

FINAL KY FACE #KY9403801

Date: 17 June 1994

Subject: Logger Killed When Struck by Log That Rolled off Truck During

Unloading Operation

SUMMARY

A 51-year-old male self-employed logger/farmer was preparing to unload logs at a sawmill. The load consisted of about 18 logs, 10-22" in diameter and 8-12 feet long. The load had been secured by 2 binders (chains) to the back of a Chevrolet flatbed single-axle truck. The forward of the 2 chains had been removed by the victim. As the second chain was loosened, a log from the top rolled off the truck striking the victim. The victim was crushed by the weight of the log. The Kentucky FACE investigator concluded that to prevent similar occurrences, loggers and logging operations should:

- Ensure that individuals work in teams when unloading logs
- Prevent logs from moving while binders are being removed
- Ensure that the height of the stack of the logs does not exceed the height of the vertical side supports

Additionally, logging operators should establish practices where safety of contractors can be assured.

INTRODUCTION

On May 12, 1994, a 51-year-old male farmer/logger was fatally struck by a log that rolled off a truck during an unloading procedure. On May 16, the Kentucky FACE investigator was notified of the fatality while reading the *Lexington Herald-Leader*. On May 17, 1994, the incident was investigated by a visit to the scene. Interviews were conducted in person with the county coroner, a log buyer/manager of the logging company, and the State Police. Reports from the EMS and Fire Department were reviewed for pertinent data.

The victim in this incident was a self-employed farmer who logged farms in the area and sold to a local sawmill operation. He had been logging as a means of income for nearly 15 years. During heavy work periods, he transported 3-4 loads a day to the sawmill. He had done business with this particular sawmill for at least the past 5 years. On the day of the incident, he had transferred three loads and was in the process of unloading his fourth load for the day. Wet weather the preceding 10 days had prevented many loads from being delivered during the past week. The

victim usually worked with one helper, who ordinarily accompanied him to the mill to unload the truck. The day of the incident, he was alone.

INVESTIGATION

At about 3:20 p.m. on the afternoon of the incident, the victim arrived at the sawmill with a load of white oak logs. The single-axle Chevrolet truck carried between 18-20 logs, 10-18" in diameter and 9-12 feet long. Vertical side supports 3-1/2 feet high contained the load. Two binders (chains) secured the load to the truck.

The normal sequence of events at the mill was as follows: 1) loaded truck arrives at the saw mill; 2) contact is made with the log buyer; 3) the load is driven by the seller to the designated area; 4) binders are released either by sawmill personnel or the seller; 5) sawmill personnel unload the truck with a fork lift; 6) the seller leaves the site and the log buyer grades the logs and determines the volume of material.

On the day of the incident the truck was parked facing west on a nearly level spot on hard packed dirt. Witnesses at the scene following the incident noticed a slight leaning of the truck toward the south (victim side). Weather conditions were warm and sunny, near 75 degrees. Witnesses report the top of the log stack following the incident was between 12 and 14 feet from ground level. The load was well above the vertical side supports.

At 3:25 p.m. the victim was found under an 11" diameter 10' long white oak log that had rolled off the top of his loaded truck. At 3:26 p.m., 911 was called and the EMS personnel were dispatched at 3:29. They arrived at the scene at 3:41. On route to the scene they were notified by radio that the victim was dead. The coroner arrived at 4:30 p.m. and pronounced the victim dead. He was removed in a body bag to the morgue at the local hospital.

Although there were no witnesses to the log falling, the following sequence of events can be deduced from the evidence. Two chains secured the load during transit from the logging site to the sawmill. The victim had loosened the front of the two chains that secured the load. Moving along the left side of the truck to the rear chain, he then loosened it. When the rear chain was slackened a log from the top of the load rolled from the truck onto the victim. The rear chain was found loosely around the remaining logs at the rear of the truck. The remaining stack of logs was above the side support bars about 3'. The log near the top was noted to have a knot protruding approximately 12" out creating a bulge on the log. This knot was about 6 feet from the end of the log. The knot was thought to have prevented the logs from nesting against one another. When the rear chain was loosened, the knot acted as a pivot point for the log. As the tension was loosened, the log began to roll. The victim was found lying near the left rear wheel in supine position. His right leg was against the rear wheel. The log came to rest on the victim's head and face.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Unloading procedures should include working in pairs.

Discussion #1: Procedures at this sawmill should include working in pairs to unload logs. One person should loosen the binders as the other monitors for potential load movement. A warning from a co-worker could prevent being hit by a falling log.

Recommendation #2: During unloading, logs should be prevented from moving while binders are being removed. (Standard Number 1917.18)

Discussion #2: Shifting during transport likely occurred in this case. A front end claw loader put around the stack prior to binder release may prevent or contain log movement.

Recommendation #3: The height of the stack should not exceed the height of the vertical side supports.

Discussion # 3: Overloading the truck presents a hazard to the individual logger as well as citizens on public roadways. Binders can break allowing logs to roll off the truck. Load shift may loosen binders and allow logs to come off the truck.

REFERENCES

29 CFR 1917.18 Standard Number 1917.18 Log Handling.