



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?

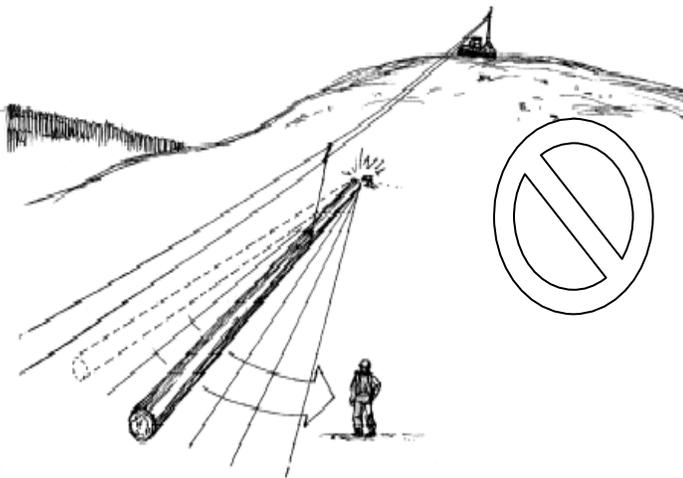
LSI employers will document that the training took place as part of their safety minutes. Be sure staff has signed the safety meeting sign-in sheet. The completion of the training will be assessed at the annual DOSH LSI Consultation.

In the Clear Logging Training – Quarter 2 2018

Please review the “In the Clear” safety requirement of the Logger Safety Initiative (LSI) program listed below (*Note, this is not a complete list). Read the safety questions, Hazard Briefs and Injury Alerts and discuss them as a group.

LSI “In the Clear” Safety Requirements:

- A position where the probability of hazardous contact with machines, moving logs, chunks, material, and rigging is minimized by distance from hazards and/or use of physical barrier such as stumps, trees, terrain, or other objects.
- Back behind on the uphill side of the turn and out of reach of any swinging or upending logs.
- Out of the bight.
- In a position where movement will not be obstructed, preferably in the logged off area.
- You are not in the clear unless you are out of the swing radius of the longest log in the turn. This means the length of the log, plus the length of the choker and dropline, and any deflection that could occur. If unsure of where the logs end the crew should be at least 40 feet beyond the potential swing radius of the longest log.
- When the rigging crew is in the clear, the rigging slinger blows a go-ahead signal, and the crew must watch the turn until it is yarded free. Blow a “go ahead slow” signal if there is any question about the turn, such as length or action of the logs in the turn. Watch for debris picked up by the logs or rigging that could roll back at the crew. If you are carrying a signaling device, be prepared to blow a “stop” signal. There must be two signaling devices at the point where chokers are being set whenever the crew consists of two or more workers.



Not being in the clear is still a leading cause of serious injury and death to rigging crews.

Commonly heard reasons for not being in the clear:

- The crew thought they were far enough out.
- They didn't know the log had a long end.
- All the ends were good so the crew didn't feel the need to clear out very far.
- The crew was tired and it was a long walk uphill to get in the clear.
- It's not practical to get in the clear by the definition.
- Our crew has never pulled a tail hold before so we thought we were fine.
- The crew pushes production to keep the landing busy.
- The crew didn't realize the trees were being pushed towards them by the skyline.

There is never a reason to not be in the clear!

- Management and lead workers must properly train employees, set expectations and hold everyone accountable for being in the clear.
- Never become complacent. In situations with good ends and lots of lift, workers must still get in the clear.
- When working in a setting where there is little lift, the likelihood of logs upending increases.
- The crew must hold each other accountable for safety. If you feel your coworkers are not in the clear, speak up! It could save someone's life.
- Hook tenders and rigging slingers: as lead workers, you should set a positive example for the choker setters. They look to you for guidance and safe practices.

Safety questions for discussion:

- Have there been any in the clear near-misses lately? When was the last time you reported a hazard observation?
- Does your crew discuss in the clear hazards when starting a new unit?
- Are you in the clear every time?
- Do you understand the hazards of your job?
- Are new crew members trained properly?
- Have you ever read an incident report that caused you to change your own practices?
- Is risking your life, or the life of your coworkers, worth a few more turns to the landing?

Rigging Slinger Killed When Struck in Head by Hung-up Log

Task: Cable logging **Occupation:** Rigging Slinger **Release Date:** August 28, 2015

In November 2014, a 25-year-old rigging slinger died after he was struck in the head by a log that swung while being yarded. The victim was part of a two-man rigging crew working on both sides of the skyline. They were alternating between pre-setting chokers and acting as rigging slinger. The victim had three years of experience as a rigging slinger; his coworker had been on the job for six months. They were working about 600 feet below the landing on an approximately 45 degree slope. The victim was down in a slight draw pre-setting chokers below and in front of a three-log turn to be yarded. The other worker was above the draw hooking up the previously set chokers and could not see the victim. He called to the victim to ask if it was all right to signal the go-ahead to yard the turn. The victim gave him the OK. After about 40 feet, the turn became hung-up on a stump causing one of the trees, a double-topped fir approximately 70-feet long, to upend down into the draw where the victim was standing. The log struck him in the head under the chin. The yarder operator stopped the turn when he saw the victim's hardhat flying through the air. The other employees who were onsite began CPR in the field. Emergency responders arrived and transported him to a local hospital where he was pronounced dead.



Turn hung-up on stump with log that upended and struck victim



Incident scene showing victim's location and log that struck him

Safety Requirements

- Employers must ensure that employees move away from the turn so as to be above or behind the turn and in the clear. They must remain on their feet and face the turn before the go-ahead signal is given. See [WAC 296-54-577\(5\)](#)

Recommended Safe Practices

- To be in the clear, remain out of the swing radius of the longest log being yarded. This distance includes the length of the log, the choker, the drop line, and any line deflection that could occur.
- Before pre-setting chokers, the employer, supervisor, or hooktender should develop a written safety plan to ensure that pre-setting will be done in a safe manner, and review it with all members of the rigging crew.
- Ensure that rigging slingers always get themselves in the clear, not just their choker setters, before signaling the go-ahead on a turn.
- Clear out on the same side of the lines.
- Never begin setting chokers until the turn has cleared your area. The amount of time you think you might save isn't worth your life!

Resources

- In the Clear training packet from the Washington Logger Safety Initiative (LSI): www.lni.wa.gov/Main/LoggerSafety/Pdfs/TrainingPacketInTheClearCableLogging.pdf
- Free video from Labor & Industries, "Be Safe in the Woods" at: <https://secure.lni.wa.gov/safetyandhealthlibrary/VideoDetails.aspx?VideoID=1490>
- LSI Sample Accident Prevention Program for Logging Operations. : www.lni.wa.gov/Safety/TrainingPrevention/Programs/files/LSILoggingOperationsSampleAPP.doc

Hazard: Skyline Hung Through Standing Timber

Watch out for:

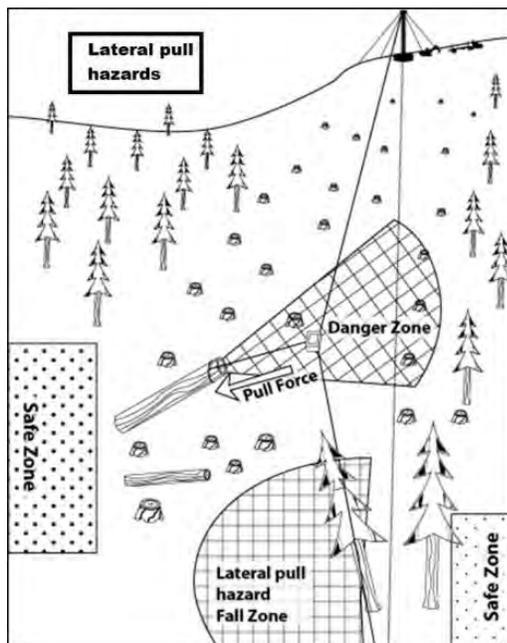
- Snags
- Line hang-ups
- Lateral pulls



Snag hazard



Skyline hung through trees



Danger zones and fall zones may increase in size depending on the distance of lateral pull. More pull results in larger hazard areas.

- Ground all snags that have the potential to create a hazard
- Make sure that skyline is not hung in limbs when slacking lines
- Clear out on the opposite side of the pull when lateral pulling near standing timber
- Fell any tree that is damaged by the skyline and becomes a hazard

WAC 296-54-577(4) 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.

Prepared by WA State Fatality Assessment and Control Evaluation (WA FACE) program. WA FACE is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant 2U00H008487).

Chaser Run Over by Loader

Task: Branding and painting logs

Occupation: Chaser

Release Date: March 23, 2015

A 64-year-old chaser was severely injured when his leg was run over by a log loader. The chaser had over 25 years' experience working in the logging industry. On the day of the incident, the chaser, his employer, and a log truck driver were working at a landing on a Forest Service timber sale. The employer was operating a loader to place logs onto the log truck's trailer. There were piles of logs on either side of the loader. The loader was a few yards behind the trailer. The chaser was performing various tasks, including bucking, limbing, branding, and painting logs. The Forest Service requires that logs be branded and painted on both ends. The operator backed the loader up a short distance and began rearranging logs in a pile so that he could pick up the ones that he needed to load onto the trailer. At this point the chaser, who had been talking to the truck driver at the front of his truck, walked back towards the loader. The chaser later stated that he felt he should be doing something and decided that he would go to the back of the trailer and brand some logs. He did not signal the operator. As he was preparing to brand a log, he turned his back to the loader. The operator, who had the cab turned away from the chaser and could not see him, picked up several logs to load onto the truck. He then began to swing the logs around while at the same time moving the loader forward toward the trailer. He heard a scream and saw that the loader's right track had run over the chaser's left leg. Immediately he backed off and dialed 911. The chaser suffered severe crushing injuries to his leg and was hospitalized. Investigators determined that the loader's travel alarm was not functioning, making it less likely that the chaser would be aware that the loader was moving toward him.



Incident scene. The chaser was in the approximate position of the red-circled person when he was run over by the loader.

Safety Requirements

- At any time when moving logging machines, the driver must have a clear and unobstructed view of the direction of travel. When this is not possible, a signal person with a clear and unobstructed view of the direction of travel must be designated and used to direct the movement of the machine, or the machine must have an audible horn that is sounded. See [WAC 296-54-57345\(2\)](#).

- Each vehicle, machine, and piece of equipment used to perform any logging operation must be maintained in serviceable condition. See [WAC 296-54-523\(3\)](#).

Recommended Safe Practices

- Before using the loader, the operator must be able to see or know the whereabouts of all landing workers and be sure that they are out of the danger area.
- Workers must always notify the operator when they are approaching the loader and get his permission to enter the work area.
- Ensure mobile equipment travel alarms are maintained in operable condition.

Resources*

- Free workplace safety and health consultations are available from L&I at:

www.SafetyConsultants.Lni.wa.gov

- Free video from Labor & Industries, "Be Safe in the Woods" at:

<https://fortress.wa.gov/lni/shrl/VideoDetails.aspx?VideoID=1490>

- Accident Prevention Program for Logging Operations. Washington State Logger Safety Initiative at:

<http://www.lni.wa.gov/Safety/TrainingPrevention/Programs/files/LSILoggingOperationsSampleAPP.doc>

*These internet links have been shortened for publication and will not operate in your web browser as written. To access these resources, please go to the SHARP publications page at www.lni.wa.gov/Safety/Research/Pubs/, click on *Logging*, open this document and follow the links from there. Prepared by Randy Clark and Christina Rappin, WA State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), WA State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5 U60 OH008487-09).

Skyline Hazard Complacency

Today, most cable logging in Washington is done using a motorized carriage and standing skyline. Younger rigging crew members may have never worked around “shotgun logging” with a skyline that is slacked up and down throughout the day. Crews that get used to a skyline that stays in the air except during road changes might forget that it can still come crashing down!

Complacency about skyline hazards can lead to risky behavior, such as:

- Crossing the skyline when the turn is going in
- Setting chokers under the skyline
- Standing too close to the skyline to pick their next turns while a turn is going in



- Train rigging crews on skyline hazards
- Ensure everyone follows “in the clear” policy
- Speak up if you see risky behavior
- Teach crews how to safely pick turns, preset chokers, and remain in the clear



Requirements:

- 54-577(4) 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.
- 54-577(6) All employees must remain away from rigging that is stopped at a hang-up, until the rigging has been slacked to reduce the hazard.
- 54-577(7) Chokers must not be hooked or unhooked until all rigging is stopped completely.

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