



# SERIOUS INJURY

## Preliminary Accident Information

### Forestry — Logging

## Broken chain drive link penetrates protective window, striking feller processor operator

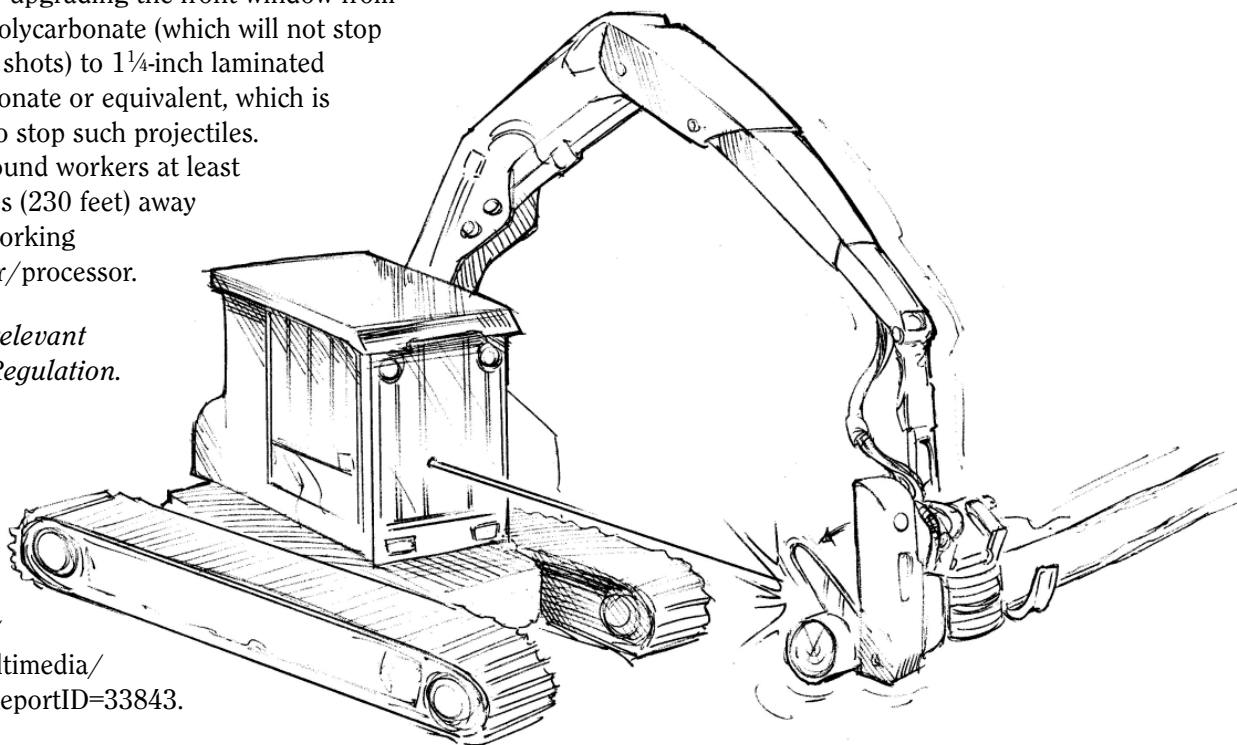
A processor operator was trimming the butt on a log. The processor bar and chain were perpendicular to and directly in line with the front window of the operator's cab. The saw chain had been repaired with used connecting links. The saw motor oversped the chain, exceeding the chain manufacturer's speed rating. The chain broke. A drive link with side plates broke free and was propelled through the ½-inch thick polycarbonate window. This "chain shot" struck the operator in the abdomen, inflicting serious injury. Research shows that similar accidents have occurred.

### What should be done to prevent a similar incident

- Follow the manufacturer's instructions:
  - Never use the saw so that the saw bar is directly in line with the cab or other persons.
  - Ensure chain speed does not exceed the chain manufacturer's rating.
  - Do not reuse riveted connecting components.
  - Follow the recommended maintenance practices for the chain, bar, and sprocket.
  - Ensure that the chain has adequate lubrication.
- Consider installing a chain catcher designed to minimize the chance of chain shot.
- Consider upgrading the front window from ½-inch polycarbonate (which will not stop all chain shots) to 1¼-inch laminated polycarbonate or equivalent, which is proven to stop such projectiles.
- Keep ground workers at least 70 metres (230 feet) away from a working harvester/processor.

See page 2 for relevant sections of the Regulation.

To see a slide show on this incident, visit the web site at [www2.worksafebc.com/publications/multimedia/slideshows.asp?ReportID=33843](http://www2.worksafebc.com/publications/multimedia/slideshows.asp?ReportID=33843).



This bulletin contains preliminary accident information and is subject to change. WorkSafeBC (WCB) has a wide range of health and safety information. For assistance and information on workplace health and safety, call toll-free within BC 1 888 621-SAFE (7233) or visit our web site at [www.worksafebc.com](http://www.worksafebc.com).

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## **Relevant sections of the Occupational Health and Safety Regulation\***

### **4.3**

#### **Safe machinery and equipment**

(1) The employer must ensure that each tool, machine and piece of equipment in the workplace is

...

(b) selected, used and operated in accordance with

- (i) the manufacturer's recommendations and instructions, if available,
- (ii) safe work practices, and
- (iii) the requirements of this Regulation.

...

### **16.21**

#### **Protective structures**

(1) Operators of mobile equipment must be protected against falling, flying or intruding objects or material by means of suitable cabs, screens, grills, shields, deflectors, guards or structures.

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\* The sections of the Occupational Health and Safety Regulation listed in this bulletin do not imply a breach of the Regulation on the part of any party that may have been involved with this incident. The purpose in listing specific sections of the Regulation is to make readers aware of some of the applicable sections of the Regulation.