

April 18, 2018

Forestry/Logging Operations

PURPOSE/APPLICATION

To provide guidance to the safe operations of tree falling, brush piling, etc. in the clearing of land as required, in the construction of facilities, pipeline right of ways, etc.

Note: Canadian Plains Energy Services (CPES) does not typically perform forestry/logging operations, but sub-contracts the work. However, as part of effective contractor management, CPES ensures that sub-contractor's safe work practices are equal to or better than CPES's Safe Work Practices.

PPE

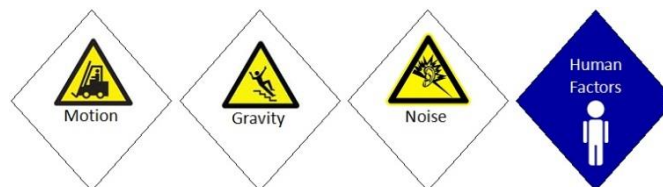
- CPES Minimum Requirements
- PPE Required in manual forestry operations (wire mesh face protection, hearing protection, gloves, limb protection (i.e. chain saw pants or chaps made of ballistic nylon), high-visibility/reflective clothing)

TRAINING

- Chain saw operation training (for climbing, bucking)
- Tree falling training

HAZARDS & CONCERNS

- Motion
- Gravity
- Abrasions/bruising/amputation
- Musculoskeletal injuries
- Flying debris
- Noise
- Vibration
- Struck by Object
- Mobile Equipment (e.g. feller bunchers, skidders, log trucks)
- Hazard trees (i.e. dead, leaning, lifting root mat, etc.)



PRECAUTIONS

Each worker has the responsibility to recognize forestry and logging operation hazard sources and take corrective measures by ensuring this practice is followed. Specifically hazards associated with ground, terrain conditions and logging activities.

1) Tree Falling

Felling and Bucking:

- A faller will ensure, before a tree is felled, that there is a clear path of retreat and sufficient space to work for the faller and the faller trainee, if any.
- Ensure that workers, except the hand faller, remain a distance of not less than twice the height of the tallest tree away from the immediate area in which the felling is taking place.
- Will ensure that, if a self-propelled mechanized feller is operating, workers remain at least the minimum distance prescribed by the manufacturer of the feller away from the immediate area in which felling is taking place.

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- Will inspect and test the "chain-brake" system on the chain saw prior to starting work activities, as well as on a regular basis through the workday. Chainsaws without "chain-brakes" are not allowed.
- Chainsaw Operation SWP-13 provides specific requirements with respect to safe use of chainsaws.

Cutting Timber:

- Fell or remove snags and trees that may create a danger to workers as the cutting progresses, and when workers are conducting other activities close to the edge of the worksite.
- Make a correct notch, not less than one quarter and not more than one third of the diameter of the tree at the butt, when felling a tree.
- Complete and clean out the undercut, leaving sufficient uncut wood in the felling cut to control the direction in which the tree falls,
- Refrain from working on hillsides immediately below another worker if skidding or felling operations are underway; as well as when there is a potential for sliding or rolling trees or logs may be present.
- Carry and use wedges for hand felling and closely trim logs before they are put onto a truck, log deck or rollway.

Partially cut trees:

- Partially cut trees will not be left standing.

Bucking:

- Protect other workers from the movement of trees during bucking, including the potential of a piece of tree "snapping" free and rolling
- Clear away all brush and other objects that may catch the saw before starting to buck the limbs and work on the upper side of logs lying on inclines.

2) Mechanized Feller or Limber

Mechanical fellers and limbers will be equipped with a cab where the operator has two exits from which the operator can readily escape.

Will be designed and equipped to direct the fall of the tree away from the mechanized feller.

Cable skidders, grapple skidders and crawlers used in the harvesting of trees are required to meet the requirements of SAE Recommended Practice J1084 APR80 (R2002), Operator Protective Structure Performance Criteria for Certain Forestry Equipment.

3) Road warnings

Road Warning Methods:

- Worker will not fell a tree within the range of a road travelled by other workers or the public unless a designated signaler is on the road to warn those approaching; stopping traffic until the tree is down and it is safe to continue
- Two flags or warning signs will be placed on the side of the road at a distance between 30m and 90m from where the tree is to be felled and could possibly land on the roadway.

Traffic Safety:

- When roadways are too narrow for two vehicles at the same time, traffic control devices will be implemented to control the movement of vehicles. Controls may include turnouts; warning signs; kilometer markings and two-way radio communications; and the requirement to use headlights.
- If falling creates a hazard for road traffic the faller is responsible to close and barricade the road and Post a sign, i.e., "Danger – Falling Area – Road Closed – Do Not Enter". The closure sign may

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be supported by a rope that is well marked with flagging tape and clearly visible to oncoming traffic.

- Traffic Control SWP-09 provides specific requirements with respect to traffic control.

Personal Protective Equipment:

- Safety glasses or goggles alone do not give adequate protection as they do not protect face from flying or falling debris - use of a wire-mesh face screen that easily flips up is also required.
- Hi-Vis clothing will be used while completing Felling and Bucking activities as it allows you to be seen at a distance, both during regular man-checks and in case of an injury. Hi-Vis apparel can be a vest or modified clothing.
- Workers operating chainsaws are required to use industry acceptable pant type leg protection to prevent leg injury due to contact with a moving saw chain.
- Leg protection must be of materials suitable for the intended application and must not unduly restrict the manoeuvrability of the worker. Leg protection must not shrink more than 10% when cleaned in accordance with the manufacturer's instructions during its service life.
- The protective material of leg protection must be at least 711 mm long and a width covering 180° in the front of both legs from inseam to out-seam plus 100 mm (4 in) on the left side of both legs. If the 28" length requirement results in a tripping hazard, the protective pad can be shorter, as long as it covers an area extending from the crotch to within 75 mm (3 in) of the centre of the ankle.
- Leg protection must meet the requirements of the "Threshold Chain Speed" Test. Tests must be done on leg protection samples assembled in the manner which the leg protection will be produced for distribution.
- Leg protection must be permanently marked on the exterior of the leg protection with characters at least 6 mm (¼ in) high to show the manufacturer's name or recognized trademark, the design specification standard, and the performance standard and level met by the protective material.

REFERENCES / ADDITIONAL INFORMATION

- SWP-13 Chainsaw Operation
- SWP-09 Traffic Control
- BC Faller Training Standard

REGULATIONS

Alberta OHS Code

Section 34

British Columbia OHS Regulation

Part 26 – Forestry Operations

Guidelines – Part 7

WCB Standard – 1997 – Leg Protective Devices (Amended January 2008)



SAFE WORK PRACTICE

SWP-65

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