

CODE OF SOFTWOOD LOGGING PRACTICE

Revised August 1985



DEPARTMENT OF CONSERVATION & LAND MANAGEMENT

INTRODUCTION

The rules and instructions contained in this Code of Softwood Logging Practice apply to all pine logging operations carried out in Department of Conservation and Land Management pine plantations whether on behalf of a private purchaser or under a logging contract to the Department.

These instructions may be amended from time to time and such amendments will come into force from the date of each amendment.

Breaches of this Code will be regarded as breaches of the appropriate Contract.

EXECUTIVE DIRECTOR

AUGUST, 1985

I N D E X

			<u>Page</u>	
SECTION	1	-	DEFINITIONS	1
	2	-	GENERAL	3
	3	-	FELLING TRIMMING CROSSCUTTING	7
	4	-	EXTRACTION	9
	5	-	HAULING AND LOADING	11
	6	-	A FIRE PRECAUTIONS	15
		-	B FIRE SUPPRESSION	20
	7	-	JARRAH DIEBACK DISEASE	23
	8	-	VOLUME DETERMINATION	24

SECTION 1

DEFINITIONS

1.1 In this Code of Softwood Logging Practice unless the context otherwise requires:

1.1.1 The interpretations are those applying in the Conservation and Land Management Act and the Timber Industry Regulation Act.

1.1.2 "Contract" means an arrangement in writing or evidenced in writing between the Department of Conservation and Land Management, hereafter referred to as "Department", and another party under which some logging operation is to be carried out by that other party.

1.1.3 "Contractor" means any person or company being a party to a Contract with the Department to log and/or deliver for or on behalf of the Department and includes any servants agents employees or sub contractors of a contractor.

1.1.4 "Hauling" means the loading on vehicles and cartage of forest produce from the loading points in or near the plantations to the nominated delivery point.

1.1.5 "Plantation" means any area of land under the ownership management or control of the Executive Director on which trees of the genus "Pinus" have been established and are now growing and includes firebreaks roads and tracks and natural forest inside the plantation boundary and firebreaks roads and tracks and natural forest adjacent to the plantation boundary.

1.1.6 "Work" means everything which by a Contract is required to be done by a contractor in regard to the felling of timber and the preparation extraction and cartage of the produce therefrom being pine logs and includes that produce.

1.2 Where there is reference herein to "work under a Contract" it means work which under a Contract the contractor is or may be required to execute.

1.3 References herein to an Act shall include the amendments to that Act for the time being in force and also any Act passed in substitution therefor or in lieu thereof and the regulations for the time being in force thereunder.

SECTION 2

GENERAL

- 2.1 The Instructions in this Code shall be observed by all persons carrying out any softwood logging operations in plantations. If any such person breaches this Code such a breach may be regarded as grounds for a Forest Officer raising objection to the continued employment of that person in the forest. (Forests Act Reg. No. 15).
- 2.2 Any contractor engaged in the cutting and/or removal of forest produce from plantations shall be in possession of a current Timber Workers Registration Certificate.
- 2.3 A contractor shall observe all Acts of the State of Western Australia and in particular the Bush Fires Act (1954) Conservation and Land Management Act (1984) Machinery Safety Act (1974) Road Traffic Act (1983) Timber Industry Regulation Act (1926) Workers Compensation and Assistance Act (1981) with all subsequent amendments to these Acts and all Regulations made under these Acts as well as this Code of Softwood Logging Practice.
- 2.4 Any power or function to be exercised by a Forest Officer under this Code may be exercised by any officer duly authorised by the Executive Director.
- 2.5 A contractor shall exercise strict supervision and control over the operations of all workers employed by him so as to:
 - 2.5.1 Prevent any breach of the Conservation and Land Management Act and Regulations and this Code of Softwood Logging Practice.

- 2.5.2 Avoid damage to other standing timber during felling extracting and hauling operations.
- 2.6 After the commencement of a Contract the contractor shall advise a Forest Officer by notice in writing within 48 hours of such event the name and address of any employee who is engaged by or ceases to be employed by the contractor.
- 2.7 The Department reserves the right to limit or otherwise control the hours and/or days of work of all personnel working in plantations. Any such instructions from a Forest Officer will apply until revoked and will apply equally to a contractor and any of his employees.
- 2.8 A contractor carrying out work under a contract shall follow and use only such roads and tracks in the plantations as may be indicated to him by a Forest Officer. Nothing herein shall affect the right of a Forest Officer or any person authorised by him to use any roads or tracks at any time.
- 2.9 A contractor must ensure that all roads and tracks are left open at the cessation of work each day and if requested during the day to allow access for fire control and administrative purposes. Roads left impassable must be approved by a Forest Officer who shall notify the fire duty officer during the fire season.
- 2.10 A contractor shall make good to the satisfaction of a Forest Officer all soil disturbance caused by the contractor which the Forest Officer shall require him to make good.
- 2.11 A Forest Officer and/or an Inspector under the T.I.R. Act may require a contractor to provide and install suitable signs on Department roads to warn road users of logging operations and/or log trucks.

- 2.12 A contractor shall dispose of all litter food scraps refuse unserviceable equipment or machinery or other debris resulting from his operations in the plantations at such place and in such manner and time as a Forest Officer shall direct. This discharge of used engine oil onto the ground in the plantation is not permitted.
- 2.13 A contractor shall comply with the requirements for safety as laid down by a Forest Officer from time to time.
-
- 2.14 Safety helmets shall be worn in the plantation at all times by all persons engaged in Softwood logging (T.I.R. Reg. 56). Similarly all personnel are to wear adequate footwear whilst in the plantation.
- 2.15 A contractor shall at the request of a Forest Officer make himself or his nominated senior field representative available to participate in the investigation of accidents involving himself his employees his vehicles or his equipment.
- 2.16 The Executive Director reserves the right to prohibit the use of vehicles or equipment which in his opinion are not suited to the work or are considered unsafe.
- 2.17 A contractor must provide First Aid Kits of a type size and specification acceptable to a T.I.R. Inspector. The containers for the kits must be adequate for the protection of the contents in a plantation situation and must be located for easy access by all plantation employees.
- 2.18 A contractor shall take any special measures prescribed by the Executive Director for the protection of water purity of water courses in or adjacent to plantation areas.

- 2.19 All culverts and road drains shall be kept clear 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 Instruction 2.21
- 2.20 A contractor is expected to have his work area in a tidy and workmanlike condition at all times but particularly when leaving an area. If a subsequent clean up is required the work will be done at the contractor's expense.
- 2.21 Any operation carried out by or on behalf of a contractor in a plantation shall be carried out as directed by a Forest Officer. A contractor shall be liable to pay the Department full compensation for any damage or waste of timber resulting from his failure to comply with such directions.
- 2.22 A contractor shall be liable for any damage to forest property due to his negligence or that of his employees.

SECTION 3

FELLING AND LOG PREPARATION

- 3.1 All felling shall be carried out in such place order time and manner as a Forest Officer shall from time to time direct.
- 3.2 A contractor shall from time to time as required by the Executive Director confine his operations to certain defined coupes within the plantation. Such defined coupes shall be cut out to the satisfaction of a Forest Officer before a further coupe is made available for cutting.
- 3.3 Marking of Trees for Felling
- (a) Trees to be felled will be marked or otherwise indicated by Department staff. Only such indicated trees are to be felled.
 - (b) If a contractor wishes to cut unmarked trees to assist his operations e.g. widening vehicle tracks extending landings he shall refer the matter to a Forest Officer and such trees will not be cut until marked by that Officer.
- 3.4 Unless otherwise directed all trees are to be felled with a stump height of not more than 7cm relative to the general soil level on the uphill side of the stump.
- 3.5 All felling trimming and crosscutting shall be carried out to ensure maximum log utilisation to current log specifications. Where in the opinion of a Forest Officer log preparation results in waste a contractor shall be liable for payment for such waste at rates determined by the Executive Director.

- 3.6 A contractor shall be liable for damages at rates determined by the Executive Director for any wood contained in any trees felled by him in breach of Instruction 3.3. Such trees shall remain the property of the Department.
- 3.7 Trees which have been scarfed or part-scarfed shall not be left standing. If this becomes necessary for example because of a mechanical breakdown the senior contractor's representative on the site and/or a Forest Officer must be informed.
- 3.8 All felling trimming and crosscutting 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. Damaged trees shall remain the property of the Department.
- 3.9 Before leaving an area "hangups" shall be dislodged and cut-off tops shall not be left leaning against standing trees. The tops and branches of all trees felled shall be dispersed to the satisfaction of a Forest Officer. All tops slash and other debris shall be cleared from roads internal and external firebreaks creeks landings and logging tracks as directed by a Forest Officer.
- 3.10 No person may engage in hand falling by himself at any time unless he is under periodic supervision throughout his working time.
- 3.11 Any new chainsaw purchased for use in a plantation operation shall meet the minimum safety requirements laid down by the Executive Director from time to time.
- 3.12 The Conservator will prohibit the use of any new chainsaw which does not comply with Clause 3.11 of this Code.

SECTION 4

EXTRACTION

- 4.1 All extraction shall be carried out in such place order time and manner as a Forest Officer shall from time to time approve.
- 4.2 A Forest Officer may determine the priority of extraction of produce from time to time. A contractor shall comply with the Forest Officer's expressed priority of extraction. This priority may be expressed in type of log, point of removal and deadline for delivery or all three together.
- 4.3 If a contractor wishes to construct tracks within the plantation to facilitate extraction the location of such tracks shall be approved by a Forest Officer and at the contractor's expense.
- 4.4 All extraction is to be carried out with a minimum of damage to standing trees. Where standing trees are damaged by a contractor he shall be liable for such damage at rates determined by the Executive Director.
- 4.5 Extraction of logs and timber shall be carried out in a manner and by such methods and equipment as shall result in a minimum of soil disturbance.
- 4.6 A Forest Officer may at his discretion prohibit all extraction or particular methods of extraction or particular items of equipment used for same at such times and places as in his opinion are causing or are likely to cause excessive soil disturbance.

- 4.7 A contractor shall not carry on extraction at such times or places or by methods or equipment which a Forest Officer has prohibited until such prohibition has been revoked by a Forest Officer.
 - 4.8 Concentrated extraction along creeks or other drainage lines shall not be carried out unless specifically approved by a Forest Officer.
-

SECTION 5

LOADING AND HAULING

- 5.1 All loading and hauling shall be carried out in such place order time and manner as a Forest Officer shall from time to time approve.
- 5.2 A Forest Officer may determine the priority of loading and removal of produce from time to time. A contractor shall comply with the Forest Officer's expressed priority of loading. This priority may be expressed in either type of log point of removal and deadline for removal or delivery or all together.
- 5.3 No road haulage of pine logs of any specification will take place unless the driver is in possession of a completed Pine Log Delivery Note CLM. 544 to cover the load he is then carrying. The driver will be responsible for ensuring that the CLM. 544 Delivery Note is certified as received by the authorised representative of the receiver before passing to him the purchaser's copy of the CLM. 544 Delivery Note.
- 5.4 Access to the loading points within State Forest and/or land owned managed or controlled by the Executive Director may be restricted by a Forest Officer at any time by:
- (a) nomination of the route to be followed;
 - (b) nomination of the hours of any day during which work may be carried on;

- (c) nomination of the days of the week during which work may be carried on;
 - (d) suspension of deliveries because of road conditions.
- 5.5 A contractor shall at his own expense maintain to the satisfaction of a Forest Officer plantation roads or other Department roads used by him for hauling.
-
- 5.6 A contractor shall observe any instructions and comply with any procedures laid down to restrict the spread of the disease known as Jarrah Dieback within State Forest and the plantations. This will apply particularly to the movement of logging equipment and road haulage equipment and the carting of road materials such as gravel (see Section 7).
- 5.7 Loading and hauling of logs and timber shall be carried out with a minimum of damage to standing trees.
- 5.8 Loading and hauling of logs and timber shall be carried out in a manner and by such methods and equipment as shall result in a minimum of soil disturbance.
- 5.9 A Forest Officer may at his discretion prohibit all loading and hauling or particular methods of loading and hauling or particular items of equipment used for same at such times and places as in his opinion are causing or likely to cause excessive soil disturbance.
- 5.10 A contractor shall not carry on loading and hauling at such times or places or by methods or equipment which a Forest Officer has prohibited until such prohibition has been revoked by the Forest Officer.

- 5.11 To minimise damage to forest roads and to promote safety in operation log trucks will not be loaded in excess of their licensed capacity.
- 5.12 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.
- 5.13 ~~No truck is to leave the loading area until the load has been checked by the driver.~~
- 5.14 Where logs are being carted each bay of logs will be secured with one load binder. The quality of the load binders is to be equal to or better than 5mm "Hercalloy" high tensile chain.
- 5.15 Protruding limbs loose bark and trailing debris of any kind are not permitted on trucks hauling pine and must be removed before leaving the loading point or immediately when noticed "en route".
- 5.16 Drivers must stop and check the safety of the load at least once while travelling to their destination.
- 5.17 The loss of any log or logs during hauling must be reported immediately to a Forest Officer. Logs must be recovered promptly by the contractor and any cost incurred in the recovery is the responsibility of the contractor.
- 5.18 Speed limits as laid down by the Main Roads Department will apply on both public and Departmental roads. The Department reserves the right to introduce lower speed limits on any or all Departmental roads in the interests of greater safety of operation or to lessen the damage to the road. All speed limits must be adhered to.

- 5.19 Where drivers come under notice of the Department for speeding on Departmental roads or are persistent offenders in this regard the provisions of Clause 2.1 of this Code may be invoked.
- 5.20 The Department reserves the right to decided whether any vehicle is in a fit condition for the job it is doing bearing in mind road conditions grades load carried etc. Contractors will on request by a Forest officer make their vehicles available to the Department for inspection.
- 5.21 If after inspection a Forest Officer decides that in his opinion a vehicle's mechanical condition renders it unfit for the job the contractor will be required to repair that vehicle to the satisfaction of the Forest Officer before it can be used further for the contractual work.
- 5.22 Engine exhaust pipe systems must be installed so that they do not blow down onto the roadway. (Exhausting above the cabin is the best position).
- 5.23 On dusty roads drivers are to keep a suitable distance apart to allow other traffic and road repair crews better visibility.
- 5.24 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 100-150m in front of the vehicle and 1.5m 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.

SECTION 6A

FIRE PRECAUTIONS

- 6A.1 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 purposes of controlling fire.
- 6A.2 No fires are to be lit in a plantation without the express permission of a Forest Officer.
- 6A.3 A contractor shall take all necessary precautions to prevent the occurrence or spread of fire in the plantation area and shall be liable to the Executive Director for damage caused within the said area 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.
- 6A.4 A contractor shall co-operate with officers of the Department in preventing and suppressing bush fires and shall when called upon by a Forest Officer act under his instructions in fire fighting or preventing outbreaks of fire.
- 6A.5 Smoking is prohibited in all 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.

6A.6 A contractor shall not use or operate or permit the use or operation of any chainsaw or other internal combustion engine in any pine plantation unless the engine is fitted with an exhaust system of a type and design approved by the Executive Director. The exhaust system will be inspected regularly to ensure that the efficiency is maintained.

6A.7 To obtain approval a chainsaw exhaust system will:

6A.7.1 Include a muffler large enough to allow gas expansion and cooling before final emission.

6A.7.2 Be of such metal and design as to allow rapid heat dissipation before final emission of gases.

6A.7.3 Be of such solid construction as to reduce noise and be without vibrating parts where these add to noise levels.

6A.7.4 Able to be dismantled for inspection and cleaning.

6A.7.5 Be located in a position so that the emissive material is not directed onto the forest floor while in the felling position nor towards the operator. The heated surfaces must not contact the forest floor in any cutting position.

6A.7.6 Include baffles or screens in such a manner that continued expansion and cooling of exhaust material is progressive during passage from engine port to final exit. These should be simple and are regarded as secondary in importance to the size and cooling capacity of the exhaust system.

- 6A.7.7 Not allow ignition within 30 seconds of any pine needles held adjacent to the exhaust orifice when the saw is operating under load.
- 6A.8 All chainsaw operators working in plantations must have in their immediate work area a pack spray of a type size and colour approved by a Forest Officer. Immediate working area is defined as the area within 150M distance of faller activity. The pack spray must always be full of water and be in good working order.
- 6A.9 A contractor shall not use or operate or permit the use or operation of any internal combustion engine in a plantation if:
- (a) the exhaust system of the engine is not clean sound and free from gas leaks;
 - (b) there is emitted from the engine any carbon particles sparks or oily substance;
 - (c) the engine is subject to any fault or mechanical defect which in the opinion of a Forest Officer would cause or be likely to cause an outbreak of fire.
- 6A.10 A contractor may establish in any plantation section not more than 1 fuel dump on a site and of a size approved by a Forest Officer. The ground around such dump shall at all times be clear of all vegetation or inflammable debris for a distance of not less than 6 metres.
- 6A.11 Smoking shall not be permitted within 6 metres of the closest point of a fuel dump.

- 6A.12 The fuelling of chainsaws vehicles or other powered equipment or the mixing of fuel shall not be carried out in 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.
- 6A.13 A contractor shall not start or permit to be started any chainsaw immediately after fuelling until such chainsaw has been wiped to remove any spillage and has been moved clear of the place at which the fuelling was carried out.
- 6A.14 Where chainsaws and harvesting machines are being used in the plantation a contractor shall ensure:
- (a) either that no chainsaw or harvesting machine is used for at least 60 minutes prior to the operator leaving the work area and that immediately before leaving the plantation the operator inspects the area covered by the last 2 hours of chainsawing or harvesting machine activity; or
 - (b) that a patrol or inspection of each area fallen or worked over by machines in the last 2 hours of each working day is made, not less than 1 hour and not more than 2 hours after the chainsawing or harvesting activity has ceased. This inspection must be made by some responsible person nominated by the contractor and approved by a Forest Officer.
 - (c) and when harvesting activity ceases, all harvesting machinery must be parked on a site cleared to mineral earth and approved by a Forest Officer.

- 6A.15 A Forest Officer may prohibit any or all types of logging operations in the plantation at such times and for such periods as is necessary when in the officers opinion such action is warranted by the Department's Fire Danger ratings.
- 6A.16 A contractor will at the contractor's own expense ensure that each member of each of the plantation crews employed on the contracted works is available to the Forest Officer in Charge for 1 day's training in fire suppression in each fire season. This one day training will normally take place in October of each year but if this is not possible or if new men are to be trained, the training will be arranged at a time agreed to by the contractor and the Forest Officer in Charge. In addition the contractor will at the contractor's expense ensure that each member of each of the plantation crews employed on the contracted works is available for a training period in fire suppression of not more than 2 hours per month for each of the months of November December February March and April of each year.
- The equipment for use during the training sessions will be that listed in clause 6B.4 and will be provided by the contractor for such training at the Contractor's own expense.
- 6A.17 Training staff and sites will be provided by the Department at no cost to a contractor and in reasonable proximity to a contractor's work sites.
- 6A.18 Contractor's personnel engaged solely in carting operations will be exempt from Clauses 6A.16 and 6B.4.
- 6A.19 A Forest Officer may exempt a contractor from the requirements of Clauses 6A.2 6A.5 and 6A.14 when in the opinion of the Forest Officer weather conditions allow. This could normally be expected in winter.

SECTION 6B

FIRE SUPPRESSION

- 6B.1 If a fire starts in a contractor's work site the contractor's plantation crew will immediately endeavour to suppress it with their own equipment under the leadership of the contractor's senior representative on site. As soon as a Department officer or gang arrives at the fire the contractor's crew will work under the direction of the senior Department Forest Officer at the site. The whole of the contractor's manpower will continue to operate under Department's control until relieved or until the fire is declared safe by the senior Department Forest Officer. This operation will be at the contractor's expense.
- 6B.2 If a fire starts outside a contractor's work site but inside the plantation the provisions of Clause 6B.1 will apply save that where in the opinion of the Forest Officer in Charge the fire is not caused by or does 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 (as certified for payment by the senior Department Forest Officer directing the operation and in the event of dispute as finally determined by the Executive Director) will be borne by the Department.
- 6B.3 A contractor and a contractor's manpower will not normally be called on to fight fires outside the plantation but if this is necessary the provisions of the Conservation and Land Management Act and the Bush Fires Act will apply.

6B.4 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 Forest Officer in Charge firefighting hand tools and equipment complying with current Department specifications on the following basis:

6B.4.1 For every 5 men or part thereof employed in the plantation -

- 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 fallers under the Code will be considered as equipment for this purpose.

6B.4.2 One fire suppression unit for each group of ten workers employed on the contract at any one plantation worksite, with a minimum of one unit on each plantation worksite.

This fire suppression unit will be of a standard acceptable to the Forest Officer in Charge, but will not deviate in any essential from the standard 450 litre patrol unit being used by the Department.

The patrol unit will be the "slip on" type mounted on its own prime mover.

6B.4.3 The contractor will at all times and at his own expense maintain each of the fire suppression units specified in Clause 6B.4.2 to an operational standard acceptable to the Forest Officer in Charge. If in the opinion of the Forest Officer in Charge the condition of a unit makes it unsuitable for fire suppression the Forest Officer in Charge may either:

6B.4.3.1 suspend operations until the unit is repaired to his satisfaction; or

6B.4.3.2 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.

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.

SECTION 7

JARRAH DIEBACK DISEASE

- 7.1 The Department is vitally concerned that during all road construction and maintenance operations everything possible is done to limit the risk of spreading the disease Jarrah Dieback.
- 7.2 All vehicles and equipment for use in contracted works but particularly those used in road maintenance shall before being taken into any State Forest or plantation be inspected by the Forest Officer in Charge and if necessary washed down to remove adhering earth soil and/or debris to the satisfaction of the Forest Officer in Charge.
- 7.3 The source of road surfacing materials for use by the contractor must be approved by the Forest Officer in Charge before winning of the material commences. Carting of materials for road maintenance in certain localities will be limited to periods of the year as determined by the Forest Officer in Charge.
- 7.4 The timing and method of operation of any road grading must be approved by the Forest officer in Charge before the grading commences.

SECTION 8

VOLUME DETERMINATION

8.1 The determination of log volume will be by the approved Department method of measurement applying for each log product.

8.1.1 Pine Particle Board Logs: true volume under bark calculated by bin measure using the appropriate Department Conversion Factor.

8.1.2 Pine Case Logs: true volume under bark calculated by bin measure using the appropriate Department Conversion Factor.

8.1.3 Pine Mill Logs: measured either by -

8.1.3.1 true volume under bark measured by small end diameter class calculated on individual logs using the appropriate Department Log Volume Table; or

8.1.3.2 true volume under bark calculated by bin measure using the appropriate Department Conversion Factor.

8.1.4 Pine Peeler Logs: true volume under bark measured by small end diameter class calculated on individual logs using the appropriate Department Log Volume Table.

8.1.5 Pine Rounds for Treatment:

8.1.5.1 true volume under bark calculated by bin measure using the appropriate Department Conversion Factor.

8.1.6 True volume under bark calculated by weight using the appropriate Department conversion factor for any log product.

8.2 The contractor will, when so arranged, be responsible for the initial determination of log volume in each of the log products he handles and by the appropriate method of measurement outlined in Clause 8.1. The volume so determined will be agreed to by the buyer and recorded and signed for on the Pine Log Delivery Note (CLM. 544). This volume will be subject to check by a Forest Officer at any time.

8.3 If a check under Clause 8.2 shows that the contractor has departed from the current Department method of measurement this will be corrected by the contractor at his expense to the satisfaction of the Forest Officer in Charge. If the volume determined by the contractor differs by more than 5% from the volume determined by the Forest Officer the contractor shall if so required by the Forest Officer in Charge and at the contractor's expense present all deliveries for a period nominated by a Forest Officer at places and times convenient to the Forest Officer in Charge.

- 8.4 If after a check by a Forest Officer under Clause 8.3 a check by a Forest Officer shows that the contractor has again departed from the current Department method of measurement and that the volume as determined by the contractor differs by more than 2 1/2% from the volume determined by the Forest Officer the contractor may at the option of the Executive Director on the recommendation of the Forest Officer in Charge be deemed to be in default under the contract and the provisions of that contract shall apply accordingly.
- 8.5 The loading of the bins by the contractor shall be such as to satisfy the Forest Officer in Charge that the Bin Conversion Factor as determined for that particular product is applicable to that load.
- 8.6 The driver will be responsible for ensuring the top of each bin is trimmed level enough to ensure the correct application of the bin conversion factor.
- 8.7 If the Forest Officer in Charge is of the opinion that the loading of any bin is such as to cast doubt on the application of the authorised Bin Conversion Factor the contractor will unload the bin and reload it to the satisfaction of the Forest Officer in Charge.
- 8.8 All log measurement being made by a contractor will be recorded by the contractor on the Forests Department Pine Log Delivery Note (CLM. 544) which will be completed in sufficient detail to allow all required information to be extracted from it without further inquiry.