# Case 194. 45-year-old truck driver/feller/crew leader for a road commission died when he was struck by a falling tree limb as he retreated from the tree after felling it with a chain saw.

A 45-year-old male truck driver/feller/crew leader for a road commission died when he was struck by a falling tree limb as he retreated from the tree after felling it with a chain saw. The decedent was a member of a four-person crew assigned to remove a dead tree from near a roadway. The decedent was the work crew leader. The crew gathered the necessary equipment to perform the work and drove to the worksite. There was a prison work crew at the site to help with brush collection and related work. The crew held a discussion to plan the work including whether or not to "limb out" the tree prior to felling. The decision was made to fell the tree without delimbing it first. The MIOSHA file indicated that according to the crew members, the direction chosen for felling the tree was at a northwest angle into the roadway. Two coworkers positioned themselves approximately 20 to 30 feet beyond what they believed would be the end of the tree in the expected falling path. The decedent operated the saw. The fourth coworker operated a front end loader. The loader was positioned at an angle partially in the road to brace the tree and to help fell the tree once the hinge was cut. The decedent made the cuts for the notch, and then made the back cut toward the hinge. During the back cut, the decedent was positioned under the bucket of the front end loader. After finishing the back cut, the decedent proceeded toward the roadway on the north side of the front end loader. As he retreated from the cutting operation, the rest of the crew noticed that the tree was beginning to fall. The crew shouted a warning. The two coworkers positioned away from the tree moved toward the decedent, who turned to look when he heard the warning. The tree rotated and fell and struck both the front end loader and the decedent, pinning him under the tree. One of the coworkers called 911 on his Nextel. The crew began to cut the limbs off of the tree to free the decedent. Emergency response arrived. The decedent was transported to a hospital and pronounced dead.

The MIOSHA compliance officers noted a number of inadequate procedures during the investigation. The compliance officers examined the trunk of the tree, the notch, and the cuts made, and found that the under cut significantly bypassed the notch. The under cut was through more than half the thickness of the tree. The officer noted that based upon statements and road commission photographs that it appeared that the hazards involved in the operation were not adequately checked and the retreat path planned. The retreat path was not directed toward the rear of the hinge. The tree was at least partially dead and reported to have had limbs and weight distributed toward and perhaps over the roadway. This was in the general direction that the employee retreated.

MIOSHA General Industry Safety and Health Division issued the following alleged Serious and Repeat Serious citations:

### **SERIOUS:**

TRACTORS, PART 22, RULE 2251(3).

An operator shall not allow anyone to stand or pass under the elevated portion of any tractor or its attachments.

## **SERIOUS:**

TREE TRIMMING AND REMOVAL, PART 53, RULE 5336(1).

Before a cut is started, a feller shall check for other employees and dead limbs, angle of tree, wind condition, location of other trees and other hazards, and plan his of retreat.

a) Inadequate check for hazards; employee did not adequately consider the angle of the tree, limbs, and obstacles in planning his retreat path from the cutting area.

The tree fell and rotated in a direction not planned which was also the chosen retreat path.

b) Inadequate retreat path; an employee did not choose a path of retreat to the rear of the direction of the hinge or notch cut.

#### **SERIOUS:**

TREE TRIMMING AND REMOVAL, PART 53, RULE 5336(5).

Clear area before starting back cut.

Area not cleared of employee and equipment; an employee remained inside a front end loader cab within range of a tree while another employee cut the tree to fell it

## **SERIOUS:**

TREE TRIMMING AND REMOVAL, PART 53, RULE 5336(9).

If there is danger of a tree falling the wrong way, such means as wedges, block and tackle or rope shall be used to control the fall.

Inadequate means to prevent tree from falling in wrong direction; employees did not use rope, wedges, or block and tackle.

## **REPEAT SERIOUS:**

TREE TRIMMING AND REMOVAL, PART 53, RULE 5336(3).

Require large enough undercut (about 1/3 diameter)

The Road Commission was previously cited for a violation of this Occupational Safety and Health Standard or its equivalent standard TREE TRIMMING AND REMOVAL, PART 53, RULE 5336(3).

Inadequate undercut, cut bypassed the diagonal cut for the notch to more than 50% of the width of the tree.