

Keeping Washington loggers safe.

Quarterly Logging Training: Lowboy Safety

January 2020

Many may not consider a lowboy to be a part of manual logging, but this is a safety hazard to be aware of. Lowboys are on and off logging sites, loading and unloading equipment and have their own set of hazards that come along with them.

Whether a company hires out a lowboy truck service or has their own lowboy and driver, the Logger Safety Initiative program strongly encourages companies to add lowboy safety information to their company's accident prevention program. When adding the lowboy safety information to your accident prevention program tailor it to the lowboy

manufacturer make and model of your trailer(s).

If employers are going to be operating the lowboy, either as an employee or an employer, it is the employer's responsibility to provide safety training for each employee per WAC 296-54-507(1). Document and maintain current records of required training per WAC 296-54-515(4).

Here are a few reminders when getting a jobsite site ready to operate and bring in equipment.

Best Practices for jobsite setup:

- Keep the haul route and spur leading to the landing maintained and clear of debris, large rocks, and root wads above road, for safe operations.
- Ensure roadways are wide enough for the trucks and equipment entering and leaving the site. Turnouts should be adequately spaced and big enough for empty trucks and pickups to pull into for traffic to get through.
- Every day when traveling roads leading to and from the jobsite make sure the CB channel and mile markers for the road are visible.
- Repaint mile markers and CB channels when they have faded.
- Always be on the correct CB channel when driving the haul routes and communicate your mile markers, not just nicknames that only the "locals" know, to avoid collisions or accidents with other vehicles.

When working alongside a lowboy truck driver, or simply helping the driver to get production moving quicker, make sure the driver knows where all hands are at all times. Machines still loaded on the trailer can cause blind spots for the driver. If someone assists the lowboy driver, and the driver is unaware of the person's location, they could drop the trailer and potentially smash a foot or hand or pinch someone in the equipment.





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Connection points for the truck and trailer can create pinch hazards so pay attention to your surroundings when connecting/disconnecting. Understand the different types of lowboy trailers and ensure crews have proper training before they offer to help.

Best Practices for loading and unloading equipment: Communication between you and the truck driver will help make sure everyone is in the clear. When loading and unloading equipment onto the lowboy trailer people assisting are under control of the truck driver.

- Communicate with the driver when you are on the ground around the trailer to ensure you are clear of any moving pieces
- When climbing up in the cab of the lowboy or the equipment, maintain three points of contact.
- Do not jump from equipment.
- Ensure the cab door of the equipment is closed when moving it.
- When loading equipment ensure you can see the lowboy driver and the trailer you are loading on.
- Binding down equipment can be a hazard itself. Inspect binders routinely for wear, looking for cracks and bends in the binders.
 - When possible, tighten binders by hand, in a downward motion.
 - Always be aware of the line of fire should you lose your grip.
 - Do not operate the lever binder with more than one person or while someone else is standing on the load.
 - According to WAC 296-54-58950-19 never use a cheater bar longer than 36 inches.
- When unloading equipment, you are still under control of the driver and need to follow their commands until the driver ensures you are in the clear.





Logging Injury Alert

Lowboy Operator's Fingers Amputated

Task: Coupling lowboy to trailer deck Occupation: Lowboy operator Release Date: 2019

In May 2019, a lowboy operator had two fingers partially amputated after they were crushed between the trailer gooseneck and the processor counterbalance. The operator was coupling the lowboy gooseneck to a lowbed trailer deck after loading and chaining down a processor. After backing in the lowboy, he climbed under the machine counterbalance to place shims. The operator can only place shims by climbing in between the gooseneck and the trailer after the initial hookup is completed. The shims are stored on a keeper post on the rear of the gooseneck. He reached under the machine counterbalance to replace the cotter pin in the keeper post. As he was doing this, he steadied himself with his left hand on the support frame of the gooseneck. At this point, the trailer detached from the gooseneck and fell to the ground. The operator's left middle finger and ring finger were crushed between the processor counterbalance and trailer gooseneck, partially amputating them. Investigators determined that while the operator had prior experience, it had been over ten years since he had last worked with a lowboy. The employer assumed that because the operator had past experience he did not need training. Also, during coupling, the hooks of the trailer did not fully couple over the steel pins of the gooseneck. It can be difficult to determine when this happens, as there is no good way to visually inspect the connections of the components.



Incident scene showing the position of the operator (X) when the trailer detached from the gooseneck,

Safety Requirements

■ Employers must adequately train employees to recognize safety and health hazards associated with the employee's specific tasks, including using measures and work practices to prevent and control those hazards. See <u>WAC 296-54-515(3)(h)</u>.

Recommended Safe Practices

- Create a reference point on the trailer deck, by either painting or welding, to show when the trailer is all the way backed into the pins, ensuring proper coupling.
- Wait to position and chain down a load on the trailer until after coupling is complete. In this case, for coupling, the processor should have been positioned to the rear of the trailer deck rather than towards the front. After coupling was complete, the processor should have been repositioned forward and chained down. This sequence minimizes the overhead hazard for the lowboy operator.
- Site managers should verify that employees can safely operate new equipment and complete assigned tasks.

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 WA FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5U60OH008487).



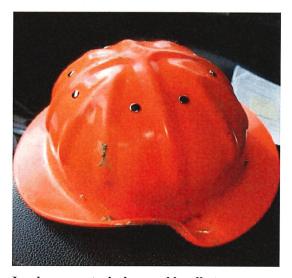
Lowboy Operator Struck by Boom Stand Support Arm

Task: Positioning boom stand on trailer Occupation: Lowboy operator Release Date: 2019

In October 2019, a lowboy operator and a shovel operator were positioning a boom stand on a lowboy trailer. Their employer had an established procedure for lifting or lowering the boom stand using a chain attached to the grapples of a shovel. Instead, the lowboy operator directed the shovel operator to use the shovel's grapples to lift the boom stand into place. The lowboy operator was standing on the trailer's deck near the rear tires as the shovel operator positioned the boom stand. He was leaning forward and reaching toward the support arm when the grapples slipped off the boom stand. As the boom stand fell towards the deck, it caused the support arm to strike the pin boss. The support arm flipped up and struck the lowboy operator's hardhat, causing him a serious head injury.



Lowboy trailer boom stand held by the shovel's grapples. When the grapples slipped off the boom stand, it fell down, causing the support arm (yellow circle) to strike the pin boss (right arrow) and flip up (left arrow), striking the lowboy operator on his hard hat.



Lowboy operator's damaged hardhat.

Safety Requirements

■ Employee work areas must be spaced and employee duties organized so the actions of one employee do not create a hazard for any other employee. See <u>WAC 296-54-513(1)</u>

Recommended Safe Practices

- Lowboy operators should stay in the clear until the boom support is set in place and secured.
- Make sure everyone involved understands, communicates, and follows all safety procedures in place for the tasks that they will be performing.

Logging Safety Training

Attendance Roster

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