



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.



Keeping Washington loggers safe.

Quarterly Logging Safety Training: Freeing a Hung Up Turn

July 1, 2017

Stay in the clear of a turn:

A log struck a 19-year-old choker setter after a turn hung up on a stump and came loose. The victim had about three months logging experience. During the previous two weeks, he had been receiving on-the-job training as a rigging slinger. On the day of the incident, there were three employees at the cable logging site: the choker setter, hooktender, and yoder operator. The choker setter and hooktender sent a turn to the landing. After about 200 feet, the turn got hung up on a stump. Attempting to free the turn, the choker setter ran the carriage a short ways downhill and then back uphill again. The turn did not come free. The choker setter walked up to the turn. He then clamped the skyline brake to the skyline and tight-lined the skyline. This caused the lines to increase the lift tension on the choked logs. As the skyline and carriage picked up the turn, the end of the choked log swung uphill towards the choker setter hitting the front of his body and arms, knocking him down. When the choker setter was struck, he was about 28 feet to the side of the stump where the turn had hung up. He was taken to a hospital but suffered only minor injuries.

Safety Requirements and Safe Practices

- Employees must be in the clear of logs, root wads, chunks, hazardous trees, rolling material, and rigging before the go-ahead signal is given and must stay in the clear until all rigging movement has stopped.
- Employees must move away from the turn so as to be above or behind the turn and in the clear.
- All employees must remain away from rigging that is stopped at a hang up, until the rigging has been slacked due to the hazard.
- Rigging crew should be in the clear further than the swing radius of the longest log in the turn. If you are unsure where the ends of the logs are located or how other logs or debris could move, the crew should be at least 40 feet beyond the potential wing radius of the longest log.
- They must remain on their feet and face the turn before the go-ahead signal is given.
- Keep a closer eye on new employees or employees taking on a new job duty.
- When an upset condition occurs, have the most experienced person take charge to clear the condition.

How will you free a hung up turn? Each turn is different and if it hangs up, the crew should thoroughly evaluate the safest possible means to free it. Often, if a turn hangs up it is due to having too much weight added to it. By removing a choker, it can often be freed and logging may resume. Other times you can free the turn by running the rigging back. If a stump is in the haul road, it can cause a hang up and should be cut and safety moved out of the way.

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 continuously reassess the situation. Never run in to quickly unbell a choker on a hung turn!

**Per the LSI Accident Prevention Program, "Match the size of the turn to the machine. Overloading places a strain on the machine and rigging which can lead to catastrophic failure."*

Scenario 1: A heavy turn is hung up and a choker needs to be taken off so it can be yarded in.



- 1) Let all employees and operators know what is happening.
- 2) If there is a possibility of the shovel or processor losing a log over the hill, have them stop working.
- 3) Ensure all crew are in the clear.
- 4) Slack all lines.
- 5) If it is a steep hillside and there is a threat that the logs may not stay, slack the turn back to a spot where they will safely stay in one place.
- 6) After logs are sitting securely and all lines are slacked, check for other hazards, such as lines hung in limbs, possible debris from above, logs in the turn moving, or other possible hazards.
- 7) Ensure the rest of the rigging crew stays in the clear.
- 8) Do not take short cuts,
- 9) Unbell or remove choker.
- 10) Get in the clear.
- 11) Let everyone know you are going back to work.
- 12) Signal to have all lines picked back up, and send the turn in.
- 13) If the pull was hard, have the hooktender check tailhold and guy line stumps.

** Per the LSI Accident Prevention Program, "Employees must be in the clear of logs, root wads, chunks, hazardous trees, rolling material, rigging and standing tree anchors before the go-ahead signal is given and must stay in the clear until all rigging movement has stopped."*

Scenario 2: Turns keep hanging up on a large stump

- 1) Let everyone know what has happened and inform them that the stump will be removed.
- 2) Get a saw with a sharp chain that is full of fuel and bar oil, wedges (if needed), chaps, safety glasses, and ear plugs.
- 3) Inspect the saw and PPE.
- 4) Ensure all the crew is in the clear of the lines and in a safe place because the stump may roll downhill after being cut off.
- 5) Slack all lines.
- 6) Assess the situation.
- 7) Check again that all are in the clear.
- 8) Cut the stump.
- 9) If the stump is stuck, put a strap on it and pull it off.
- 10) If the stump falls off safely but has the potential to roll back at the crew during yarding operations, choke it and send to the landing.



Scenario 3: Turns hung up under something such as a root wad, stump, windfall, etc....

- 1) Let everyone know what has happened and inform them that the stump will be removed.
- 2) Stay well in the clear and try running the rigging back first.
- 3) If you can't get the turn freed by running the rigging back then get a saw with a sharp chain that is full of fuel and bar oil, wedges (if needed), chaps, safety glasses, and ear plugs.
- 4) Inspect the saw and PPE.
- 5) Ensure all the crew is in the clear of the lines and in a safe place because the hazard may roll downhill after being cut off.
- 6) Slack all lines.
- 7) Assess the situation. What will the log do prior to cutting, keeping in mind there may be pressure on the log, the log may roll, slide down the hill, etc...
- 8) Cut the hung portion of the log (s) off. There may be lots of pressure on the logs. Have the crew member with the most saw experience do the bucking.
- 9) Place "shear" logs to keep the turns or logs from getting under or around possible hang up (when ground conditions permit and shear logs will not create an additional hazard).

Questions/conversations:

- 1) How would you handle these situations?
- 2) What are your company's policies on these type of situations?
- 3) What is your company's presetting choker plan?
- 4) Do you have any relevant situations or thoughts to share?