

INDUSTRY ALERT

HAZARD

Chipper knives broken by chain, ejected through sliver chute

What happened?

A chipper operator was chipping hardwood when he heard a loud bang from the direction of the engine. A nearby grapple operator saw flames and sparks coming from the chipper's sliver chute at about the same time as the loud bang was heard. The chipper operator thought he might have thrown a piece of chain through the knives. He finished chipping the trees that were in the chipper, then he shut it down to inspect the knives. He saw that one complete knife and counter knife were missing.

Why did it happen?

It was concluded that a piece of chain must have struck the knife with great force, causing it and the counter knife to break away from the chipper and exit through the sliver chute. The area around the sliver chute was checked for pieces but nothing was found. New knives were installed and no further problems were encountered.

How can it be prevented?

A daily check of the chipper using a checklist of the machine's systems and major components is recommended. The two main purposes of such checks are to look for signs of excess wear and broken or missing machine parts and to check for anything that might interfere with the machine's normal operations.

Chipper operators should ensure that the chipper's knives are correctly torqued and that the counter knives are tight. Chains should be inspected for wear and replaced on a regular basis.

Grapple skidder operators and anyone else working in the vicinity of the chipper should be warned of the hazard of working near the chipper's sliver chute. The danger zone rule relating to the area that could be affected by flying debris from the chipper must be respected at all times. All work must stop and any machines must be shut down before any worker on foot or another machine or vehicle enters the danger zone.

www.ofswa.on.ca