

Hop Farm Harvester Operator Struck By Steel Cable

INCIDENT FACTS

REPORT #: 71-218-2022s

REPORT DATE: April 11, 2022

INCIDENT DATE: September 24, 2018

VICTIM: 26 years old

INDUSTRY: Miscellaneous Crop Farming

OCCUPATION: Hop Farm Worker/Operator

SCENE: Hop Combine Harvester

EVENT TYPE: Struck by



FATALITY NARRATIVE



A 26-year-old hop farm worker was killed after he was struck by a steel cable. The operator had been employed by the hop farm for about eight months.

On the day of the incident, the operator and four coworkers were harvesting hops in a hop yard. The hop vines had been grown on a trellis system composed of a grid of steel cables suspended by wooden poles. The vines were suspended vertically from cables running the length of the rows with cross cables over the rows to strengthen the system.

FATALITY NARRATIVE



The operator and a coworker operated a combine harvester to gather and process the hop vines from the steel cables. The coworker was driving the harvester at the front and the operator was on an elevated platform in the rear. The operator's job was to ensure the vines were being processed and the hop cones were moving from the rear harvester chutes, onto the conveyor, and into the following truck.

FATALITY NARRATIVE



The coworker said that he lowered the harvester to go under an overhead cross cable and then raised it after clearing the cable, just as he always had. Shortly after, he heard a loud noise and stopped the machine. He said it sounded like metal hitting metal. When he turned around, he noticed the operator was down on the platform. He called for help. The operator was carried to the ground and lifesaving efforts were started.

FATALITY NARRATIVE



The operator had an injury on his chin where he had apparently been struck by the cable. None of the other workers witnessed the incident, but some reported hearing the loud noise. The operator suffered a broken neck due to blunt force trauma and later died.



Following the incident, investigators found:

- The hydraulic systems on the harvester were functioning properly when examined.
- The steel cable and a bolt on the top of the harvester showed signs of damage, possibly due to the cable being caught on the bolt.
- A few poles that suspended the cables were leaning in the direction of the harvester, possibly due to the harvester striking and tensioning the cable.
- Another operator reported that he had also experienced the cables getting caught and dangerously releasing while working at the rear of the harvester. He said he had learned to stoop to avoid them.

FATALITY NARRATIVE



Photo 1. View of rear of harvester with elevated platform where operator was located. Platform had rear and side guard rails (in yellow) to prevent operators from falling.



Photo 2. View of the platform from the front. There were no guardrails or other structures in front of the platform to protect operators.

FATALITY NARRATIVE



Photo 3. Hex-head bolt with abrasion that may have snagged the elevated cross-cable. Two bolts on each side secured a horizontal auger to the top front of the harvester.

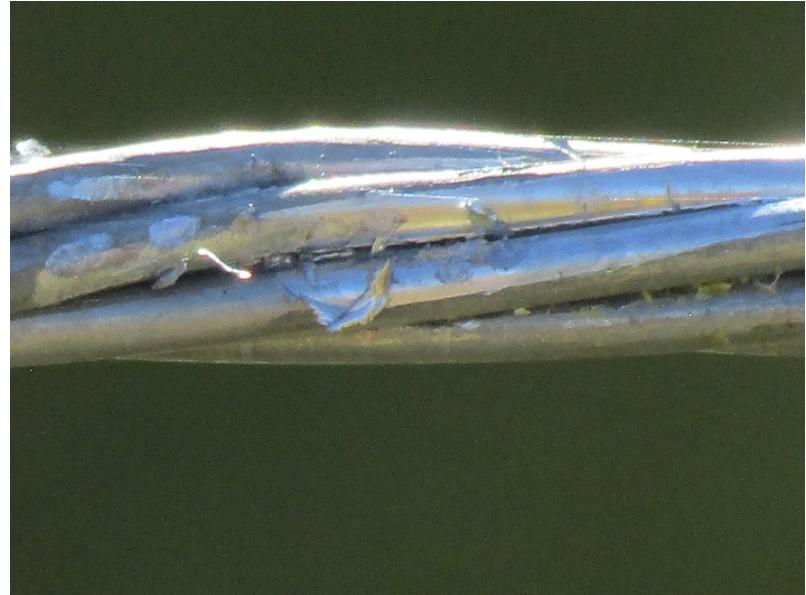


Photo 4. Cross-cable with abrasion where it may have snagged on hex-head bolt.

FATALITY NARRATIVE



Photo 5. Wooden trellis poles that may have tilted due to tension on the cross-cable. The poles are adjacent to where harvester was operating and in the direction it was travelling.



Recommendations

FACE investigators concluded that to help prevent similar occurrences employers should:

- Design hop growing trellises in a way that eliminates or reduces the hazard of overhead cross cables when harvesting.
- Add guarding to the front of rear platforms to protect operators.

Recommendations

FACE investigators concluded that to help prevent similar occurrences employers should:

- Reduce snag hazards on the top of machinery by using round socket-head bolts or domed bolt covers.
- Train harvester drivers to maintain safe distances between harvesters and overhead cables.
- Train and encourage workers to report hazardous conditions so they can be corrected before an injury occurs.



FATALITY NARRATIVE



This narrative was developed to alert employers and workers of a tragic incident and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or the cause of the injury.

Developed by the Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), Washington State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5U60OH008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.

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