Log Cutting Safety Meeting Kit

What’s At Stake

In the logging industry, cutting is used to fell, limb, and buck (cross cut) trees and limbs into pieces that are usable and maneuverable. Log cutting can be hazardous because workers use powered chainsaws and the cut trees, limbs, and logs can pose a crushing hazard.

Cutting boards and panels generates wood dust which can cause irritations or allergic reaction following contact with the skin, respiratory tract or eyes. Exposure to some wood dusts has also been linked to respiratory ailments such as occupational asthma and shown to be associated with nasal cancer.

What’s the Danger

Often necessary on construction and other work sites, tree removal can pose several serious hazards:

- Falling trees and limbs can kill or injure the cutter or persons working nearby
- Operating powerful cutting and trimming equipment such as chain saws and brush saws can cause severe injuries
- Working near live electrical utility lines and equipment can cause electrocution or serious injuries
- Possibility of severe injuries from a fall when working at height
- Fuels for powered equipment can ignite and cause serious burns

Accidents related to the logging industry include falling trees, malfunctions with chainsaws and equipment defects. Injuries that occur in the logging industry often tend to be very serious. Broken bones, cuts, bruises, head trauma or back injuries can be the result of such a workplace accident.

Logging workers face many distinctive challenges in the workplace, including physically demanding labor, remote locations, and unpredictable weather and terrain conditions. They are also considered a higher risk occupation due a fatality rate substantially higher than the national average.

HOW TO PROTECT YOURSELF

WHAT WORKERS NEED TO DO WHEN CUTTING DOWN TREES

Start by verifying the height of the tree. This is a critical step in establishing the drop zone. Anyone unsure about how to verify the height of a standing tree should consult with their employer or the qualified tree worker before any cutting takes place.

When possible, reduce the footprint of the tree being cut by trimming off large limbs and branches.

A reliable communications system is essential—a two-way radio with fresh batteries is recommended, but hand signals from a qualified tree worker may also be used. Never turn your back to the tree as it falls.

LIMBING A TREE. Once the tree is down, remove the branches. This is limbing.

Pulling and Pushing Chain: Work carefully, starting at the base of the tree. You can cut downward with the bottom of the bar. This is known as cutting with a pulling chain since the chain pulls the saw out from you. Or you can cut upward with the top of the bar. This is known as cutting with a pushing chain, since the chain pushes the saw towards you.

Offsetting Cuts: These are cuts you make by partially cutting on one side of the limb and then completely cutting through an inch or so closer to the trunk. Be sure to keep the chain from binding.

Underside Limbs: Limbs on the underside can be cut if you have a good working height.

Limbs Under Tension: Limbs that are bent under the tree and can

spring back. These can be cut later when you can turn the tree and relieve the tension.

Large Branches: Large branches can be under great tension from their weight and should be cut starting from the outside and working toward the trunk.

BUCKING A TREE. When you've removed the limbs, it's time to cut the trunk. This is called bucking.

- **Prevent Binding:** Look for where the wood might compress as it's cut: That's where two sections of trunk could fall together and pinch (bind) the saw. Cut a third of the way through the side where compression might take place. Then cut completely through from the opposite side with a cut offset by 1 inch. This technique helps keep the saw from binding and gives you more control. You can also use a wedge to hold the gap open, but make sure the chain doesn't contact it.
- **Logs on the Ground:** For logs on the ground, cut through most of the way and then turn the log and finish the cut so the blade doesn't contact the ground.
- **Supported Logs and Pieces:** For logs supported on one end, cut up from the bottom and then finish the cut on top. Cut the pieces into manageable sizes and stack them away from the work area.

FELLING A TREE. Felling is the part of the process where most injuries and fatalities occur.

- Wear personal safety equipment.
- Pinpoint potential hazards and form a plan to avoid them.
- Identify the best felling direction and plan an escape from it.
- Figure out the proper hinge size; the wrong size can lead to an accident.
- Perform the correct cut to ensure controlled felling.

GUIDELINES FOR SAFE USE OF CHAINSAWS

- They must be operated with two hands. If one hand is removed

to start a saw in mid-air, or for any other reason, the operator is not in control of the tool.

- Always start your saw on a surface that is as clear of debris, firm and level as possible.
- Adjust your saw so that when it is idling, the chain is stopped.
- If the saw is fitted with a chain brake, keep it in good working order. Never modify or remove a chain brake.
- Wear a hardhat, preferably with mounted face guard and hearing protection.
- Wear gloves when working with or fueling the saw, handling, or changing the chain.
- Wear boots with good sole grips.
- Wear leg protectors.
- When carrying the saw, keep the chain bar to the rear. You won’t fall on the chain if you stumble and it’s less likely to get hung up in brush.

FINAL WORD

Log cutting is dangerous business. Experienced professionals minimize the risk of injuries and fatalities but even they have to take extreme safety precautions. If you are log cutting, safety measures could mean the difference between life and death – don’t let a moment of negligence lead to an injury that impacts the rest of your life.