



HARVESTING PROCEDURE MANUAL

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This Manual and other Contractor information are updated periodically and can be found on the ForestrySA secure webpage www.forestrysa.com.au/sites/.

1. GLOSSARY.

- a) "Agreement for Services" - means the contractual arrangement between the parties;
- b) "Bush Ban" – means an order for all Contract personnel to cease work and depart the Harvesting Source within a specified timeframe;
- c) "Cartnote" means a ForestrySA document used for each load of Product delivered to a Customer to determine the net weight of the load, the Harvesting Source, the Harvesting Contractor, the Transport Contractor, the Customer and the date of delivery;
- d) "Environmental Incident" - means any incident which damages or may damage the environment and would require some action under either the South Australian Environment Protection Act, 1993 or the Victorian Environment Protection Act, 1970, as appropriate;
- e) "Fire Danger Season" – means the dates prescribed by ForestrySA or the CFS which regulates the allowable activities under the Fire and Emergency Services Act 2005 and the Forestry Act 1950;
- f) "Forest Compartment" - means an area of forest totally enclosed by firebreaks and/or defined tracks;
- g) "FTP" – means a ForestrySA managed internet based program where a Contractor can upload data.
- h) "GPS" – means a device to determine the current Geographic Position.
- i) "Hang Up or Hanging Top" - means a tree or a portion of a tree that lodges into an adjacent standing tree/s when cut and does not fall to the ground;
- j) "Harvesting" – means any or all of the actions that are carried out to convert standing trees into Products defined in the Product Specification Manual and placed on a Log Storage Area ready for transporting to a Customer;
- k) "Harvesting Source" - means a group of Forest Compartments to be harvested at one time;
- l) "Landing" – see Log Storage Area;
- m) "Log Storage Area" (LSA) – means a point on the Forest Compartment edge where Product is stacked prior to transporting off site;
- n) "Logging Slash" - means the parts of the tree that remain in the forest after Products defined in the Log Standards Specification Manual have been produced and includes sections of the stem that are not harvested because of deformity or size, branches, needles, pine cones and bark;
- o) "Product Specification Manual" - means a ForestrySA document which lists and describes detailed specifications for each merchantable Product;
- p) "Sales Co-ordinator" - means a ForestrySA employee designated to monitor and liaise with the Contractor or the Contractors Operations representative;
- q) "Harvesting Schedule" - means a plan or table with a series of Harvesting Sources designated for Harvesting by the Contractor; under the Agreement for Services;
- r) "Service Easements" - means areas which contain powerlines, gas lines, water or communication infrastructure and the like.
- s) "Stanfor D" – means the international standard for Forestry Data and Communication.

2. CONTEXT

This Manual forms a part of the Agreement for Services between the Harvesting Contractor and ForestrySA and details all of the procedural and technical requirements associated with conducting the Harvesting Operations. Parts of this Manual or associated documents may be updated from time to time and the Harvesting Contractor will be informed of any such changes.

3. PRODUCTS

3.1 Product Specification Manual - Ranges

The list of product names and the corresponding specifications can be found in the Product Specification Manual - Ranges which is available on a secure webpage at www.forestrysa.com.au/sites/.

The Product Specification Manual – Ranges may vary from time to time with updates being provided to the Harvesting Contractor as required.

3.2 Residue

Residue is not described in the Product Specification Manual – Ranges. If not otherwise specified, it is 'waste' material that is ≥ 1.8 metres in length and has a minimum small end diameter of 100 mm.

3.3 Recovery

The Harvesting Contractor shall endeavour to maximise product recovery and value, consistent with the cutting instructions.

4. WEEKLY PRODUCTION INSTRUCTIONS

ForestrySA will advise the Harvesting Contractor of the weekly cutting and delivery instruction, no later than 12 noon on the Friday of the week prior to the period relating to the cutting and delivery instruction, and the Harvesting Contractor will harvest the Products and volumes specified.

5. HARVESTING SCHEDULE

5.1 Harvesting Schedule

At the commencement of the Agreement for Services, ForestrySA will provide the Harvesting Contractor an initial Harvesting Schedule. The Schedule will be updated during the life of the Contract.

Alterations to the Harvesting Schedule may be necessary where:

- there is a change in Product demand that necessitates an alteration to the Product mix; or
- weather or other conditions cause an area to become inoperable; or
- salvage is required.

5.2 Schedule Implementation

Selection of the order of Harvesting Sources to be harvested and the order of working within a Harvesting Source will be determined by ForestrySA in consultation with the Harvesting Contractor.

5.3 Private Woodlots

From time to time ForestrySA will require a Harvesting Contractor to work in private woodlots, the details of which will be discussed as required with the Harvesting Contractor.

6. MECHANICAL EQUIPMENT

The Harvesting Contractor will ensure that all equipment used remains fit for the purpose and consistent with requirements specified at the commencement of the Agreement for Services:

- is in good working order
- does not damage standing trees in the area in which work is being carried out
- has the required optimisation equipment.

ForestrySA may, at its discretion, claim compensation from the Harvesting Contractor for damage caused to standing trees that can be attributed to Harvesting Operations.

7. USE OF WELDING, CUTTING AND ABRASIVE TOOLS

Conditions for use can be found in the ForestrySA Fire Season Requirements for Contractors which is available on a secure webpage at www.forestrysa.com.au/sites/

8. FIRE PROTECTION

The Harvesting Contractor must prevent, suppress and report any fire started in the area of a Harvesting Operation. For all Harvesting Operations, an operational mobile fire-fighting appliance to a minimum standard as determined by ForestrySA must be present on site during the proclaimed Fire Danger Season, and at other times as directed by ForestrySA.

All equipment to be used in the forest must comply with the ForestrySA Fire Season Requirements available on a secure webpage at www.forestrysa.com.au/sites/, and undergo annual inspections for compliance.

9. FOREST CLOSURES

From time to time ForestrySA will call a Bush Ban, or forest closure, to prevent an unacceptable risk of damage to the forest. Bush Bans are most commonly called during the Fire Danger Season, although wet weather Bush Bans are possible. Imposing or lifting of Bush Bans may occur at different times for Harvesting and Transport Operations at the discretion of ForestrySA.

10. OPERATIONS LOGGING PLAN

ForestrySA will prepare an Operations Logging Plan which will identify site issues (including exclusion areas) and contain management descriptions of how ForestrySA expects a Contractor to operate on and near the site.

No Harvesting work is to be carried out until a site inspection has taken place and the Operations Logging Plan has been signed by both the Harvesting Contractor and Transport Contractor (a single sign on if the contractor is undertaking both roles).

The Harvesting Contractor and their employees must be aware of and comply with the operational requirements of the Operations Logging Plan.

A copy of the Operations Logging Plan must be kept at the Harvesting Source and be available to those working on site.

Variations from the Operations Logging Plan will be documented and pre-approved by ForestrySA.

11. FORESTRYSA'S HARVESTING REQUIREMENTS

11.1 Entry to an Operational Harvesting Source

On signing an Operations Logging Plan and when machinery is on site, the Harvesting Contractor assumes control of the site indicated in the Plan. When operating, authority to enter the site by persons not employed or engaged by the Harvesting Contractor is to be granted by the Harvesting Contractor in advance of entry.

The Transport Contractor is to notify the Harvesting Contractor upon entry to the Harvesting Source.

11.2 Signage

A Harvesting Contractor is required to place Hazard signs in accordance with Work Health and Safety Regulations 2011.

11.3 Residual Tree Damage

The total permissible damage for felling, processing and extraction Operations shall not exceed

- 8% in first thinning
- 6% in second thinning
- 4% in third thinning

Not more than a ¼ of this shall be severe damage. Severe damage is where more than 150 square centimetres of bark has been removed down to the cambium layer.

The Harvesting Contractor, when instructed to, shall return to harvest those trees damaged and identified for removal.

11.4 Stump Height

The height of stumps after trees have been felled must be as low as practicable to ground level and is not to exceed 120mm. Stump height is measured from the highest point of the stump to the highest point of the ground surface.

11.5 Hang Ups and Hanging Tops.

The Harvesting Contractor will take immediate action to remove Hang Ups or Hanging Tops within the Harvesting Source. If it is not practical to do so they must be flagged as a hazard and an exclusion zone established around them.

11.6 Logging Slash

The Harvesting Contractor shall ensure that all Logging Slash that falls on any firebreak or defined track as a result of their Harvesting Operations is docked to lengths no greater than 3 metres, and is immediately removed and placed behind the first stump row adjacent to that firebreak or defined track in the Harvesting Source. The Harvesting Contractor shall not place Logging Slash in the entrance to extraction rows, which may prevent subsequent equipment access and may be directed by ForestrySA to push up the docked Logging Slash into heaps on any nominated firebreak.

11.7 Harvesting in the Vicinity of Service Easements

Where the Harvesting Contractor is required to work adjacent to a service easement, they must ensure that no damage is caused to the infrastructure in the easement. If the Harvesting Contractor and or the Transport Contractor considers that a risk of damage to infrastructure might occur, they

must make their own arrangements, after consultation with ForestrySA with the responsible agency in order to allow the operation to proceed safely.

11.8 Harvesting adjacent to Public roads

ForestrySA will provide assistance to the Harvesting Contractor for traffic control on public roads where specifically requested by the Harvesting Contractor.

11.9 Operations Representative

The Harvesting Contractor will appoint an Operations Representative as the point of contact for the ForestrySA Sales Co-ordinator.

11.10 Damage to ForestrySA Property

The Harvesting Contractor must ensure that culverts and / or drains within the Operations Logging Plan area are not blocked, or the flow of water impeded as a consequence of the Harvesting and Loading operation.

The Harvesting Contractor must ensure that roads or other ForestrySA property are not unreasonably damaged. All damage is to be reported within 2 business days.

11.11 Felling of Trees

All trees designated for felling must be felled as listed below.

- In a Clear Felling operation all trees identified in the Operations Logging Plan must be felled.
- In First, Second or Third Thinning Operations, trees marked with paint will be deemed to be designated for removal.
- In First Thinning, out rows for removal will be identified with paint (a cross) at the end of the row on the Forest Compartment edge.
- Where there is no tree marking, a Harvesting Contractor may be required to self-select the trees for removal. Refer to 11.12 Operator Self Selection.

All standing trees identified for removal must be felled irrespective of whether they are merchantable or not.

The Harvesting Contractor is required to work with ForestrySA to achieve optimal production of log Products. ForestrySA will provide log making instructions from time to time in relation to Products and specifications.

Failure to comply with this condition will require that the Harvesting Contractor pays to ForestrySA as liquidated damages, the estimated value of the trees in question at current values.

11.12 Operator Self Selection

Where a machine operator is required to select the trees for removal, ForestrySA will provide guidelines for tree selection, and the desired stocking levels. ForestrySA may carry out assessments of tree selection for compliance and quality control purposes.

11.13 Litter

All litter that the Harvesting Contractor is responsible for will be removed from ForestrySA property. Litter includes food scraps, refuse, unserviceable equipment and machinery owned by or carried as a result of the activities of the Harvesting Contractor and their employees.

Instances of oil, grease, fuel and other petroleum products falling to the ground must be kept to an absolute minimum and this is at the discretion of ForestrySA.

11.14 Log Measurement

The Harvesting Contractor will check the calibration of log length measurement at 2 hourly intervals during production and record on log ends, or in a diary or equivalent document.

12. ENVIRONMENTAL REQUIREMENTS

12.1 Damage

The Contractor will rectify any damage caused to soil, culverts, bridges and other property of ForestrySA, if in breach of the logging plan.

12.2 Wet Weather Operations

H&T operations shall be conducted to minimise adverse environmental effects.

Operations will achieve this by complying with the ForestrySA Buffer Guidelines, relevant legislation, and the requirements below.

H&T contractors must understand and comply with these requirements and the site Operations Plan before commencing.

12.3 Wet Weather Harvesting

When significant compaction, rutting or soil mixing is likely to occur, on landings or tracks, the suspension of extraction, forwarding and cartage operations will protect on-site soil and water quality.

H&T operations must be restricted or stopped where there is a risk to soil and water quality values during or following wet weather conditions.

Extraction, forwarding and cartage operations must be suspended when water begins to flow along tracks, except where appropriate preventive actions have been taken to address risks to off-site water quality.

A range of techniques to assist harvesting such as floatation tyres and the use of harvesting slash on extraction tracks can be used to extend the operational window while minimising the impact of the operation on environmental values. Rutting and compaction may be minimised by use of cording or matting of extraction routes and/or landings.

Rutting may not exceed:

- Within 50 metres of a designated dump or on major extraction routes outside of compartments – 400 mm below the natural surface for a distance exceeding 25 metres
- Within the compartment or along road verges – 250 mm below the natural surface for a distance exceeding 25 metres

unless authorized by District Forest Manager, in which case approval is to be recorded and rehabilitation works specified on the logging plan.

Affected sections of an extraction track **will not** be by-passed by opening up another extraction track alongside or close by on similar saturated ground. Tracks may be corded or operations shifted to another section of the coupe with better ground conditions.

Harvesting Equipment must not damage drainage systems, cross drainage lines or sediment traps while soil is saturated or water is flowing along drainage lines.

Tracks should be out-sloped, cross-drained or slash used to interrupt any flow of surface water down the track and disperse it onto undisturbed or uncompacted areas, avoiding off-site discharge into waterways.

Rehabilitating tracks and other infrastructure at the earliest opportunity will minimise the risk of weather events causing unacceptable water quality outcomes.

The Contractor will level out ruts, aerate slash and cording, ensure water is not running down ruts or extraction tracks and remove cording from roads and LSA sites as areas are completed and finalised prior to departure.

12.4 Wet Weather Haulage

Roads must be temporarily closed to heavy timber harvesting traffic when persistent weather or road stability compromise road drainage and water quality.

Road haulage will cease if:

- Rutting exceeds 150mm for more than 20 metres below the original road surface
- Trucks are unable to travel under their own motive power
- Turbid water runs in wheel ruts that are deeper than 100mm in the running surface of the roads

ForestrySA may declare a total closure of operations when conditions are extremely adverse or the contractor has failed to react to the prevailing conditions. This closure will be lifted at the discretion of ForestrySA in consultation with the contractor.

12.5 Dry Weather Haulage

Roads must be temporarily closed to heavy timber harvesting traffic when persistent dry weather causes the surface materials to unravel to a degree that poses a threat to water quality, in the absence of suitable preventative or remedial actions to manage the risk to water quality.

ForestrySA may declare a total closure of operations when conditions are extremely adverse or the contractor has failed to react to the prevailing conditions. This closure will be lifted at the discretion of ForestrySA in consultation with the contractor.

13. EXTRACTION

The Harvesting Contractor is required to deliver Products to the LSA.

Extraction distance in each compartment will vary depending upon the size of the compartment and the row direction of the trees. The maximum average extraction distance travelled within a Harvesting Source is 500 metres. Where the maximum average 500m extraction distance is exceeded, ForestrySA and the Harvesting Contractor may choose to negotiate a rate variation for the affected area.

Residue shall not be deliberately docked back to lengths less than 1.8 metres.

The allowable time from Harvesting a Product to extraction to the LSA is 5 business days.

The Harvesting Contractor will mark the date of Harvesting on Products.

If the Harvesting Contractor causes Product to be rejected by delayed delivery and this was within their control, they will be liable for the loss.

14. LOG STORAGE AREAS

Depending on the Agreement for Services, the Harvesting Contractor may be responsible for the loading of Products onto trucks.

Machinery involved in loading is not to leave the site until all Product including part loads have been removed from the Harvesting Source.

Prior to transporting, the Harvesting Contractor is responsible for marking one end (as specified) of each Sawlog Product with a predetermined paint colour. No Sawlog Product is to be transported if it does not have the Harvesting Contractor paint colour on the specified end.

Following the placement of Product at a LSA, the Harvesting Contractor acknowledges that the Product meets specification and is ready for transporting to a Customer. For the avoidance of doubt the Harvesting Contractor will label Product stacks to ensure that the Transport Contractor is aware of Product type.

Products will be stacked with neatly flush ends to facilitate easy loading of trucks and grouped by length, diameter or Customer as appropriate.

Oldest cut Product shall be delivered first. All Product, needs to be transported within 10 business days of Harvesting unless roadside stockpiling has been arranged by ForestrySA.

The Transport Contractor has the right to not transport a Product if they believe that the Product is out of specification and shall refer to the respective ForestrySA Sales Co-ordinator for clarification. Any disputation between Harvesting and Transport Contractor's that is not resolved in a timely manner is to be referred to the ForestrySA Sales Co-ordinator.

15. PAYMENT FOR HARVESTING AND IF APPLICABLE, LOADING

Unless otherwise specified, Harvesting payment will be made by weight recorded from an agreed weighbridge and provision of a completed Cartnote to ForestrySA.

Loading payment will be paid at the agreed rate.

In the event of a weighbridge breakdown, truck scales may be used by agreement with both the Transport Contractor and Harvesting Contractors.

16. DATA REQUIREMENTS

16.1 Harvester data: System compatibility

All harvesters are to be fitted with optimisation hardware and software that complies with the "Stanfor D" format or other software as agreed, and which is compatible with ForestrySA's hardware and software platforms.

16.2 Tree Data & File Transfers

When available, the Harvesting Contractor will supply ForestrySA with 100% stem, prd and/or pri files that comply with ForestrySA data standards, including Product name, and site identification standards. Uploading of these files onto ForestrySA's FTP site is to be done on a daily basis.

ForestrySA will provide and edit cutting instructions as an apt file or other format as appropriate.

The Harvesting Contractor will adhere to ForestrySA's optimisation guidelines and instructions.

16.3 Calibration of Harvesting Head Measurement Systems

Calibration data and control measurement reports are required weekly with Harvesting Contractors using digital callipers. A strict calibration procedure must be followed and data integrity maintained.

16.4 GPS & Mapping

When available, GPS coordinate data is required with full mapping capability such as downloading Harvesting Source maps onto harvester screens to show exclusion zones and buffer boundaries etc.

Base information for each site can be provided by ForestrySA with the Operations Logging Plan.

16.5 Future Data Requirements

The parties will negotiate on further technological developments as required.

17. INSPECTION OF HARVESTING CONTRACTOR'S WORK

ForestrySA may inspect the Harvesting Contractor's work during and at completion of the Harvesting Source. No equipment is to leave the site until the Operations Logging Plan has had a provisional sign off. If work is found not to comply with the Operations Logging Plan, ForestrySA will direct the Harvesting Contractor to rectify the breach within 48 hours.

If the Harvesting Contractor fails to rectify the issue ForestrySA may suspend the whole or a part of the services.

ForestrySA will conduct periodic reviews using the Contractor Administration Audit Tool which is available on a secure webpage at www.forestrysa.com.au/sites/.

18. REJECTS

ForestrySA may reject Roundwood Product delivered to a designated location that does not comply with Log Standard Specifications or at its sole discretion downgrade a product.

If so required by ForestrySA in its discretion, the Contractor must compensate ForestrySA for the Products rejected for reasons of:

- poor felling practices
- being outside accepted diameter, length and quality specifications
- being mislabelled in LSA.

ForestrySA will not be obliged to pay the Contractor for rejected Roundwood product and the Contractor will be responsible for the cost of:

- removing rejected Product from the original delivery location;
- transport of the Product to an alternative location; or
- return of the Product to the forest for reprocessing and transporting to a suitable delivery location.

If the Contractor fails to comply with its obligations, ForestrySA or its representative may remove the product as required, at the expense of the Contractor.

ForestrySA will adjust the payment to the Contractor for the Services based on the proportion of the rejected Products which has been accepted by ForestrySA.

The Harvesting Contractor will be available to inspect Product rejected from a Customer, if requested by ForestrySA.

19. OPERATING HOURS

The Harvesting Contractor may determine suitable working hours for its employees or any other person engaged in the provision of the services with the following exceptions

- Manual fallers (being fallers using chainsaws) must work during daylight hours only
- The provisions contained in ForestrySA's "Fire Season Requirements for Contractors". Available on a secure webpage at www.forestrysa.com.au/sites/.
- Work on Public Holidays and Weekends. Approval to work on weekends will not be unreasonably withheld.
- Where an Operations Logging Plan designates limits to operating hours.
- Operation may not commence prior to 0600 if houses are located within 500m of H&T operation.

20. REPORTABLE INCIDENTS

All environmental incidents must be reported as soon as practicable to ForestrySA.

In the event of an environmental incident, ForestrySA expects the Harvesting Contractor to take reasonable measures to mitigate damage caused by the incident.

For improved security and to reduce exposure and risk of spillage, the Harvesting Contractor must ensure that fuel is not stored on ForestrySA's land overnight.

Damage to machinery or to ForestrySA property by a third party needs to be reported within 2 business days.

All lost time and medical treatment only injuries must be reported within 24 hours to ForestrySA.

Other safety incidents and near misses must be reported within 2 business days to ForestrySA.

At its discretion ForestrySA may determine to undertake or have a third party undertake an investigation into an incident.

Where incidents are reported as required above, the Harvesting Contractor must provide ForestrySA with a copy of the Contractors investigation form within 5 business days of the reporting.

The Harvesting Contractor is required to provide ForestrySA with statistical data of Lost Time Injury Frequency Rate (LTIFR) as well as the Severity Rate. (Average Duration Rate) for Lost Time Injuries.

This will be reported on a quarterly basis.

21. DISPUTE RESOLUTION

Should any issues arise for the Harvesting Contractor while completing work under this contract, the Harvesting Contractor is to discuss the issue with their assigned ForestrySA Sales Co-ordinator.

