



JOSH DOBSON
COMMISSIONER

PAUL SULLIVAN
ASSISTANT DEPUTY COMMISSIONER
OCCUPATIONAL SAFETY AND HEALTH DIVISION

MEMO TC 1

To: OSH Division
From: Paul Sullivan, Assistant Deputy Commissioner 
Date: June 09, 2023
Re: Enforcement Inspection Guidance for Tree Care and Tree Removal Operations

On June 24, 2021, the Occupational Safety and Health Administration (OSHA) cancelled the August 21, 2008, OSHA Instruction CPL 02-01-045, *Citation Guidance Related to Tree Care and Tree Removal Operations* (the Tree Care Directive). OSHA recognizes that engaging in tree care operations, such as tree trimming and removal, exposes workers to hazards such as falls from elevation, struck-by objects (cars, branches), lacerations, and contact with energized power lines. Therefore, on June 30, 2021, OSHA issued a memorandum on “*Enforcement Inspection Guidance for Tree Care and Tree Removal Operations*” to compliance safety and health officers (CSHOs) inspecting employers engaged in tree care and tree removal operations.

Per this memorandum, the Occupational Safety and Health (OSH) Division of the North Carolina Department of Labor adopts the above-mentioned OSHA enforcement inspection guidance memorandum (attached) for use in North Carolina, effective on the date of signature with modifications as listed below:

CSHOs will disregard references to federal documents not adopted by the OSH Division and will follow guidance located on the Field Information System (FIS). This includes the following:

- References to OSHA’s Field Operations Manual (FOM), Chapter 4.XI.B., will mean the OSH Division FOM, Chapter XV – Industrial Hygiene Compliance, F.2.a., b., and c. – Violations of the Noise Standard.
- References to OSHA’s FOM, Chapter 4.III, will mean the OSH Division FOM, Chapter IV – Violations, B. - General Duty Requirement.
- References to Section 5(a)(1) – General Duty Clause will mean NCGS 95-129(1) – General Duty Clause.
- References to OSHA’s FOM, Chapter 5.VI.B.2., will mean the OSH Division FOM, Chapter V – Citations, E.3.c. – Affirmative Defenses, Impossibility.
- References to OSHA’s FOM, Chapter 5.VI.B.3 will mean the OSH Division FOM, Chapter V – Citations, E.3.d. – Affirmative Defenses, Greater Hazard.

At the time of issue, any references to footnote 6 will mean footnote 5 as verified by OSHA’s point of contact, Sanji Kanth.



JUN 30 2021

MEMORANDUM FOR:

REGIONAL ADMINISTRATORS
STATE PLAN DESIGNEES

THROUGH:

JAMES S. FREDERICK
Acting Assistant Secretary

A handwritten signature in black ink, appearing to read "J. S. Frederick".

FROM:

D Williams for
PATRICK J. KAPUST, Acting Director
Directorate of Enforcement Programs

SUBJECT:

Enforcement Inspection Guidance for Tree Care and
Tree Removal Operations

On June 24, 2021, OSHA cancelled the August 21, 2008, OSHA Instruction CPL 02-01-045, *Citation Guidance Related to Tree Care and Tree Removal Operations* (the Tree Care Directive). OSHA recognizes that engaging in tree care operations, such as tree trimming and removal, exposes workers to hazards such as falls from elevation, struck-by objects (cars, branches), lacerations, and contact with energized power lines.

The attached provides enforcement guidance to compliance safety and health officers (CSHOs) when inspecting employers engaged in tree care and tree removal operations. For any questions related to this guidance, please contact Sanji Kanth at 202-693-2135 or at kanth.sanji@dol.gov.

Attachment – Tree Care and Tree Removal Enforcement Guidance

Many of the hazards found in tree care and tree removal operations are addressed by OSHA's General Industry standards (29 CFR § 1910), and citations may be issued under those standards, where applicable. Citations may also be issued under Section 5(a)(1) of the OSH Act, 29 U.S.C. § 654(a)(1) (the General Duty Clause), where appropriate. CSHOs should refer to OSHA Instruction CPL 02-00-164, *Field Operations Manual (FOM)*, Chapter 4.III, when considering recommending the issuance of citations under the General Duty Clause.

The following discussion highlights some of the hazards faced by workers engaged in tree care and tree removal operations, as well as some of the general industry standards that address those hazards. The discussion also highlights some of the situations where citation under the General Duty Clause may be appropriate.

Protection from Falls and Falling Objects (29 CFR § 1910 Subparts D and I, 29 CFR § 1910.67).

Fall and struck-by hazards are leading causes of death and serious injury for tree care workers. For example, workers can fall from trees or aerial lifts/boom equipment, or be struck by falling trees, tree limbs, branches, and hand tools. Falling hand tools and other falling objects have enough force to cause serious or even fatal injuries to workers. Before beginning any tree care operation, employers need to check the health of the tree and assess the work site for fall and struck-by hazards. When inspecting work sites, CSHOs shall assess whether the employer is complying with the following standards, which address fall and struck-by hazards: the *Walking-Working Surfaces* standard, 29 CFR § 1910 Subpart D; the *Personal Protective Equipment* standard, 29 CFR § 1910 Subpart I; and the *Vehicle-Mounted Elevating and Rotating Work Platforms* standard, 29 CFR § 1910.67.

Some examples of fall hazards workers face in tree care and removal operations are highlighted below.

Climbing, Changing Location, and Performing Elevated Work in Trees

Workers engaged in cutting tree limbs and other tree care operations sometimes climb, change location, and perform elevated work in trees. In these circumstances, to determine whether workers are adequately protected from falls, CSHOs should assess whether employers are in compliance with the personal protective equipment requirements in 29 CFR § 1910 Subpart I. Section 1910.132 requires the employer to, among other things, "assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE)," and, "[i]f such hazards are present, or likely to be present, . . . [s]elect, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;" and the *Personal Fall Protection Systems* standard, 29 CFR § 1910.140, establishes "performance, care, and use criteria" for personal fall protection systems.

In general, the criteria found in 29 CFR § 1910.140 apply to personal fall protection systems used to protect workers against fall hazards while climbing, changing locations, and performing elevated work in trees. However, 29 CFR § 1910.140(c)(13) requires anchorages used when engaged in climbing, changing location, or performing elevated work in trees to be: “[c]apable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or [d]esigned, installed, and used, under the supervision of qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.” ANSI Z133-2017, § 8.1.11 provides that a climber installing a climbing line from the ground must “visually inspect the anchor point for condition from the ground, and, if suitable, shall subject it to a load approximately twice the weight of the climber before climbing commences.” Where the CSHO finds that the person inspecting the anchor point meets the definition of qualified person for the purposes of this activity (see 29 CFR § 1910.140(b)) and the employer otherwise follows the requirements of ANSI Z133-2017, § 8.1.11, no citation shall be issued.

Where a tree care employer’s compliance with the requirements of 29 CFR § 1910.140 poses potential feasibility issues regarding climbing, changing locations, and performing elevated work in trees, the CSHO should contact the Directorate of Enforcement Programs in OSHA’s National Office to determine the appropriate enforcement options.

Ladders

Workers sometimes use portable ladders while engaged in tree care and tree removal operations. OSHA’s *Walking-Working Surface* standard (29 CFR § 1910 Subpart D) contains requirements for portable ladders (see, for example, 29 CFR §§ 1910.22, 1910.23, 1910.30). It is essential that employers comply with Subpart D to prevent falls from ladders. CSHOs should therefore assess whether employers have met 29 CFR § 1910 Subpart D when workers are exposed to such falls.

Aerial Devices

Employers engaged in tree care operations sometimes work from aerial devices (or aerial lifts) to perform certain tasks. OSHA’s *Vehicle-Mounted Elevating and Rotating Work Platforms* standard, 29 CFR § 1910.67, contains requirements for aerial devices (defined as “[a]ny vehicle—mounted device, telescoping or articulating, or both, which is used to position personnel”). It is essential that employers comply with 29 CFR § 1910.67 to protect workers in aerial devices from falls. CSHOs shall assess whether employers meet the requirements of 29 CFR § 1910.67 when workers are using aerial devices.

Provision and Use of Personal Protective Equipment (PPE) in Connection with Other Hazards (29 CFR Part 1910, Subpart I and other PPE requirements)

CSHOs shall also assess whether employers provide and ensure employees use required PPE in connection with hazards other than those associated with falls and falling objects (for example, the provision and use of cut-resistant leg protection while operating chain saws). As stated, the general requirements of the PPE standard, 29 CFR § 1910.132, require the employer to, among other things, “assess the workplace to determine if hazards are present,

or are likely to be present, which necessitate the use of personal protective equipment (PPE)," and, "[i]f such hazards are present, or likely to be present, . . . [s]elect, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment." The PPE standard, 29 CFR 1910 Subpart I, also contains provisions specifically addressing eye and face protection, respiratory protection, head protection, foot protection, electrical protective equipment, and hand protection, as well as personal fall protection systems (which was discussed earlier). Moreover, CSHOs shall determine whether PPE requirements in other OSHA standards apply and assess compliance with those requirements. For example, the *Electric Power Generation, Transmission, and Distribution* standard, 29 CFR § 1910.269, and the *Occupational Noise Exposure* standard, 29 CFR § 1910.95, which are discussed later in this memorandum, contain PPE requirements that may apply to the specific working conditions at issue.

Electrical Safety (29 CFR § 1910.269 and 29 CFR § 1910 Subpart S).

A worker engaged in tree care or removal operations can be electrocuted if the worker, their tools, or their equipment (e.g., aerial lifts) comes into contact with an overhead electrical power line or underground utility line. They can also be electrocuted when a tree limb or branch makes contact with an energized power line.

Depending on the work being performed and the employees performing that work, different OSHA standards apply to protect workers against electrical hazards (see, for example, the *Electric Power Generation, Transmission, and Distribution* standard, 29 CFR § 1910.269, and the general industry electrical standards, 29 CFR § 1910 Subpart S). For example, some line-clearance tree trimming is covered under 29 CFR § 1910.269, some line-clearance tree trimming is covered under 29 CFR § 1910 Subpart S, and some tree trimming is covered under the *Telecommunications* standard, 29 CFR § 1910.268. For further information about the applicability of these standards to tree care and removal operations on, near, or directly associated with power lines, see 29 CFR § 1910.269(a)(1)(i)(E), 29 CFR § 1910.331(b) & (c), and 29 CFR § 1910.268(a), the definitions of "line-clearance tree trimming" and "line-clearance tree trimmer" in 29 CFR § 1910.269(x), and *Questions and Answers on 29 CFR 1910.269 and 29 CFR Part 1926, Subpart V*, Question 38 (available at www.osha.gov/dsg/power_generation/QandAFinal.html). CSHOs shall assess whether employers are complying with the applicable requirements for maintaining safe distances of personnel and equipment (e.g., booms and aerial lifts) from overhead lines, and for the use and safe handling of appropriate tools and equipment (e.g., ladders) in conjunction with line-clearance tree trimming work.

Flammable Liquids (29 CFR § 1910.106).

Flammable liquids must be stored, handled, transported, and used in accordance with the requirements of the *Flammable Liquids* standard, 29 CFR § 1910.106. This standard contains specific requirements for, among other things, the storage of flammable liquids in portable containers (29 CFR § 1910.106(d)(2)). CSHOs shall assess whether suitable fire control devices,

such as small hose or portable fire extinguishers, are available at locations where flammable liquids are stored (29 CFR § 1910.106(d)(7)(i)). Employers should be cited under the relevant provisions of 29 CFR § 1910.106, as applicable.

Occupational Noise Exposure (29 CFR § 1910.95).

Chainsaws, chippers, and other power tools used in tree care and removal operations create high noise levels when in use. The *Occupational Noise Exposure* standard, 29 CFR § 1910.95(b)(1), requires the use of “feasible administrative or engineering controls” to address noise hazards and the use of PPE if administrative and engineering controls “fail to reduce sound levels within the levels” specified in the standard. Also, the *Occupational Noise Exposure* standard requires the employer to administer a continuing, effective hearing conservation program whenever employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) of 85 dBA or, equivalently, a dose of fifty percent (29 CFR § 1910.95(c)).¹

OSHA’s current enforcement policy regarding 29 CFR § 1910.95(b)(1) allows employers to rely on the use of PPE and a compliant hearing conservation program, rather than engineering and/or administrative controls, when hearing protectors will effectively attenuate the noise to which employees are exposed. However, employers need to implement technologically and economically feasible engineering and/or administrative controls under 29 CFR § 1910.95(b)(1) when: (a) employee exposure levels are so elevated that hearing protectors alone cannot reliably reduce noise levels received to levels specified in the standard, (e.g., hearing protectors which offer the greatest attenuation can reliably be used to protect employees when their exposure levels border on 100 dBA); or (b) the costs of engineering and/or administrative controls are less than the cost of an effective hearing conservation program. In examining compliance with 29 CFR § 1910.95, CSHOs shall consult FOM, Chapter 4.XI.B, pp. 4-32 to 33, which contains greater details on how to implement OSHA’s enforcement policy. CSHOs should also refer to CPL 02-02-035, 29 CFR § 1910.95 (b)(1), *Guidelines for Noise Enforcement; Appendix A*, December 19, 1983, which can be found at: www.osha.gov/enforcement/directives/cpl-02-02-035.

Materials Handling and Storage (29 CFR § 1910 Subpart N).

CSHOs should assess the employer’s compliance with OSHA’s *Materials Handling and Storage* standards at 29 CFR § 1910, Subpart N, including whether the employer has ensured that truck-mounted cranes are operated and maintained in compliance with the *Crawler Locomotive and Truck Cranes* standard (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” (29 CFR § 1910.180(h)(3)(v)). This requirement applies even though the standard for *Arboricultural Operations—Safety Requirements*, ANSI Z133-2017, §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 § 1910.180(h)(3)(v). An employer may, however, assert that compliance with the

¹ This program must include, among other elements: noise monitoring; provision of adequate hearing protectors, at no cost to employees; baseline and annual audiometric testing, at no cost to employees; and training in the hazards of noise and the use of hearing protectors (29 CFR § 1910.95(c) thru (o)). Also under the program, employers must ensure that hearing protectors are worn in specified situations, including where an employee is required by 29 CFR § 1910.95(b)(1) to wear PPE (29 CFR § 1910.95(i)(2)).

OSHA standard is either impossible/infeasible or presents a greater hazard to the employee. The employer, though, bears the burden of proving these affirmative defenses.

1. In accordance with the FOM, Chapter 5.VI.B.2, impossibility/infeasibility of compliance is established by the employer when the employer proves:
 - a. Compliance with the requirements of 29 CFR § 1910.180(h)(3)(v) is impossible or would prevent performance of the required work; and
 - b. The employer took reasonable alternative steps to protect employees or there are no alternative means of employee protection available.
2. In accordance with the FOM, Chapter 5.VI.B.3, a greater hazard defense is established by the employer when the employer proves:
 - a. Compliance with 29 CFR § 1910.180(h)(3)(v) would result in a greater hazard(s) to employees than would noncompliance;
 - b. The employer took reasonable alternative protective measures, or there are no alternative means of employee protection; and
 - c. An application for a variance would be inappropriate.

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 shall consider whether the following (non-exclusive) alternative methods could have been used:

- Can an aerial lift position employees? Aerial lifts (e.g., bucket trucks or cherry pickers) are available in many configurations, some with booms of up to 46 meters. Aerial lifts with material handlers are also available, though generally not with the longest booms. Cranes may be used in addition to aerial lifts if 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.
- 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.
- If it is impossible to use an aerial device and if climbing is unsafe, can a personnel platform be suspended from a crane? Personnel platforms meeting 29 CFR § 1926.1431 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 (29 CFR § 1926.1431(e)(3)).

Hand and Portable Powered Tools and Other Hand-Held Equipment (29 CFR § 1910 Subpart P, 29 CFR § 1910.269(r), and the General Duty Clause).

CSHOs shall assess the condition of portable powered tools and other hand-held equipment used in tree care and removal (e.g., chainsaws), and whether these tools and equipment are appropriately maintained, in accordance with OSHA's *Hand and Portable Powered Tools and Other Hand-Held Equipment* standard (29 CFR § 1910 Subpart P). This standard requires each employer to be responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees (29 CFR § 1910.242(a)). Note that 29 CFR § 1910.242(a) applies to the use of defective tools or equipment in the workplace.

The *Hand and Portable Powered Tools and Other Hand-Held Equipment* standard, 29 CFR § 1910 Subpart P, contains some other requirements that apply to chainsaws and other tools used during tree care and tree removal operations. For example, 29 CFR § 1910.243(a)(2)(i) requires all hand-held gasoline powered chainsaws to be equipped with a constant pressure throttle control that will shut off the power to the saw chain when the pressure is released, 29 CFR § 1910.243(a)(4) requires cracked saws to be removed from service, and 29 CFR § 1910.243(a)(5) requires portable electric power tools to meet the electrical requirements of 29 CFR § 1910 Subpart S. CSHOs should assess whether employers have met these and other requirements in 29 CFR § 1910 Subpart P when conducting inspections.

The line-clearance tree trimming provisions in the *Electric Power Generation, Transmission, and Distribution* standard, 29 CFR § 1910.269(r)(5), also contain potentially applicable requirements for gasoline-engine chainsaws, including a requirement that gasoline-engine chainsaws be started on the ground or where they are otherwise firmly supported. Section 1910.269(r)(5) also requires that gasoline-engine chainsaw operations meet the requirements in 29 CFR § 1910.266(e) for hand and portable powered tools. For example, 29 CFR § 1910.266(e)(2)(vi) prohibits drop starting chainsaws, and 29 CFR § 1910.266(e)(2)(i) requires means to prevent or minimize chainsaw kickback. (It should be noted that the line-clearance tree trimming provisions in 29 CFR § 1910.269(r) also contain requirements for brush chippers, sprayers and related equipment, stump cutters, and backpack power units, among other requirements).²

Finally, to the extent no other standard specifically addresses the hazard at issue, the use of hand and portable powered tools and other hand-held equipment, including chainsaws, may be subject to citation under the General Duty Clause. In considering whether to recommend issuance of citations under the General Duty Clause, and appropriate abatement of any violations, CSHOs

² Also note that 29 CFR § 1910.269(a)(1)(iii) provides that 29 CFR § 1910.269 "applies in addition to all other applicable standards contained in this part 1910" and that "[e]mployers covered under [29 CFR § 1910.269] are not exempt from complying with other applicable provisions in part 1910 by the operation of §1910.5(c)." Section 1910.5(c) provides that "[i]f a particular standard is specifically applicable to a condition, practice, means, method, operation, or process, it shall prevail over any different general standard which might otherwise be applicable to the same condition, practice, means, method, operation, or process."

should examine ANSI B175.1-2012, Power Tools—*Gasoline Powered Chain Saws-Safety Requirements*, as well as ANSI Z133-2017, *Safety Requirements for Arboricultural Operations*. CSHOs should consider whether the recommendations contained in those consensus standards are consistent with OSHA's standards, interpretations and policies.

Machinery and Machine Guarding (29 CFR § 1910 Subpart O and 29 CFR § 1910.269).

When workers are using brush chippers, stump cutters, chainsaws, or other machinery, CSHOs should assess whether the employer is complying with the applicable general industry standards on *Machinery and Machine Guarding* (29 CFR §1910 Subpart O). Employers should be cited under the relevant provisions of Subpart O if employees are not provided with the appropriate machine guarding measures required by the standard.

The line-clearance tree trimming requirements in the *Electric Power Generation, Transmission, and Distribution* standard, 29 CFR § 1910.269(r), also contain potentially applicable provisions on brush chippers, stump cutters, chainsaws, and other machinery used in tree care and tree removal operations (29 CFR § 1910.269(r)). For example, the standard requires that “[b]rush chippers not equipped with a mechanical infeed system shall be equipped with an infeed hopper of length sufficient to prevent employees from contacting the blades or knives of the machine during operation” (29 CFR § 1910.269(r)(2)(iii)), and that stump cutters be “equipped with enclosures or guards to protect employees” (29 CFR § 1910.269(r)(4)(i)).³

First-Aid Providers and First-Aid Kits (29 CFR § 1910.151 and 29 CFR § 1910.269).

CSHOs shall assess whether the employer is complying with OSHA's *Medical services and first-aid standard* (29 CFR § 1910.151) for tree care and removal operations. The general industry first-aid standard requires that “a person or persons . . . adequately trained to render first aid” shall be present on the job site “[i]n the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees” (29 CFR § 1910.151(b)). The basic purpose of this provision is to ensure that adequate first aid is available in the critical minutes between the occurrence of injury and the availability of a physician or hospital care for the injured employee.

An employer who contemplates relying on assistance from outside emergency responders, instead of ensuring that “a person or persons . . . adequately trained to render first aid [is] present on the job site,” must take a number of factors into account (e.g., nature of the hazards at the workplace, distance to the nearest hospital/infirmary).⁴ CSHOs should assess whether the employer has taken appropriate proactive steps (such as making arrangements with emergency responders) to ensure that emergency assistance will be readily available if an injury occurs. In addition, while the standard

³ See footnote 2.

⁴ OSHA has consistently taken the view that the near proximity of a trained emergency service provider, such as fire department paramedics or EMS responders, would be equivalent to the “infirmary, clinic, or hospital” specified by the standard. Therefore, emergency medical services can be provided either on-site or by evacuating the employee to an off-site facility in cases where that can be done safely.

does not prescribe a number of minutes, OSHA has long interpreted the term “near proximity” to mean that emergency care must be available within no more than 3 to 4 minutes from the workplace, as medical literature establishes that, for the serious injuries that could occur during tree care operations, first aid treatment must be provided within the first few minutes to avoid permanent medical impairment or death. For more information, please see <https://www.osha.gov/laws-regulations/standardinterpretations/2007-01-16-0>; <https://www.osha.gov/laws-regulations/standardinterpretations/2007-03-23>.

CSHOs shall also assess whether the employer is complying with the first-aid supply requirements in OSHA's *Medical services and first-aid standard* (§1910.151). Section 1910.151(b) requires employers to provide first-aid supplies that are readily available at the job site.

Section 1910.151 Appendix A provides that ANSI/ISEA Z308.1-1998, *Minimum Requirements for Workplace First-Aid Kits and Supplies*, contains an example of the minimal contents of a generic first-aid kit that OSHA considers adequate for small work sites. Section 1910.151 Appendix A also provides that employers who have unique or changing first-aid needs in their workplace may need to enhance their first-aid kits, and that employers should assess the specific needs of their worksite periodically and augment the first aid kit appropriately.

Note that other standards which apply to certain specific hazards or industries make employee first aid training mandatory and reliance on outside emergency responders is not an allowable alternative. Section 1910.269(a)(1)(i)(E) requires that employers engaged in line-clearance tree trimming covered by 29 CFR § 1910.269 must comply with the medical services and first aid requirements in 29 CFR § 1910.269(b). While 29 CFR § 1910.269(b) requires employers to provide medical services and first aid as required by 29 CFR § 1910.151, it also contains additional pertinent requirements on the number of persons with first-aid training who must be available during the conduct of line-clearance tree trimming, first-aid supplies, and first-aid kits.

Fire Extinguishers (29 CFR § 1910.157).

CSHOs should investigate whether employers performing tree care operations store portable fire extinguishers on their vehicles, expect their workers to use them to fight incipient stage fires, and meet the applicable requirements in the *Portable Fire Extinguishers* standard, 29 CFR § 1910.157. For example, 29 CFR § 1910.157(e) addresses the inspection, maintenance, and testing of portable fire extinguishers, 29 CFR § 1910.157(f) addresses hydrostatic testing of portable fire extinguishers, and 29 CFR § 1910.157(g) addresses the training and education of workers about the general principles of fire extinguisher use and the hazards involved with incipient stage firefighting. An “incipient stage fire” is defined as “a fire which is in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus” (see 29 CFR § 1910.155(c)(26)). Note that 29 CFR § 1910.157(d) does not apply to fire extinguishers provided for employee use on the outside of workplace buildings or structures.

Protective Structures (the General Duty Clause).

CSHOs shall assess whether machines (e.g., tractors, mechanical felling devices, feller-bunchers) used in tree care and removal are equipped with falling object protective structures (FOPS) and/or rollover protective structures (ROPS). To the extent no other standard specifically addresses this hazard, CSHOs shall consult with national consensus standards such as, but not limited to, International Organization for Standardization (ISO) 3471:2008, *Earth-moving machinery -- Roll-over protective structures -- Laboratory tests and performance requirements*, and ISO 3449:2005, *Earth-moving machinery—Falling-object protective structures -- Laboratory tests and performance requirements*, in evaluating hazard recognition and feasible abatement methods under the General Duty Clause. CSHOs should consider whether the recommendations contained in consensus standards are consistent with OSHA's standards, interpretations and policies.

Traffic Safety (the General Duty Clause).

Employees can be struck by moving vehicles and mobile equipment from outside and inside the work zone. CSHOs should consider whether employees are protected from traffic outside and inside the work zone.

Most OSHA general industry standards do not currently contain requirements for traffic control practices. To the extent no other standard specifically addresses the hazard at issue (e.g., see footnote 6 below), CSHOs should consider whether citation under the General Duty Clause is appropriate. Additional information on highway work zones and signs, signals, and barricades may be found at www.osha.gov/doc/highway_workzones/.⁵

⁵ The Electric Power Generation, Transmission, and Distribution Standard contains some requirements on traffic control (see 29 CFR §§ 1910.269(e)(7), 1910.269(w)(6)). These requirements do not apply to the majority of line-clearance tree trimming covered under the standard (see 29 CFR § 1910.269(a)(1)(i)(E)). CSHOs should nevertheless consider whether these requirements apply and issue citations, if appropriate.