



FORESTRY OPERATIONS

Includes: planting, handfelling, spot spraying, pruning and waste thinning

GENERAL

- ◆ If there is any doubt about an environmental issue always contact your **Timberlands Limited (TL) Manager for instructions.**
- ◆ All operations must comply with the **Work Prescription, Environmental Hazard ID Form** and any other relevant document or instruction from **TL.**
- ◆ All operations must comply with **Council standards and resource consent conditions.**
- ◆ **Draining** of sump oil and **dumping** of fuels, oils, and containers is prohibited.
- ◆ No chemicals, fuels or oils should be stored or mixed where a spill could enter a **watertable, stream or riparian zone.**
- ◆ **Spill kits** appropriate to the nature and quantity of fuels, oils and chemicals must be on site.
- ◆ Unless instructed in writing by **TL,** operations are not to be undertaken within **archaeological sites.**
- ◆ 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 permission is received from **TL.**
- ◆ All **environmental incidents** are reported to **TL** as soon as they are discovered.
- ◆ Other environmental issues such as sightings of endangered species, environmental hazards, archaeological sites, etc are **reported to TL.**

Upon completion of the operations the Operation Manager shall ensure that the following is completed:

- ◆ All **waste oil** is to be removed from the forest.
- ◆ Contractors and workers shall remove all machinery, vehicles, equipment, used parts, wire rope, grease and oil containers, empty planting boxes, fertiliser bags, lunch wrappings and general refuse from the area upon completion of the operation, or sooner if so instructed by the Operation Manager. **The area should be left in a tidy condition** to the satisfaction of the **TL** Operation Manager.
- ◆ The clean-up complies with **Council standards and resource consent conditions** and waste products and materials disposed of in an only at Council or legally approved landfill or waste disposal sites.

PLANTING

- ◆ Trees are not to be planted in **riparian zones** (see Kaingaroa Streamside Policy) or reserves.

KAINGAROA STREAMSIDE MANAGEMENT POLICY - PLANTING									
Model Summary (permanent Streams)									
	Plateau Streams					Escarpment Streams			
	Horizontal Dist	10m	10m	30m	30m	20m	30m	30m	30m
	Slope Angle	0-15°	STEEP BANK*	ADJACENT SLOPE	16-25° 26°+	0-15°	16-35°	36-45°	46°+
Activity:		Minimum Distance from Stream							
Planting		5m	3m*	5m	10m	5m	10m	20m	Not be planted
Note: *Landward from dropoff									
This policy prescription does not apply to rivers and streams with adjacent "marginal strips" (i.e. watercourses with bed width equal to or greater than 3m in width). In such cases seek TL advice.									



PRUNING AND THINNING

- ◆ Where practical **directional felling** techniques are to be used to avoid felling edge trees into Riparian zones, Reserve areas, across boundaries and other features such as roads, powerlines fences, firebreaks etc.
- ◆ Pruned branches and thinnings are to be **removed** from neighbouring properties, roads, watertables, waterbodies, firebreaks and fences and placed back into the stand.

SPOT SPRAYING

- ◆ All chemical application must comply with the relevant standards of the **Growsafe Agrichemical Users Code of Practice** (NZS 8409-1999), which promotes safe chemical use.
- ◆ The prime contractor and gang supervisor must hold an **Approved Handler certificate** as per the HSNO Act regulations.
- ◆ All applicators must receive **on-the-job training** prior to the commencement of the operation.
- ◆ Transport of chemicals will comply with NZS 5433:1999 for the **Transport of Dangerous Goods on Land**.

Storage and Mixing

- ◆ Chemicals should be **stored and mixed** on sites where any spillage will not directly enter watertable, stream, riparian zone or reserves.
- ◆ 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, stream riparian or reserve).
- ◆ Where practical **water** must be clean and free of dirt particles.
- ◆ **Chemical containers** should be disposed off-site and in the appropriate manner. The preferred method is to re-locate back to the chemical company.
- ◆ An **emergency spill kit** must be available and suitable for quantity and type of chemical being stored and used.
- ◆ **Waste water** from cleaning of storage tanks, equipment and containers must be disposed of in a safe manner away from watertables, stream and riparian zones.

Application

- ◆ Spray equipment should be **calibrated** correctly. Leaking nozzles must be cleared or replaced immediately.
- ◆ The operation should cease at any time if **weather conditions** are affecting 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 when temperature reaches 20°C.
- ◆ Spraying should only be undertaken in accordance to terms and conditions outlined on the **TL** operational prescription.
- ◆ Spray 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.
- ◆ Chemical mixes should avoid killing **non-target species** (e.g. grasses).
- ◆ **Rates** should not exceed the recommended dosage required to effectively control the target species.