

PRESCRIPTION 26 HERBICIDE SPOT SPRAYING PRESCRIPTION (V2009)

Objective: To release planted trees from weed competition.

Co-ordinator:		Spacing & Stocking:		
Date:		Between rows	Within rows	Stocking (spha)
Contractor:		m	m	
Forest:	Stand:	Wind: km/ha		
Area: ha		* Stop the operation when wind speed exceeds 15km/hr		

Site Specific Requirements

Water tables	Yes/No	Do not spray or carry out mixing unless unavoidable.
Permanent water courses	Yes/No	_____
Restricted areas	Yes/No	_____

Additional Prescription Requirements

Mixing sites, wind, rain, water supply, neighbour's property, buildings

General Requirements

- 1) **Pre-Operation Physical Hazard Identification:** Co-ordinator will list all the known physical hazards for each stand. After the consultation with Co-ordinator, convey those physical hazards together with operational hazards to the employees.
- 2) **Quality Assessment (quality check by the Contractor):** Carry out Quality Assessment to make sure that all the requirements defined in this Prescription and Specifications are met.
- 3) **POAC:** Complete and submit a POAC to the Forest Co-ordinator by the end of monthly measure-up.
- 4) **Make sure all employees understand and meet the following:** a) This Prescription and Job Specifications for Weed Control Hand Spray- Herbicide, b) Forest Operations Handbook, Pan Pac Forest Products, c) OSH Approved Code of Practice for Safety and Health in forest operations, d) Environmental Rules and Guidelines, Pan Pac Forest Products (particularly Section *Agrichemical Application*)
- 5) **Safety Data Sheets (SDS):** Read and understand thoroughly, and always keep it on site.
- 6) **Daily Record Sheet:** You must fill out and provide this to Pan Pac staff daily.

Operational Guidelines

1) Application/Mixing Rates

Application Rates		Mixing Rates	
Spot diameter	1.3 M	Release or Valzine 500/20 L mix	2.0 Litres
Dose/spot	20 ml	Dye/20 L	100 ml
Release or Valzine 500/spot	2.0 ml	Water	18 Litres
Trees/20 L total mix	1000	Bulk water = 400 litres	40 litres Valzine

2) Clothing- minimum requirements

Always wear the correct clean gear in good condition, for your own protection. Wash the contaminated clothes separately from all other clothing

<p><u>When Spraying ...</u> Overalls (washable cotton or disposable) PVC gauntlet gloves Rubber/ PVC steelcap boots - spikes recommended PVC leggings to cover all skin of legs Long sleeved shirt or overalls (sleeves must not be rolled up) PVC cape</p>	<p><u>When mixing ...</u> Overalls (washable cotton or disposable) PVC gauntlet gloves Rubber/PVC steelcap boots (chemical resistant) PVC leggings to cover all skin of legs Face shield or safety glasses</p>
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3) Equipment

Provide and maintain all equipments listed below.

Equipment	Purpose	Requirements
Knapsack sprayers	To spray an accurate dose	With strainers, no leakage
Nozzles	To spray an accurate dose and spot size	Solid cone, FL 15VC or 18VC
Measuring tumbler	To regularly audit 20 ml measured dose	
Measuring pole	To check spot size	With 1.3 m mark on it
Measuring jugs/cups	For mixing and calibration of 20ml per spot	With clear markings
Spill kit	For collecting spilt herbicide and contaminated soil. See Spraying Technique 5) - f) below.	With shovel and heavy plastic bag with tie for the top and absorbent material

4) **Mixing-** Contractor or a senior crewmember must do this task. Both must hold an Applied Growsafe Certificate.

- Have spill kit at the mixing site and when transporting any herbicide.
- Carry out mixing on a large flat surface, at least 20 metres from waterways (in case of spillage).
- Mix only enough herbicide for the day and allow for weather change.
- Always stir well the pure and mixed herbicide.
- Half fill the mixing tank or container with water, **then** concentrated herbicide while stirring, **then** fill the tank with water. For powder or granule herbicides, you may need to mix them into slurry prior to pour into the mixing tank.
- Add spray marker dye and wetting agent (if required) after all other mixing has been done. Then stir gently.
- Avoid carrying mixed over from previous day.

5) **Spraying Technique**

- Develop a rhythm during spraying by keeping up an even walking pace.
- Hold the wands at sufficient height above ground (generally 700-800 mm high, between knee and waist) to give a required spot size (**1.3** m in diameter). Use dye, measuring poles and 20ml tumbler to check the doze and spot size every now and then.
- On slopes, spray the tree from the side or from uphill. Two thirds of the spot needs to be on the uphill side of the tree. This is important because weeds on the uphill side of the tree already have a "height advantage."
- Always mix/stir liquid within the sprayer after any breaks.
- Do not put your foot/feet by the target tree when spraying.
- Always have a spill kit at the work site. Pick up any spilt herbicide and contaminated soil using the kit, then label the bag with the type of herbicides, whether it is a concentrate or herbicide mix. Return the bag to the Forest Co-ordinator.
- When refilling knapsacks, use a jug or funnel to prevent spillage.

6) **After the operation (wash out, container, record)**

- Empty herbicide containers: Triple rinse with water and pour the waste water into another empty container. Keep the lids on when cleaning inside and outside. Then return all the containers to the Forest Coordinator.
- Rinse the knapsack sprayers and measuring gear with water. Put the waste water into an empty container (or a container being used for rinsing).
- Keep daily record of herbicide usage by completing Daily Record Sheet. Also mark up the area treated on the map. Provide the record to Pan Pac staff daily.

7) **Safety**

- Read and understand the Safety Data Sheets (**SDS**).
- Avoid herbicide contact with skin, eyes, and avoid breathing fumes, dust or drift.
- Know the location of clean water suitable for personal first aid.
- Avoid spraying upwind or downwind of others.
- Wash your hands before smoking or eating.
- Prepare spare clothes in case of a heavy spill or for alternative work.

Signed by:

Forest Co-ordinator:

Contractor:

Date: