

Appendix 6: Herbicide for Site Preparation and Plantation Release

Objective: To control regeneration forecasted to compete with planted seedlings by applying an herbicide product registered for forestry applications, using aerial or ground based treatment methods.

Pre-Treatment Assessment

- Initial Release Timing: Release treatments should normally take place the first or second growing season after planting. (see Appendix 7 for natural regeneration release criteria)
- Site Preparation prior to planting: site preparation treatment must occur after competing vegetation has achieved near full foliage (July) and planting may occur within the same growing season and must occur before the end of the next growing season.
- Stocking: > 75% softwood (planted and natural) stocking (using 1.26 m radius (5 m²) plots where one "in" tree represents stocked).
- Competition: Hardwood, woody brush and/or herbaceous weeds occupy ≥ 80% of site; ≥ 40% of the planted crop trees are overtopped, show growth interference or are expected to become overtopped.
- Remnant Overstory: must be < 4 m²/ha BA for aerial treatment.
- Crop tree protection: Initial release treatment cannot be within the year of planting, unless approved by ERD.
- Second Release Timing: Any second release treatment must occur within 4 growing seasons following planting and be recommended by Year 3 Plantation Performance Monitoring (see Appendix 11), unless otherwise approved by ERD.
- Regulations: A Pesticide Use Permit must be obtained from the NB Department of Environment and Local Government, authorizing the application of any herbicide treatment, either by ground or by air, before any operations commence (exception: certified applicators performing ground application on their own land).

Post-Treatment Inspection

- Competition Control: < 25 % of the area stocked to softwood is showing growth interference with hardwood, woody brush and/or herbaceous weeds that is overtopping or expected to overtop the crop species
- Untreated areas: inoperable areas larger than 0.04 ha are considered voids and will be deducted to calculate net treated area. All voids 0.5 ha and larger are to be mapped and must be excluded from the final submitted shapefile. The Marketing Board should download the GPS navigational data from the herbicide application vehicle to determine the area treated.
- Performance Reporting: Each treatment site must be inspected by the Marketing Board during the spring growing season immediately following treatment to determine compliance with the above "Competition Control" criteria. Each Marketing Board will

submit, not later than August 1st of the year following treatment, a list of any sites where the treatment was unsuccessful.

- Re-treatments: Each Marketing Board will submit, not later than November 30th of the year of treatment, a list of any sites receiving re-treatment due to a rating of unsuccessful.
- Sampling: Plot intensity greater of one plot per ha or 4 plots per work area.

Appendix 7: Herbicide for Natural Regeneration Release

Objective: To control regeneration forecasted to compete with desirable natural regeneration by applying a herbicide product registered for forestry applications, using aerial or ground based treatment methods.

Pre-Treatment Assessment

- Stocking: > 75% softwood stocking (using 1.26 m radius (5 m²) plots where one "in" tree represents stocked).
- Competition: Hardwood, woody brush and/or herbaceous weeds occupy ≥ 80% of site; ≥ 40% of the natural regeneration are overtopped, show growth interference or are expected to become overtopped.
- Remnant Overstory: must be < 4 m²/ha basal area for aerial treatment.
- Tolerant Hardwood: < 40% of crop tree competition is tolerant hardwood
- Regulations: A Pesticide Use Permit must be obtained from the NB Department of Environment and Local Government, authorizing the application of any herbicide treatment, either by ground or by air, before any operations commence (exception: certified applicators performing ground application on their own land).

Post-Treatment Inspection

- Competition Control: < 25 % of the area stocked to softwood is showing growth interference with hardwood, woody brush and/or herbaceous weeds that is overtopping or expected to overtop the crop species
- Untreated areas: inoperable areas larger than 0.04 ha are considered voids and will be deducted to calculate net treated area. All voids 0.5 ha and larger are to be mapped and must be excluded from the final submitted shapefile. The Marketing Board should download the GPS navigational data from the herbicide application vehicle to determine the area treated.
- Reporting: Each treatment site must be inspected by the Marketing Board during the spring growing season immediately following treatment to determine compliance with the above "Competition Control" criteria. Each Marketing Board will submit, not later than August 1st of the year following treatment, a list of any sites where the treatment was unsuccessful.
- Sampling: Plot intensity greater of one plot per ha or 4 plots per work area.