

Investigation Report
Worker Fatally Injured when Struck by Tree
December 15, 2014



The contents of this report

This document reports an Occupational Health and Safety's investigation of a fatal accident in December 2014. It begins with a short summary of what happened. The rest of the report covers this same information in greater detail.

Incident summary

A tree felling equipment operator was conducting timber harvesting duties at a remote woodlands worksite. A supervisor was conducting truck transport duties in close proximity to the harvesting equipment. Tree debris from the harvesting activities struck the supervisor resulting in fatal head injuries.

Background information

Alberta-Pacific Forest Industries Inc. (Al-Pac) was a large employer and had conducted harvesting activities in Alberta since 1993 to service its pulp mill near Grassland. Al-Pac was the prime contractor for the worksite and hired many sub-contractors, including Weinrich Forestry Ltd., to conduct forestry duties in Alberta.

Weinrich Forestry Ltd. (Weinrich Forestry) was a local forestry company that had been conducting forestry duties in the Slave Lake and Athabasca areas for over 20 years. At the time of accident, Weinrich Forestry had five workers conducting tree harvesting duties at the worksite. Weinrich Forestry was working at the Al-Pac cutblock (Planning Unit 070234) woodlands worksite (13-70-24-4 W4M) northwest of Athabasca Alberta (figure 1). A cutblock is a specific area with defined boundaries identified for harvest activities.

Weinrich Forestry supervisors 1 and 2 both had 15 years of experience working in the forestry industry with Weinrich Forestry. The supervisors were brothers and part-owners of Weinrich Forestry along with their mother and father. At the time of the accident, supervisor 1 was securing a load for transport and supervisor 2 was off site and in his vehicle.

The Weinrich Forestry equipment operator had approximately 23 years of experience in the forestry industry, including previous experience operating a feller/buncher, and had been with Weinrich Forestry since October 2014. At the time of the accident, the equipment operator was felling trees using the feller/buncher.







Figure 1. Accident location from road toward feller/buncher and truck and trailer A: Feller/buncher

B: Truck and trailer

Equipment and materials

Feller-Buncher

Weinrich Forestry was using an Association of Equipment Manufacturers (AEM) Feller/Buncher. A feller/buncher is a type of harvester used in logging operations. It was powered mobile equipment with an attachment that could rapidly cut and gather several trees before felling them. The contractor was using a John Deere Felling Head FR22B (figure 2). The feller/buncher was to be operated in isolation and not within 90 metres (m) of additional equipment or workers. Workers were required to contact the feller/buncher operator by radio if access within the 90 m of the powered mobile equipment was required.







Figure 2. Feller/buncher in use at the time of the incident.



Figure 3. Feller/buncher. Proximity warning can be seen on the boom.





Sequence of events

On December 15, 2014, Weinrich Forestry was conducting timber harvesting duties at the Al-Pac worksite. The equipment operator started at approximately 12:00 p.m., and was conducting tree felling duties using the feller/buncher. The equipment operator began on the cutblock and worked back toward the road (the felled trees were piled and placed along the cutblock for site removal).

At approximately 2:00 p.m., supervisor 2 was assisting the equipment operator with a global positioning system (GPS) update of the feller/buncher, which is used to track the progression of the equipment. Following the GPS update, supervisor 2 moved the equipment operator's personal vehicle away from the operating equipment and then left the immediate worksite in his own vehicle.

At the same time, supervisor 1 was working at his truck and trailer preparing to transport a piece of equipment for repair.

The equipment operator then re-engaged the feller/buncher and returned to felling trees. As the equipment operator was working along the cutline road, he observed someone (later identified as supervisor 1) working at the truck and trailer. The operating feller/buncher was approximately 16 m from the road and 23 m from the truck and trailer (figure 1). The equipment operator was felling several trees at a time, when one of the trees fell away from the feller/buncher and toward the truck and trailer. The tree was approximately 29 m in length and was observed to be broken at approximately 20 m from the tree base (figure 4). The equipment operator picked up the tree and placed it in the established tree pile.

At approximately 2:30 p.m., the equipment operator had not seen the worker at the truck and trailer and became concerned. The equipment operator shut down the feller/buncher and walked toward the truck and trailer. The equipment operator observed a worker on the ground and approached the area. Realizing that emergency assistance was required, the equipment operator used the feller/buncher radio to contact other Weinrich Forestry workers. Two Weinrich Forestry workers responded immediately from another area of the worksite, and attempted first aid. Supervisor 2 returned to the worksite and contacted emergency medical services (EMS). Supervisor 1 had suffered fatal head and neck injuries caused from a significant blow from a section of tree.







Figure 4. View from feller/buncher to truck-trailer. Indentation is consistent with a fallen tree from the feller/buncher.

A: Berm indentation indicating the presence of a fallen tree. Supervisor 1 was observed to be directly east of the indentation at the berm.

B: Field indentation indicating the presence of a fallen tree

Completion

A review for enforcement action was completed on September 23, 2015, and it was determined that prosecution or an administrative penalty were not appropriate based on the circumstances surrounding this incident





Signatures

ORIGINAL REPORT SIGNED August 10, 2016

Lead Investigator Date

ORIGINAL REPORT SIGNED August 10, 2016

Manager Date

ORIGINAL REPORT SIGNED September 8, 2016

Director Date



