



Washington State Department of
Labor & Industries

Logging Injury Alert

Shovel Operator Dies When Shovel Rolls Down a Ridge

Task: Forwarding decks of logs **Occupation:** Equipment operator **Release Date:** March, 2017

In September 2016, a 50-year-old logging equipment operator died when the shovel/yoder he was operating rolled down a steep ridge. He was an experienced equipment operator who began working in the logging industry at the age of 17. On the days leading up to the incident, the shovel was rigged up as a yoder. Once the crew had finished yarding and decking the logs on the ridge, the next step was for the operator to swing the decks of logs to the road.

On the day of the incident, the operator got an early start at forwarding decks of tree-length logs to an upper landing. When the crew arrived at about 6:45 a.m., they could hear the shovel working below. At around 9 a.m., a crew member went to check on the shovel operator. Due to the fog he could not see the shovel, but he could hear it moving. At noon, a crew member walked up to the ridge line to see if he could establish radio contact with the operator. He then looked down and saw that the shovel was not where it was supposed to be, but was instead at the bottom of the ridge. The crew responded and found the shovel upside down with the operator inside and unresponsive.

Investigators determined that at the time of the incident the operator was moving the logs uphill. To assist the traveling and the positioning of the shovel on steep terrain, the operator would use the boom of the shovel to push/pull the shovel up the ridge. Once in position, he would lift the boom off the ground and then use the grapples to grab a bunch of logs from the lower side and then swing them closer toward the upper landing. He would then repeat the process as he moved all the decks uphill. At some point during the operation, due to momentum created by the swing or rotation of the boom, the shovel's tracks lost traction with the ground, causing the shovel to lose its center of gravity and roll down the 60% grade hill, coming to rest upside down 380 feet below.



Incident scene showing the shovel upside down at the bottom of the ridge.

Safety Requirements

- The employer's accident prevention program must include, among other elements, the following:
 - An on-the-job review of the practices necessary to perform job assignments safely;
 - Recognition of safety and health hazards associated with the employee's specific work tasks, including using measures and work practices to prevent or control those hazards.

See [WAC 296-54-515\(3\)\(g\)\(h\)](#)

- Operators must operate and control their machines in a safe manner and avoid operations in areas where machine stability may not be maintained.

See [WAC 296-54-57350\(1\)](#)

Recommended Safe Practices

- Operators must control their machines in a safe manner and avoid operations in areas where machine stability may not be maintained. Exercise due caution while working on hillsides. If you encounter ground conditions that you feel are unsafe, discontinue work and consult your supervisor.
- Know your personal and equipment limitations.

Resources

- Accident Prevention Program for Logging Operations:

www.lni.wa.gov/Safety/TrainingPrevention/Programs/files/LSILoggingOperationsSampleAPP.doc