



BEST ENVIRONMENTAL PRACTICES: AERIAL OPERATIONS

1. **Scope:** Timberlands Limited (TL) will monitor compliance with these best environmental practices (**BEP**).
2. **Application:** this BEP applies to all aerial operations
3. **General:** all operations (including post-operations clean up) must comply with the following:
 - (a). TL work prescription;
 - (b). National Environmental Standards for Plantation Forestry (**NES**) see below);
 - (c). resource consent conditions;
 - (d). Heritage New Zealand authority (for archaeological sites);
 - (e). relevant forest practice guides; and
 - (f). any other relevant documents or instructions from TL.
4. **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.
5. **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.
6. **Reporting:** all environmental incidents and hazards are to be reported to TL as soon as they are discovered.
7. **Endangered species:** sightings of endangered species (e.g. falcon) are to be reported to TL.
8. **Set-backs:** vehicle/machine shall operate in the setback areas, unless crossing at a designated crossing.
9. **Reserves:** machinery entering into reserve areas, across boundaries, roads, powerlines and fences.
10. **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.
11. **Certification:** Operate in accordance with the relevant FSC ESRA (Environmental and Social Risk Assessment)
12. **NES: the following paragraphs summarise the relevant parts of the NES as apply to aerial operations. You must comply with the NES - non-compliance may result in fines, abatement or prosecution.**
13. **Oversowing:**
 - (a). The oversowing method must ensure that **no seed drift** reaches Riparian zones, neighbouring properties and other non-target area. This may necessitate leaving an unseeded margin.
 - (b). Oversowing is not to be carried out if it is **raining**.
 - (c). Spreading should be undertaken in accordance to the **TL prescription**.
14. **Spraying (including herbicide, pesticide and fungicide application):**
 - (a). All chemical application must comply with the relevant standards of the **NS8409:2004 Management of Agrichemicals**, which promotes safe chemical use.
 - (b). The **pilot** and key staff must hold an Approved Handler certificate as per the HSNO Act regulations.



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- (c). All crew must receive **on-the-job training** prior to the commencement of the operation.
 - (d). Transport of chemicals will comply with **NZS 5433:2012 Transport of Dangerous Goods on Land**
15. **Storage and Mixing:** the following conditions apply to the storage and mixing of chemicals:
- (e). chemicals should be stored and mixed on sites where any spillage will not directly enter the watertable, waterbody, riparian zone or reserves;
 - (f). mixing is to be measured accurately and without spillage (in the event of spillage occurring disposal must be undertaken in a safe manner away from any watertable, waterbody, riparian or reserve).
 - (g). where practical water must be clean and free of dirt particles.
 - (h). chemical containers must be disposed off-site and in the appropriate manner. The preferred method is to recycle via the agri-recovery sites.
 - (i). an emergency spill kit must be available and suitable for quantity and type of chemical being stored and used.
 - (j). waste water from cleaning of storage tanks, equipment and containers must be disposed of in a safe manner away from watertables, waterbodies and riparian zones.
16. **Chemical application:** the following conditions apply to the application of chemicals:
- (k). spray equipment must be calibrated correctly. Leaking nozzles must be cleared or replaced immediately.
 - (l). operations should cease if weather conditions affect spray performance. As a guide the following weather conditions apply for aerial applications of herbicides:
 - Spraying should cease when wind strength reaches 12km/hr.
 - Spraying should cease
 - (m). the application method must ensure that no spray drift reaches surrounding forest stands, riparian zones, neighbouring properties or other non-target areas. This may necessitate leaving an unsprayed margin.
 - (n). chemical mixes should avoid killing non-target species.
 - (o). rates should not exceed the recommended dosage required to effectively control the target species.
17. **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.
18. **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.
19. **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.
20. **Spill kits:** spill kits (as appropriate) for fuels, oils and chemicals must be kept on site.
21. **Daily Aerial Spray Record Form:** Must be completed for every block treated by aerial application.
22. **Ask TLI:** if there is any doubt about an environmental issue, or compliance with this BEP, contact TL for instructions.