



July 2021

Logger Safety Initiative Quarterly Training

Why am I receiving this LSI Safety Training Packet?

LSI participants are required to annually attend approved LSI Employer Logger Safety program training. There are two parts to the required training: Formal Training and Safety Training (see the attached LSI Training Requirements for more details). This packet satisfies one of the four required Safety Trainings. The LSI employer must ensure that all workers receive four LSI required trainings per year.

How do I provide the training to my employees?

LSI Employers and supervisors, if delegated, and all employees engaged in manual logging operations must participate in at least four (4) LSI trainings on an annual basis. If you have employees that do ground operations, even if only occasionally, review the "In the Clear Rigging" safety training (found on our website) materials in detail and discuss the scenarios with employees.

What documentation is required?

LSI employers will document that the training took place as part of their safety minutes. Be sure staff has signed the safety meeting sign-in sheet. The completion of the training will be assessed at the annual DOSH LSI Consultation.



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Quarterly Logging Training: Cable Logging in a Thinning Unit

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This training will review the hazards associated with cable logging in a thinning. Once hazards have been identified, developing procedures and applying methods to help reduce the chance of injury is imperative. Performing a risk assessment to identify hazards and potential failure zones, may not always ensure complete safety. However, it is a key component to minimizing inherent dangers and helping to ensure that the job is performed as safe as possible.

First off, what are some of the safety aspects related to cable logging in a thinning? Please take a few minutes to discuss what you already may already know with your crew. Potentially, you may unveil other elements not covered in this training. *(Supervisors make a list of your crew's suggestions).*

Though there are countless hazards one can encounter, we have narrowed it down to a few of the most common hazards:

- More overhead hazards
- Lateral pull hazards/working in corridors
- Hang-ups
- Smaller/road-side landings

Additional topics to discuss with your crew (may include):

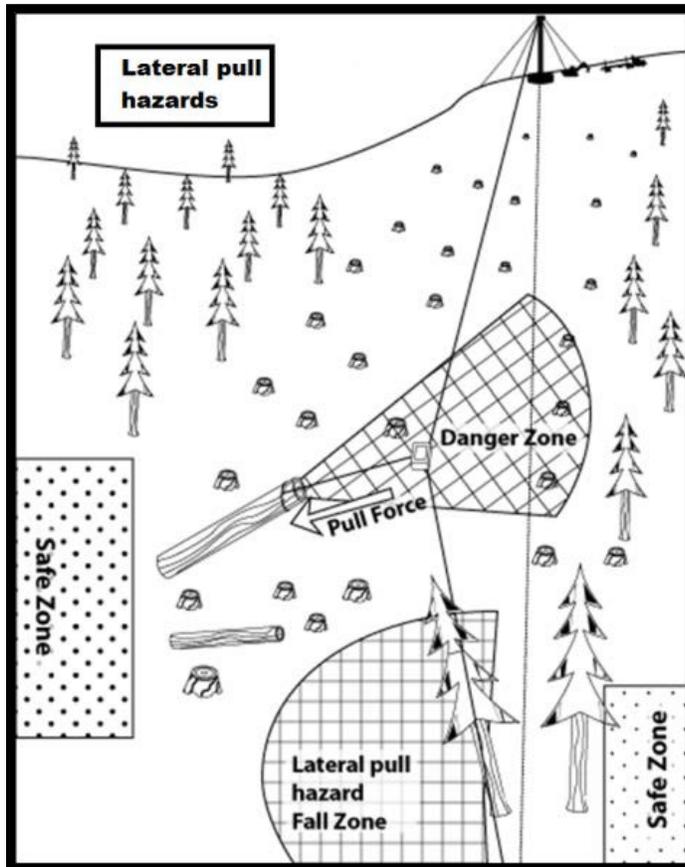
- Limited anchor choices for staying aligned in corridors
- Standing anchor trees (guylines, tree guylines, tailholds, etc.)
- Side-washes

Overhead hazards

During thinning operations or whenever working near standing timber, make sure the crew watches for hung/lodged trees, widow makers, and trees which could be pushed or pulled over while yarding. Remind fallers it is a requirement to mark the trees that they are unable to get

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on the ground with high visibility flagging or other means. Hung up trees that are left in the unit need to be discussed prior to work taking place, or before continuing work, once discovered.

Lateral Pull Hazards

When working in tight corridors, the rigging slinger needs to use good angles to extract the felled timber to ensure that he is limiting the risk of striking and damaging the standing trees and helping to eliminate potential hang-ups.

While rigging crews might feel safe getting in the clear by using the standing timber as a physical barrier, they must also keep in mind to remain in the clear of standing trees and saplings that could be pulled over and/or broken off during yarding

operations when clearing out on the lateral pull side (see illustration "pull force").

NOTE: Be aware of hazards on the opposite side of lateral pull, such as potential for struck-by's from broken line and/or flying debris/logs.

Hang-ups

Each turn and hang up is different. If a turn becomes hung up, all employees must remain in the clear until the rigging has been slacked to reduce the hazard. As with any unusual circumstance, communication, assessment, and planning are critical. Take time to evaluate potential hazards and abate them. If the rigging slinger is not comfortable with the hang-up, radio the hook tender for assistance. Take your time to create a plan of action and reassess the situation. Never run in too quickly to un-bell a choker on a hung-up turn!



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Considerations for freeing a hung-up turn include, but are not limited to removing/un-belling a choker cutting the hang-up out of the way with a chainsaw if feasible, or using the rigging to pull at a different angle.

Scenario: the turn is hung-up under something such as a root wad, stump, windfall, etc....

- 1) If attempting to manually free the hang-up (chainsaw, un-bell choker, etc..), slack the rigging and communicate what has happened and inform the crew of your intended plan. This may include slacking the skyline as well, if having to fell trees that are causing hang-ups. NOTE: Any time a tree or hang-up may strike a line, the line must be slacked.
- 2) Stay well in the clear if attempting to free the hang-up with the rigging/carriage.
- 3) You may need a chainsaw to free the turn if all other methods are unsuccessful.
- 4) Follow all safety protocols for chainsaw use, inspection, and PPE use and inspection.
- 5) Ensure the crew is in the clear of the lines and in a safe place, as the hang-up may roll downhill after being cut off.
- 6) Have chainsaw and PPE ready and available, to include wedges, axe, extra gas & oil. It is preferable that the crew keeps a saw available as they move down the corridor.
- 7) Attempt to approach the hang-up from the uphill side.
- 8) Assess the situation to determine what the log may do prior to cutting, keeping in mind there may be pressure on the log, the log may roll, or slide down the hill.
- 9) Place shear logs to keep the turns or logs from getting under or around possible hang-ups (when ground conditions permit and shear logs will not create an additional hazard).

Intermediate support trees

Trees used, as intermediate supports must be firmly rooted, sound and straight from the ground to the point of strap attachment, and must be rigged so that:

- Carriage clearance, as measured at the base of the support tree(s) is approximately five feet.
- The jackline/support line is a single piece of line that is one-eighth inch larger than the tong or skidding line or rigged to provide a strength equal to a line one-eighth inch larger than the tong or skidding line.
- Intermediate support trees must be adequately guyed to withstand any stress to which the tree may be subjected.

Avoid sending carriages over supports in excessive speed. Best practice is to coordinate with the yarder engineer and have them mark on their drums approximate locations of

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support trees. Excessive speeds can cause upset conditions which could cause carriages to come off of lines and/or put unnecessary strain on support trees. Same best practice applies for marking tail/lift trees on drum, to help reduce chances of running into tail tree at excessive speeds.

****Review WAC 296-54-565 for further details and requirements.***

Tail/lift tree

In accordance to WAC 296-54-563(1) “Whenever a tail/lift tree is within reach of the work area and the rigging is placed on the tail/lift tree at a height greater than five times the tree diameter (dbh), at least two guylines must be used unless tree size and strength and rigging position eliminate the need for guylines or employees must be in the clear before the go-ahead signal is given.”

****Review WAC 296-54-563 for the complete list of requirements.***

Small Landings

Landings used when thinning timber are typically limited to the available space at each corridor along the roadway.

Ensure that the landing, in combination with the lay of ground, is able to support the logs. In accordance to WAC 296-54-577(10) logs must be stable and secure before being approached by employees and before chokers are unhooked.

If the landing will not allow the yarded trees/logs to land unassisted, a machine can be used to help stabilize the turn. Crews must remain in the clear until all unstable logs are removed from the chute.

All danger trees within reach of landings, rigging, buildings, or work areas must be fell, or have work arranged so that employees are not exposed to the hazard.

All trees that interfere with proper alignment, placement, or tightening of guylines must be fell.

NOTE: Keep in mind that extreme weather conditions such as, but not limited to- wind, snow, and ice, can have a more significant impact on thinning operations and must be given careful consideration when evaluating their potential impact on crew safety.

****Review WAC 296-54-575 for further landing requirements and details.***

