Department of Consumer and Business Services

DATE: June 5, 2025

TO: All Oregon OSHA Staff

FROM: Alex Townsley, Interim Standards and Technical Manager

SUBJECT: Technical Guidance: ANSI Z133-2017: Arboricultural Operations - Safety Requirements

Question: Is an employer's reliance on the ANSI standard Z133-2017, *Safety Requirements for Arboricultural Operations*, section 5.7.11, a defense to an alleged violation of Division 2, Subdivision N, 1910.180(h)(3)(v)?

Background: Per ANSI Z133-2017, section 5.7.11, *"A qualified arborist may be hoisted into position utilizing a crane if he/she is **tied in** with an **arborist climbing line** and **arborist saddle** and secured to an anchor point on or above the crane hook or to the crane boom."* However, per truck crane load handling rule 29 CFR 1910.180(h)(3)(v), *"No hoisting, lowering, swinging, or traveling shall be done while anyone is on the load or hook."*

Answer: No, Oregon OSHA does not consider the provisions as described under ANSI Z133-2017, section 5.7.11, as an acceptable means or method to hoist personnel (qualified arborist, etc.) into position with a crane, regardless of an employer's assertion of a greater hazard.

Workers in the tree and shrub services industry can face unique challenges when performing elevated work during tree care operations, including pruning, maintaining, repairing, or removing trees. In Oregon, such activities are primarily covered under the Oregon Rules for Tree and Shrub Services - Division 2 (General Industry), Subdivision R (Special Industries), OAR 437-002-0301 through 437-002-0311. However, such activities not specifically covered by 2/R, are covered under other applicable standards.

Tree and Shrub Services must also comply with Oregon OSHA's Materials Handling and Storage standard in Division 2, Subdivision N when truck-mounted cranes are used, including that they are operated and maintained in compliance with the Crawler Locomotive and Truck Cranes standard under 29 CFR 1910.180.

Among other requirements, the standard prohibits hoisting an individual on the crane load or hook, also known as "riding the hook" under 29 CFR 1910.180(h)(3)(v). This requirement applies even though the standard for Arboricultural Operations—Safety Requirements, ANSI Z133-2017, section 5.7.11, allows the hoisting of personnel into position with a crane. An employer's reliance on the ANSI standard is not a defense to a violation of 29 CFR 1910.180(h)(3)(v). An employer may, however, assert that compliance with the standard is either impossible/infeasible or presents a greater hazard to the employee. The employer, though, bears the burden of proving these affirmative defenses.

If there is reason to believe that either the impossibility/infeasibility or greater hazard defense may be asserted by an employer using a crane to position an employee, CSHOs should consider whether all of the following (non-exclusive) alternative methods could have been used:

- <u>Can the tree removal activity be conducted at ground level?</u>
  Per OAR 437-002-0310(5)(a), hand felling work practices may be used after a safety plan is developed which considers the following:

  - The tree and the surrounding area for anything that may create a hazard when the tree falls
  - The shape of the tree
  - The lean of the tree
  - Wind force and direction
  - Decayed or other weak spots
  - The location of other persons or structures

  If the evaluation of worksite conditions indicate that hand felling can be used to safely remove a tree, the felling work practices must comply with OAR 437-002-0310(5)(b) through (k).

- <u>Can an aerial lift position employees?</u>
  Aerial lifts (e.g., bucket trucks, cherry pickers, or other boom-supported elevating aerial platforms) are available in many configurations, some with booms over 150 feet. Aerial lifts with material handlers are also available, though generally not with the longest booms. In addition to using aerial lifts to support workers with the bucket or platform, a separate crane can be used when heavy limbs must be handled.

Aerial devices used in compliance with 29 CFR 1910.67, Vehicle-Mounted Elevating and Rotating Work Platforms, are considered a safe method of positioning employees as well as boom-supported elevating work platforms used in compliance with OAR 437-003-0073.
Note: Tree and shrub service work using a boom-supported elevating work platform covered by the scaffolding regulations in 29 CFR 1910.10.27(a) are regulated in Oregon through OAR 437-003-0073 in Division 3, Subdivision L, Scaffolding.

- Is the tree safe to climb?
  Climbing decayed or damaged trees could be hazardous. For instance, damage to tree bark from insect infestation, or missing tree bark caused by fire, may make climbing infeasible or more hazardous than using a crane. If the tree is not damaged or decayed to the extent that climbing would be unsafe, then climbing is normally considered safe using the appropriate climbing equipment and practices under OAR 437-002-0310(1).

- If it is impossible to use an aerial device, if climbing is unsafe, and if tree removal from the ground is unsafe, can a personnel platform be suspended from a mobile crane?
  Personnel platforms meeting Division 3 (Construction), Subdivision CC (Cranes and Derricks in Construction), 29 CFR 1926.1431 (Hoisting Personnel) are available in several designs and, when used in accordance with 29 CFR 1926.1431, will be treated as de minimis violations of 29 CFR 1910.180(h)(3)(v). Among other criteria, personnel platform suspension systems must be designed to minimize tipping of the platform due to movement of employees occupying the platform (1926.1431(e)(3)).

- Can a mobile crane be used to pre-position the hook or boom to then be strictly used as a stationary anchor point for a rope access system that allows a tree worker to ascend up through a tree to perform work?
  When tree work activities involve rope access system techniques installed and implemented in compliance with Division 2 (General Industry), Subdivision D (Walking-Working Surfaces), OAR 437-002-2027 (Rope Descent & Rope Access Systems), a crane that is under the exclusive control of the tree worker held aloft by the rope access system can be used as the supporting structure for which the rope access system is anchored. The rope access system and the associated fall protection system must comply with the temporary anchorage requirements of OAR 437-002-2027(4)(b).

Exclusive control means a method that effectively prevents any other person from being capable of raising or lowering the hook, block, line or boom; rotating the boom horizontally, or crawling or moving the crane by means of the wheels or tracks.

Based on the type of crane being utilized, the line or boom may be capable of being lowered by gravity when the associated controls are manipulated, even when the crane is powered off. Because of this, the employer's method implemented by the tree worker utilizing the rope access systems to maintain exclusive control of the crane must take this into consideration and prevent access to the controls.

Crane operation must comply with all applicable requirements under 29 CFR 1910.180 (Crawler Locomotive and Truck Cranes). Finally, when a crane is used as a temporary anchorage for a rope access system, the crane cannot be operated while a worker is supported by the crane, or when a worker is connected to the rope access system on the crane while also being supported by the tree. Movement of the crane which is strictly prohibited when any worker is attached to the rope access system includes, but is not be limited to, raising or lowering the hook, block, line or boom; rotating the boom horizontally, or crawling or moving the crane by means of the wheels or tracks.

In conclusion, at no time may a worker be hoisted into position (raised, lowered, or horizontally moved) utilizing a crane without the use of a personnel platform meeting the requirements of 29 CFR 1926.1431, and only when the employer can first demonstrate that safer methods to access the tree are infeasible.

This technical guidance is effective immediately. This policy will remain in effect until rescinded.

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History: TG 2025-01 Issued: 6/5/2025