Personal Protective Equipment

* Hard hat of contrasting colour
* Hearing Protection
* Leg protection (bucking pants)
* Eye and face protection (visor)
* Hand protection (cut resistant gloves)
* High visibility apparel
* Safety footwear (caulked boots)
* Appropriate clothing for the weather conditions including rain jacket and pants; insulating layers; extra gloves and head coverings for cold and/or wet weather.
* Whistle and /or portable radio
* Personal first aid kit including a large pressure bandage for any large cuts and EpiPen if allergic to bee stings.

**HEALTH CONSIDERATIONS**

*Thinning or juvenile spacing and mechanical brushing is very physical work with my hazards associated with a forested environment including*:

* Mosquitoes – have repellent available and cover.
* Bees and Wasps – If any identified, inform the rest of the crew.
* Ticks – Check frequently and on a regular basis for ticks on clothing and keep pant and shirt cuffs and sleeves tucked-in. Workers should check each other also.
* Wildlife (e.g., bears, cougars, moose…) – Check the work area for any wildlife before and during operations that could have come onto the site.

*To maintain good health before and during work:*

* Get a good night’s sleep.
* Be mentally and physically prepared to begin work, including stretching and warming up before and during work.
* Eat health, nutritious meals and refrain from using drugs and alcohol.
* Prepare nutritious meals and snacks; and bring lots of water and electrolytes replacements for the workday.
* Bring personal care products including medical prescriptions and medications; sunscreen; and lotions.
* Take frequent small breaks for water and nutrition; and to stretch.

PRe-work procedures

*Prior to conducting a pre-work meeting with the crew, the supervisor or foreman should complete a pre-work meeting with the client and review the prescription or site plan, ensure that they understand the site plan requirements; and then visit the worksite and complete a documented inspection and hazard assessment, mapping any hazards that have not been detailed or found in the site plans.*

**PRE-WORK MEETING WITH CREW**

* Conduct a pre-work meeting with crew to review and discuss hazards (and methods to control them); site plan (e.g., cutting prescription) and maps, and emergency response procedures.
* Review on maps, allocated work areas or strips for each crew member
* Discuss who are the designated first aid attendants and the location of first aid supplies, ETV and stretcher if appliable.
* A review of emergency response plan procedures including muster point; emergency communications and signals (e.g., whistle, radio and horns); fires response; first aid procedures and evacuation procedures.
* Establish communication and check-in procedures and intervals; and don’t work alone.
* Re-fuel in a designated, safe area (clearings); carry personal first extinguisher and no smoking.
* Fire protection reporting and response procedures and location of fire equipment and tools.

*Hazards to be aware of could include:*

* Danger trees and overhead hazards
* Steep ground, rocky terrain, gullies, holes and debris
* Weather conditions including snow and ice; high winds; rain; flog and poor visibility conditions; heat and high fire hazard conditions.
* Insects and wildlife as previously mentioned.

Spacing and Thinning Technique

*The following general rules should be followed for spacing and thinning operations:*

* Each crew member is assigned a work area or strip that is flagged out.
* The worker should work uphill in a zig-zag pattern covering the whole strip, looking ahead for hazards and stem distribution.
* Stay aware of your position in the work area and the position of the adjacent workers.
* Keep stump heights low and less than 30 cm; and cut below the lowest live branch.
* All cuts should be parallel to the ground to avoid sharp points that can injure other workers and wildlife.
* All stems cut cleanly with no hinges.
* Accidentally damaged trees must be cut.
* Cut trees should not lean on crop trees.
* All conifers, other than crop trees taller than one metre must be cut.
* Cut small stems and then large ones, leaving crop trees of good form and vigour.
* Larger stems should be fallen with a small undercut.
* Generally, all woody vegetation competing with crop trees should be cut back at least one metre.
* Reduce spacing by 50 percent around natural openings, old skid trails and roads.

Chainsaw use

* Use a smaller, appropriate sized chainsaw with medium sized bar, that reduce the amount of bending over to cut stems.
* Check that the chainsaw is running well and that the muffler is adequate.
* Carry a personal first extinguisher and personal first aid kit.
* The chainsaw sharp, tension set, saw properly maintained; and extra sharp chains are available.
* Have available tools available for maintaining the saw including chain sharpening tool (file guides); files; screwdriver; and grease gun.
* Check that chain brake is functioning properly.
* Check that there is sufficient mixed gas and chain oil for the work day.
* Refuel after the engine has cooled down.
* Chain brake engaged to control fast idle start.
* Maintain good balance and a secure footing when operating; and keep chainsaw below waist height.

Brush saw use

*As per the items listed under chainsaw use and including:*

* Avoid using brush saws on steep slopes and use only a ground level to moderately sloping terrain.
* Ensure that the saw properly maintained.
* Cut on the left side of the blade so that machine pulls away from operator.
* Saw blade sharp and extra saw blades are available.
* Ensure that the cutting head is adjusted properly and tight.
* The guard is intact.
* Harness properly fit and adjusted to prevent back strain.
* Shut off engine before putting cutter down and before cleaning out clogged or stuck cutter.