FINAL KYFACE #94KY07801

Date: 28 September 1994

Subject: Farmer is Killed After Being Run Over By Wagon

SUMMARY

A 55-year-old male farmer was unloading irrigation pipe with his father (the witness) and another helper. The witness and helper were unloading 30' sections of 4" irrigation pipe from a flat bed wagon at a tobacco field. The procedure was to unload and connect the pipe in the field, then pump water from a creek approximately 300' away. As the operation began, the victim parked the tractor and wagon along the edge of the tobacco field and remained seated on the tractor. He would slowly pull forward as the witness and the helper unloaded the pipe. About 15 minutes into the procedure, the victim turned the tractor engine off, dismounted the tractor and walked back to help unload the pipe. After unloading 2 lengths of pipe, the victim noticed the wagon and tractor moving forward. He ran along the left side of the tractor as it rolled down a slight grade. The witness yelled to the victim to let it roll. The victim jumped onto the moving tractor but could not stop it before it rolled into a thicket of trees. The victim fell from the tractor and was found under the wagon in the thicket of trees. The witness ran to the victim who was bleeding but breathing. He then instructed the helper to go to a nearby farm house and call 911. Emergency Medical Service (EMS) personnel arrived at 8:45 am. The victim was taken to the local hospital, then transferred by helicopter to a University hospital where he died shortly thereafter. The KY FACE investigator concluded that to prevent similar occurrences, owners/operators should:

- Engage parking brake when stopped and leave the unit in gear
- Not try to stop runaway vehicles

INTRODUCTION

On July 19, 1994, a 55-year-old male farmer was killed after being run over by a wagon. On July 20, the Kentucky FACE investigator read of the incident in the local newspaper. An investigation was immediately initiated. On August 3, 1994, the FACE investigator traveled to the scene to gather information about the victim, the equipment involved and the circumstances surrounding the fatality. A county police officer and the victim's father were interviewed. The scene, tractor and wagon were photographed. Emergency medical service personnel and county coroner were later interviewed by phone. Photographs taken by the county police were reviewed. The coroner's report, police report and autopsy were obtained.

The farmer in this incident had retired from a major manufacturing job 3 years prior to the incident. He had farmed full time since his retirement and part time since childhood. He raised tobacco, hay and a few cattle. He had had no previous injuries doing farm work. Training was all on the job. The morning of the incident was clear, dry and near 75 degrees. The grass was lightly

damp with dew.

INVESTIGATION

On the day of the incident, the victim drove the 1992 Ford 5610 (62hp) from a nearby farm to the tobacco field. The day's activity included setting up 4" irrigation pipes to water a 4 acre tobacco patch. The victim drove the tractor which was pulling a flat bed wooden top wagon loaded with approximately 24 30-foot-long segments of aluminum irrigation pipe. Operating parallel to the tobacco rows about six feet from the first row, the victim would move slowly forward to facilitate unloading. The victim's father (the witness) and another helper were unloading the pipe and placing it in the field where it would later be connected and used to irrigate the plot.

At about 8:20 am, the victim stopped along the tobacco field. He turned the engine off. He waited a few minutes, looking back at the witness and helper unloading the irrigation pipe. He then got off the tractor and walked back to help with the unloading procedure. He did not set the parking brake. The Hi/Low switch was between gear positions. The tractor was parked on a 3 degree downward sloped grass-covered field. The witness stated the victim turned the wheels left toward the tobacco field and opposite the direction of the sloping field before dismounting. The tractor was stable as the victim got off. The witness suggested that the shaking movement of the wagon as the pipes were removed caused the front tractor wheels to turn to the right.

A few moments later, the victim noticed the wagon and tractor begin to slowly move down the hill to the right. The victim ran along the tractor as it rolled unmanned downhill. The witness yelled to let the tractor roll, but the victim jumped on the moving tractor after it rolled approximately 65 feet. At this point, the slope increased to 8 degrees toward a brush-filled thicket at the base of the hill. The slope increased more as it approached the base. The victim was seen standing on the tractor as it entered the thicket.

The tractor entered between two 8" cherry trees spaced 10 feet apart. Several small saplings ranging from 1-3" slowed the tractor. The victim fell forward and to the left and went down under the rear axle of the tractor and under the front axle of the wagon. The tractor and wagon then stopped. The victim lay face up between the front and rear axle of the wagon. The witness called to the victim. Getting no response, he ran to the thicket to assist.

The helper then ran about 900 feet to a nearby farm house to call the Emergency Medical Service (EMS). EMS received the call at 8:36 am. The victim was still breathing when EMS personnel arrived at 8:45 am. He was removed from under the wagon, put on a flat board and carried to the ambulance 12 feet away. EMS transferred the victim to the local hospital. He arrived at the hospital at 9:26 am. He was then transferred from the hospital by ambulance at 11:03. He arrived at the helicopter pad at 11:05 and subsequently air lifted to the university hospital 20 miles away. He was pronounced dead by hospital personnel at 12:24 pm.

CAUSE OF DEATH

The cause of death was listed as cardiorespiratory arrest, blunt force trauma to the chest due to tractor accident.

The tractor, equipped with Roll Over Protection Structure (ROPS) and a slow moving vehicle (SMV) tag, was minimally damaged. The step on the tractor's left side, used for mounting the tractor, was bent. The tractor was found in gear but with the Hi/Lo shifter between positions. The tractor was in excellent overall condition (604 hours). It is owned by the victim's father (the witness). Clearance between the rear axle and the ground is 16". From the bottom of the step to the ground is 17". The clearance between the tractor draw bar and ground is 13 1/2". When checked by the investigator, the parking brake worked.

The wagon was not damaged. Its surface measured 8 feet by 20 feet and was made of ash. Clearance between the ground and the axle is 8 1/2". It has 15" wheels. The wagon was in overall very good condition.

It is surmised from the evidence that the victim fell forward and to the left from a standing position on the tractor. The slowing of the tractor by the saplings and trees caused the victim to lose balance, fall forward and under the tractor as the tractor decelerated.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Operators should set parking brake before getting off the unit. As well the unit should be put in gear to prevent unintentional roll.

Discussion #1: The parking brake would have prevented roll. The victim did turn the wheels left in order to prevent roll, however, movement of the irrigation pipes caused the tractor front wheels to move and roll enough to aim the tractor down hill. The tractor was found with the Hi/Low shifter between positions. With the shifter in this position, the tractor could roll without resistance.

Recommendation #2: Operators should not attempt to halt a runaway vehicle.

Discussion #2: Operators should not attempt to remount moving vehicles. In this case the tractor would not have caused any significant human or environmental damage. It should have been let go and retrieved once it came to rest.