive basic fire awareness training. The minimum standard acceptable to CALM is a pass and demonstrated competence in the following three modules of CALM’s Basic Fire Fighter’s course:

- Basic fire safety
- Hand tools and knapsack sprays
- Fighting fire with water

The responsibility for providing basic fire awareness training lies with the contractor, although CALM will provide written training material at no cost. The contractor is also required, under duty of care principles, to keep records of such training provided to his bush employees.

6.24 A contractor will ensure that up to 50 per cent of his bush employees, as required by the Department, are made available for training in fire control, in order to supplement the Department’s fire control forces. The nominated contractor employees will be required to attend training for up to six days in the first year to become qualified - three days of theory training and three days of practical training. In subsequent years, training will involve three days of practical training each year to maintain qualifications. A contractor is required to make the nominated employees available for training at his expense, at times and places as agreed to by the contractor and the FOIC.

The responsibility for providing fire control training lies with CALM. This means CALM will provide staff, written material and sites for fire control training at no cost to a contractor and in reasonable proximity to a contractor’s work sites.

SECTION

Fire - pine plantations

- 6.25 Smoking is prohibited in all pine plantations except where the ground has been cleared of all vegetation or inflammable material. Butts and spent matches must be deposited on bare mineral soil and buried. A Forest Officer may exempt a contractor from this requirement when, in the opinion of the Forest Officer, weather conditions allow. This could normally be expected in winter.
- 6.26 All chainsaw operators working in pine plantations must have in their immediate work area a pack spray of a type, size and colour approved by a Forest Officer. "Immediate work area" is defined as the area within 150 metres distance of feller activity. The pack spray must always be full of water and be in good working order.
- 6.27 The fuelling of chainsaws, vehicles or other powered equipment or the mixing of fuel shall not be carried out in pine plantations except on firebreaks, tracks or roads where the ground is clear of all vegetation or inflammable material for a distance of not less than 1.5 metres around the fuelling position.
- 6.28 A contractor shall not start or permit to be started any chainsaw immediately after fuelling until the chainsaw has been wiped to remove any spillage and has been moved clear of the place at which the fuelling was carried out.
- 6.29 Where chainsaws and harvesting machines are being used in the pine plantation a contractor shall ensure **either**:
 - (a) that no chainsaw or timber harvesting machine is used for at least 60 minutes prior to the operator leaving the work area and that immediately before leaving the pine plantation the operator inspects the area covered by the last two hours of chainsawing or timber harvesting machine activity; **or**
 - (b) that a patrol or inspection of **each** area fallen or worked over by machines in the last two hours of each working day is made, not less than one hour and not more than two hours after the chainsawing or timber harvesting activity has ceased. This inspection must be made by some responsible person nominated by the contractor and approved by a Forest Officer, **and**
 - (c) when timber harvesting activity ceases, all timber harvesting machinery must be parked on a site cleared to mineral earth and approved by a Forest Officer.

A Forest Officer may exempt a contractor from these requirements when in the opinion of the Forest Officer weather conditions allow. This could normally be expected in winter.

Soil

- 6.30 The FOIC may at his discretion prohibit all felling, extraction, loading and hauling or particular methods or equipment used for felling, extraction, loading and hauling at such times and places as in his opinion are causing or are likely to cause excessive soil damage.
- 6.31 At the completion of extraction or during temporary cessation of extraction, erosion control work must be completed. Extraction tracks and temporary roads subject to erosion must have cross drains installed, as prescribed by a Forest Officer.
- 6.32 The maximum level of damaged soil in any coupe, sub-coupe or feller's block shall not exceed certain specified limits at the completion of extraction. Damaged soil is defined as soil which has been subject to any of the following:
- (a) the A soil horizon (topsoil) removed;
 - (b) the A soil horizon (topsoil) mixed with the B soil horizon (sub-soil usually containing clay);
 - (c) severe compaction (normally meaning compaction which will affect germination or plant growth).

Surveys will be conducted to determine the percentage area of each feller's block or coupe where soil has been damaged by extraction.

If the level of damage exceeds the specified limit then the feller's block or coupe will be closed and the contractor will be moved to the most suitable timber harvesting area available. If damage exceeds the specified limit in the most suitable area the whole operation will be closed.

After a coupe is closed it will not be re-opened until the local soil dryness index exceeds the limit specified by the FOIC.

- 6.33 A contractor shall at his expense when so required by the FOIC repair all soil damaged by timber harvesting. Rehabilitation work shall be carried out during the summer following harvesting to the satisfaction of the FOIC.
- 6.34 A contractor shall at his expense carry out any measures specified by the FOIC to prepare denuded areas for revegetation. These areas shall include landings, gravel pits and temporary roads used during the timber harvesting operation.
- 6.35 If a contractor fails to minimise and/or repair soil damage as required by the FOIC any necessary work may be done by the FOIC at the contractor's expense and the money expended may be recouped under Clause 1.8.

Noxious and environmental weeds

- 6.36 A contractor will take any precautions nominated by a Forest Officer to prevent the introduction or spread of noxious and environmental weeds during his timber harvesting operation. Where necessary, a Forest Officer may require cleaning down of equipment or other practices to prevent the introduction or spread of noxious and environmental weeds.

Feral animals

- 6.37 A contractor shall not interfere with any activities taking place to control feral animals.

Declared rare flora

- 6.38 A contractor shall comply with all requirements notified by a Forest Officer with respect to declared rare flora or protected fauna.

Water

- 6.39 A contractor shall take any special measures prescribed by the FOIC for the protection of water purity in water courses in or adjacent to forest areas in which he is working.
- 6.40 A contractor shall ensure that no timber harvesting machinery or vehicles enter stream reserves, unless authorised by a Forest Officer.
- 6.41 All culverts and road drains shall be kept clean of soil, slash or other debris likely to obstruct the flow of water. Damage caused to roads by a failure to carry out this instruction will be regarded as damage covered by Clause 1.8.

General

- 6.42 A contractor shall comply with all other requirements notified by a Forest Officer for the purposes of environmental protection.

7

Quantity determination, recording and payment

SECTION

7: Quantity determination, recording and payment

- 7.1 The determination of log quantity will be by one of the five methods specified in Schedule 1 of the Forest Management Regulations 1993. These methods are:
- (a) volume under bark for individual logs, using length and mid diameter under bark measurements and the appropriate Department Hardwood Volume Table (eg hardwood sawlogs);
 - (b) volume under bark for individual logs, using length and small end diameter under bark class and the appropriate Department Log Volume Table (eg softwood sawlogs);
 - (c) weight as measured by approved weighbridge (eg hardwood sawlogs and chiplogs);
 - (d) volume under bark calculated by bin measure using the appropriate conversion factor (eg pine particle board logs);
 - (e) volume under bark using an infra red log scanner (eg softwood sawlogs).
- 7.2 No delivery of logs of any type may take place unless the truck driver is in possession of a completed delivery note or other approved documentation to cover the load he is carrying. The contractor will be responsible for ensuring that the delivery note or other approved documentation is certified as received by the authorised representative of the receiver before passing to him the original and/or the purchaser's copy of the approved docket.
- 7.3 Payment/invoicing to all parties will proceed only on the basis of the original copy of the delivery note or other approved documentation, correctly completed and certified by a Forest Officer or other person authorised by the Executive Director.
- 7.4 On receipt from a Forest Officer of a certificate covering completed delivery notes or other approved documentation the Executive Director shall ensure payment is made to the contractor for any work done in accordance with the terms of the contract. This payment will normally be made twice per month. Payment at any other time will be made only for good cause as shown by the contractor and deemed by the FOIC in his absolute discretion to be sufficient to warrant such payment being made to the contractor.
- 7.5 Payments made under Clause 7.4 will be subject to deduction of any amounts certified by the FOIC as payable by the contractor under Clauses 1.8, 1.15, 1.16, 2.4, 2.7, 2.9, 2.10, 3.4, 5.6, 5.12, 6.35 and 6.41 of this Code.

8

Safety

SECTION 8

8: Safety

- 8.1 The contractor shall comply with the provisions of the OSH Act.
- 8.2 In relation to the OSH Act, the contractor shall ensure, as far as practicable, that the workplace is free of hazards by:
 - (a) the provision and maintenance of appropriate workplaces, plant and systems of work;
 - (b) the provision of appropriate information, instruction and training to and supervision of employees;
 - (c) consulting and co-operating with health and safety representatives and committees where appropriate; and
 - (d) provision of adequate and protective clothing and equipment.
- 8.3 The contractor shall comply with the interim guidelines (as may be amended from time to time) in relation to the respective obligations of CALM and contractors in managing in-forest hazards.
- 8.4 The contractor and his employees shall comply with the "Safety Code for West Australian Logging Operations", published by the Forest Products Association (WA) in 1989, or any subsequent or replacement booklet or document which may be published from time to time.
- 8.5 Safety helmets shall be worn in all forest areas at all times by all persons engaged in timber harvesting (TIR Reg 56).
- 8.6 Safety boots shall be worn in all forest areas at all times by all persons engaged in timber harvesting.
- 8.7 A contractor must provide a first aid kit of a type, size and specification acceptable to a TIR Inspector (TIR Reg 37). The container for this kit must adequately protect the contents and it must be located for easy access by all employees.
- 8.8 The FOIC and/or an Inspector under the Timber Industry Regulation Act may require a contractor to provide and install suitable signs on Departmental and/or public roads to warn road users of the presence of felling, extraction and delivery operations.
- 8.9 A contractor shall at the request of the FOIC make himself or his harvesting supervisors available to participate in the investigation of accidents involving himself, his employees, his vehicles or his equipment.

9 Definitions

SECTION 9

9: Definitions

In this Code of Practice for Timber Harvesting, unless the context requires otherwise, the following definitions apply:

CALM Act - the Conservation and Land Management Act 1984.

catchment - an area draining into a given waterway or reservoir.

cleandown - the process by which soil and other material is removed from vehicles and machinery. Water, air and brushes may be used for cleaning down, depending on whether mud, dust or vegetable matter is to be removed.

contract - a contract in which the Executive Director contracts with any person for that person to harvest log timber on Crown land or managed land and to deliver that timber to the buyer.

contractor - a person who contracts with the Executive Director under a contract to harvest and deliver, including any servants, agents, employees or subcontractors of that person.

coupe - an area in a State forest or timber reserve that is specifically set aside for the purpose of timber harvesting in a timber harvesting plan.

delivery - the cartage of forest produce from loading points in or near the forest area to a nominated delivery point.

Department - the Department of Conservation and Land Management established under the CALM Act.

dieback disease - a disease of certain native species of vegetation, including jarrah, caused by the root rotting fungus *Phytophthora cinnamomi*.

extraction - the movement of forest produce from the position at which it is felled or cut to a position where it may be loaded onto a vehicle.

feller's block - a cutting area, within a coupe, allocated to a single feller or tree felling machine.

forest areas - any area of land under the ownership, management or control of the Executive Director on which trees are growing, including firebreaks, roads and tracks.

Forest Officer - a forest officer as defined in the CALM Act.

Forest Officer In Charge (FOIC) - any forest officer for the time being or from time to time appointed in writing by the Executive Director to be in charge of any timber harvesting site or any part thereof.

forest produce - any log or log product that may be removed by a contractor from an operation and includes sawlogs, poles, piles, chip logs, firewood, chips and any other product authorised by a contract or Departmental licence.

forest representative - any Forest Officer, nominated orally or in writing by the Executive Director or by the Forest Officer in Charge, to assume some or all of the powers, duties, discretions and authorities of the Forest Officer in Charge.

hygiene - actions that decrease the risk of the dieback disease pathogen being introduced, spread, intensified or surviving.

jarrah forest - any forest area dominated by the species *Eucalyptus marginata*.

karri forest - any forest area dominated by the species *Eucalyptus diversicolor*.

Large Fire Organisation - the planned deployment of Departmental resources in the event of a major wildfire.

licence - a licence granted by the Executive Director under Section 88(1)(a) of the Act to take forest produce on CALM land.

operation - any timber harvesting activity, on State forest or other Crown land under the control of the Executive Director, authorised by a written contract between the Executive Director and another party or by a Departmental Licence.

OSH Act - the Occupational Safety and Health Act 1984.

pine plantation - any forest area dominated by species of the genus *Pinus*.

regulations - the Forest Management Regulations 1993.

Safety Code - the "Safety Code for West Australian Logging Operations" or any authorised document published in replacement.

soil dryness index - a measure of soil moisture that reflects the flammability of heavy fuels. It indicates fire suppression difficulty.

soil movement - the movement of moist soil sticking to the wheels or tracks of machinery or vehicles.

stream reserve - a strip of vegetation of a specified width located along a particular watercourse from which timber harvesting is excluded.

sub-coupe - a cutting area situated within a self draining catchment. A sub-coupe may contain several fellers' blocks.

timber harvesting supervisor - the timber harvesting contractor's on-site representative with day to day responsibility for the performance of the contractor's servants, agents, employees or subcontractors.

TIR Act - the Timber Industry Regulation Act 1926.

work - everything and anything that a contractor, under the terms of a contract or licence, and this Code of Timber Harvesting Practice, is required to do in regard to the felling of trees and the preparation, extraction and cartage of the produce therefrom.