

BEST ENVIRONMENTAL PRACTICES: HARVESTING

- 1. **Scope**: Timberlands Limited (**TL**) will monitor compliance with these best environmental practices (**BEP**).
- 2. **General**: <u>all</u> operations (including post-operations clean up) must comply with the following:
 - (a). TL harvest plan;
 - (b). TL work prescription;
 - (c). National Environmental Standards for Plantation Forestry ((NES) see below);
 - (d). resource consent conditions;
 - (e). Heritage New Zealand authority (for archaeological sites);
 - (f). relevant forest practice guides; and
 - (g). any other relevant documents or instructions from TL.
- 3. **Operations to cease**: operations are to cease and TL contacted:
 - (a). if there is non-compliance with any of the above requirements, or this BEP, and operations must cease. Operations cannot recommence until approval from TL is given.
 - (b). when weather and site conditions will result in unmanageable risks to the environment.
- 4. **Archaeological sites**: no operations are to be undertaken within archaeological sites unless instructed in writing by TL. If a new archaeological site is discovered or suspected, work in the immediate area is to stop and the site reported to TL. Work cannot proceed until written approval from TL is given.
- 5. **Reporting**: all environmental incidents and hazards are to be reported to TL as soon as they are discovered.
- 6. **Endangered species**: sightings of endangered species (e.g. falcon) are to be reported to TL.
- 7. **Felling**: avoid machinery entering or felling trees into reserve areas, across boundaries, roads, powerlines and fences. If unavoidable felled trees should be removed with minimal damage to the feature and the resulting debris cleaned up.
- 8. **Clean machinery**: machinery must be free of dirt and seeds (as far as practical) before moving from an area where there is pampas in either Rotoehu, Tarawera or Whakarewarewa forests to another forest or where required by regional pest management plans or consent conditions.
- 9. **Removal of materials and rubbish**: all machinery, vehicles, equipment, used parts, wire rope, paint spray cans, grease and oil containers, empty planting boxes, fertiliser bags, and rubbish must be removed from the area at the end of the operation, or sooner if required by TL, to leave the area in a tidy condition to the satisfaction of the TL.
- 10. **Earthworks BEPs**: for earthworks and roading refer to TL's earthworks and roading BEP.
- 11. **Bridges BEPs**: for bridges and culverts refer to TL's river and stream crossing BEP.
- 12. NES: the following paragraphs summarise the relevant parts of the NES as apply to harvesting. You must comply with the NES non-compliance may result in fines, abatement or prosecution.
- 13. **Sediment**: sediment originating from harvesting must be managed to ensure that after reasonable mixing it does not cause any of the following effects in the receiving waters:



- (a). any conspicuous change in colour or visual clarity;
- (b). making fresh water unsuitable for consumption by stock;
- (c). significant adverse effects on aquatic life.
- 14. **Ground disturbance**: harvest systems must be planned and located to achieve butt suspension wherever practicable. Disturbed soil must be stabilised or contained to minimise sediment entering water and causing:
 - (a). the diversion or damming of any water;
 - (b). degradation of the water, aquatic habitat, or river/stream bank;
 - (c). damaging downstream infrastructure, property, or receiving environments.
- 15. Slash/debris management: slash from harvesting:
 - (a). must be placed onto stable ground;
 - (b). that is on the edge of landing sites must be managed to avoid the collapse of slash piles;
 - (c). must not be deposited into water or onto the land that would be covered by water during a flood.
- 16. **Slash in water**: if slash enters water or is on an area that would be covered by water during a flood, it must be removed (if removal can be done safely) to avoid:
 - (a). blocking or damming any water;
 - (b). eroding river banks;
 - (c). significant adverse effects on aquatic life;
 - (d). damaging downstream infrastructure, property, or receiving environments.
- 17. **Margins of Water**: unless unsafe, trees must be felled away from any water body or river/stream bank during harvesting to protect river and stream banks. If it is unsafe to fell away, trees must be felled directly across the water body for full-length extraction before de-limbing or heading.
- 18. **Rivers 3 m wide**: full suspension tree harvesting in a manner that lifts the entire tree above the ground must be achieved across rivers of 3 m (or more) wide.
- 19. **Harvesting machinery**: do not operate machinery:
 - (a). within 5 m of a river which is less than 3 m wide;
 - (b). within 5 m of a wetland larger than 0.25 ha;
 - (c). within 10 m of a river which is more than 10 m wide;
 - (d). within 10 m of a lake larger than 0.25 ha.
- 20. **Exceptions**: harvesting machinery may be operated in the above areas (condition 19 above) if disturbance to the water body from the machinery is minimised; and
 - (a). the machinery is being operated at water body crossing points or it is necessary for slash removal; or
 - (b). it is essential for directional felling or extraction of trees under condition 18 above.



- 21. **River banks**: when harvesting occurs within or across a river or stream bank, all disturbed vegetation, soil, or debris must be deposited to stop it entering into water, and to avoid:
 - (a). the diversion or damming of any water;
 - (b). degradation of the water, aquatic habitat, or river/stream bank;
 - (c). damage to downstream infrastructure and properties.
- 22. **Fuel and oil**: fuel must not be stored, machinery must not be refuelled, and oil must not be changed in any location where fuel can enter water, including:
 - (a). within 10 m of a river, wetland or lake;
 - (b). on, over, within, or in the bed of a stream or river.
- 23. **Fuel discharges**: fuel must not be discharged into water, or onto or into the bed of a stream or river, or onto or into land in circumstances that may cause fuel to enter water.
- 24. **Waste oil**: dumping of fuels, oils, and grease (and their containers) in the forest is prohibited. All waste oil products are to be removed from the forest and disposed of at an approved landfill or waste disposal site.
- 25. **Spill kits**: spill kits (as appropriate) for fuels, oils and chemicals must be kept on site.
- 26. **Ask TL!**: if there is any doubt about an environmental issue, or compliance with this BEP, contact TL for instructions.