

## **17 Struck by ---Inspection # 1306470 Dale Seals Logging**

A **31 year old male** was fatally injured when he was **struck by** a tree during a logging operation. The victim was tasked with conducting ground clearing/topping operations. The equipment he was utilizing was identified as Husqvarna brand 395xp chainsaw, hard hat equipped with face shield, boots, gloves, and forester chaps. He was working in an area alone and through interviews it was determined that the closest employee was approximately 75 yards away operating the skidder.

Shortly after starting work, he manually felled an 85 ft. tall x 2 ft. diameter tree utilizing a chainsaw. The felled tree was located on a slight incline towards a hilltop. He felled the tree in a SW direction downwards on the slope. Employees interviewed explained that, although, they were not manually felling trees at this worksite, the victim would sometimes fell trees anyway.

A review of the base of the felled tree and stump indicated that the victim attempted to utilize a notch and back cut, however, improperly angled the notch/face cut and made the back cut below the notch. This evidence would further suggest that due to the improper cut, the tree likely fell in an unintended direction, causing the felled tree to strike a nearby tree. This resulted in the base of the felled tree kicking back approximately 16 ft. in a northern direction. This kickback/rebounding action caused the butt of the tree to strike the victim from behind as he attempted to retreat the area. The tree that was struck by the falling tree fell into nearby trees, however, did not uproot and remained upright and steeply leaned against two nearby trees.

Due to the improper felling technique and debris in the surrounding area, the victim was unable to quickly egress the area when the tree began to kickback/rebound and was subsequently struck by the rebounding tree sustaining fatal injuries. The skidder operator saw a large tree fall in the area where the deceased was working and went to investigate. He saw the deceased pinned under a tree and quickly ran to the logging road to signal for help.

### **Citation(s) as Originally Issued**

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

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**Citation 1 Item 1                      Type of Violation: Serious                      \$800**

**29 CFR 1910.266(d)(7)(i):** Hand signal or audible contact, such as, but not limited to, whistles, horns, or radios, were not utilized whenever noise, distance, restricted visibility, or other factors presented clear understanding of normal voice communications between employees:

In that the employer failed to train employees on the use of hand signals or provide employees audible methods such as horns, whistle, and/or radios during logging operations.

**Citation 1 Item 2                      Type of Violation: Serious                      \$800**

**29 CFR 1910.266(e)(2)(x):** Prior to felling any tree, the chain-saw operator did not clear away brush or other potential obstacles which might interfere with cutting the tree or using the retreat path:

In that one employee did not clear away brush/debris from his retreat path prior to the felling of a tree.

**Citation 1 Item 3                      Type of Violation: Serious                      \$4000**

**29 CFR 1910.266 (1) (2)(viii):** An employee other than the operator was riding a mobile vehicle without the use of a seat belt or other protection equivalent to that provided for the operator.

In that two employees periodically ride on the skidder (John Deere 648L) and/or bulldozer (John Deere 700k XLT) by sitting or standing on side of the cab access area to travel to different areas of the worksite.

**Citation 1 Item 4a                      Type of Violation: Serious                      \$4000**

**29 CFR 1910.266(h)(2)(v):** The undercut was not of a size so the tree would not split and would fall in the intended direction:

In that one employee failed to utilize an undercut that was of necessary size to prevent the tree from splitting and ensure it would fall in the intended direction.

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**Citation 1 Item 4b**                      **Type of Violation: Serious**                      **\$0**

**29 CFR 1910.266(h) (2)( vii ):** The back cut was not above the level of the horizontal face cut in order to provide an adequate platform to prevent kick back.

In that one employee utilized a back cut that was below the level of the horizontal face cut when he felled a tree.

**Citation 1 Item 5**                      **Type of Violation: Serious**                      **\$800**

**29 CFR 1910.266(i)(1):** The employer did not provide training for each employee. including supervisor, at no cost to the employee:

In that employer failed to provide training to employees on the required elements of a logging safety program outlined in 29 CFR 1910.266(i)(3).

**Citation 1 Item 6**                      **Type of Violation: Serious**                      **\$800**

**29 CFR 1910.266(i)(7)(i):** The employer did not assure that each employee including supervisors had received first-aid and CPR training meeting at least the requirements specified in Appendix B:

In that the employer failed to ensure four employees received first-aid and CPR training.

**Citation 2 Item 1a**                      **Type of Violation: Other-than-Serious**                      **\$150**

**29 CFR 1910.1200(e)(1):** The employer did not develop, implement, and maintain at the workplace a written hazard communication program which describes how the criteria specified in 29 CFR 1910.1200(f), (g) and (h) will be met:

The employer had not established a written hazard communication program to address the hazardous chemicals present in the workplace such as diesel fuel, wood dust, and carbon monoxide.

**Citation 2 Item 1b**                      **Type of Violation: Other-than-Serious**                      **\$0**

**29 CFR 1910.1200(1)(6):** Except as provided in paragraphs (f)(7) and (f)(8) of this section, the employer did not ensure that each container of hazardous chemicals in the workplace was labeled, tagged, or marked with either: (i) The

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information specified under paragraphs (f)( I )(I) through (v) of this section for labels on shipped containers; or, (ii) Product identifier and words, pictures, symbols, or a combination there of which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under hazard communication program, will provide employees with the specific information regarding the physical, and health hazards of the hazardous chemical.

The employer did not ensure that the 18 gallon aluminum diesel tank located in the bed of the Dodge Ram 4500 truck was properly labeled.

**Citation 2 Item 1c      Type of Violation: Other-than-Serious      \$0**

**29 CFR 1910.1200(g)(1):** Employers did not have a safety data sheet in the workplace for each hazardous chemical which they use:

The employer did not maintain a safety data sheet at the worksite for diesel fuel, wood dust, and carbon monoxide.

**Citation 2 Item 1d      Type of Violation: Other-than-Serious      \$0**

**29 CFR 1910.1200(h)(1):** Employees were not provided effective information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever a new hazard that the employees had not been previously trained about was introduced into their work area:

The employer failed to provide effective information and training on hazardous chemicals for employees that were potentially exposed to chemicals including, but not limited to diesel fuel, carbon monoxide, and wood dust.

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**Description:** Photo shows Elvira Keeble (orange vest/ white hard hat) standing in the area identified as location employee was struck.



**Description:** Photo shows butt of felled tree. The tree was moved slightly following the incident, during rescue.

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