

City of Clearwater

Tree Trimming and Logging Safety

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Section 1: References

- A. 29CFR1910.67 Vehicle Mounted Elevating and Rotating Work Platforms
- B. 29CFR1910.95 Occupational Noise Exposure
- C. 29CFR1910.106 Flammable and Combustible Liquids
- D. 29CFR1910.132 Personal Protective Equipment General Requirements
- E. 29CFR1910.133 Eye and Face Protection
- F. 29CFR1910.135 Head Protection
- G. 29CFR1910.136 Occupational Foot Protection
- H. 29CFR1910.137 Electrical Devices Protection
- I. 29CFR1910.138 Hand Protection
- J. 29CFR1910 Subpart I Appendices A and B
- K. 29CFR1910.157 Portable Fire Extinguishers
- L. 29CFR1910.242 Hand and Portable Powered Tools
- M. 29CFR1910.243 Guarding of Portable Powered Tools
- N. 29CFR1910.244 Other Portable Tools and Equipment
- O. 29CFR1910.266 Logging
- P. MN Rules 5206 Employee Right-to-Know
- Q. MN Rules 5208 AWAIR

Section 2: Definitions

- A. **Arch-** An open-framed trailer or built-up framework used to suspend the leading ends of trees or logs when they are skidded.
- B. **Back cut-** The final cut in a tree felling operation. Also called the “Felling Cut.”
- C. **Ballistic Nylon-** A nylon fabric of high tensile properties designed to provide protection from lacerations.
- D. **Buck-** To cut a felled tree into logs. For the purposes of this program, “Buck” will also apply to cutting poles or other similar items into smaller pieces, as well.
- E. **Butt-** The bottom part of a felled tree, pole, or other similar item.
- F. **Chock-** A block, often wedge shaped, which is used to prevent movement; e.g., a log from rolling, a wheel from turning.
- G. **Danger Tree-** A standing tree that presents a hazard to employees or the public due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem or limbs, and the direction and lean of the tree.
- H. **Debark-** To remove bark from trees or logs.
- I. **Deck-** A stack of trees or logs.
- J. **Fell-** To cut down trees, poles, or other similar objects.
- K. **Feller-** The person who fells a tree, pole, or other similar object.
- L. **Fire Watch-** An employee who observes operations that have a danger of resulting in fire. The fire watch must be equipped with a portable handheld fire extinguisher that matches the possible class(es) of fire that may result.
- M. **Grounded**
 - a. (Logging)- The placement of a component of a machine on the ground or on a device where it is firmly supported.

- b. Ensure that when working around electricity, electrical lines, or electrical components, all employees are aware of the use of the term “grounding” as not necessarily meaning that an item is electrically safe.
- N. **Limbing-** To cut branches off of felled trees.
- O. **Lodged Tree-** A tree leaning against another tree or object which prevents it from falling to the ground. Also called a “Hung Tree.”
- P. **Logging-** For the purposes of this written program, the term “logging” includes the following (regardless of what the final material is used for):
 - a. Felling trees
 - b. Tree trimming operations
 - c. Chipping
 - d. Using chainsaws or other tree felling/trimming equipment to saw down, cut apart, or remove poles
- Q. **Positive Pressure Switch-** A switch that must have constant pressure applied to it. When the pressure is released, the switch cuts power.
- R. **Root Wad-** The ball of a tree root and dirt that is pulled from the ground when a tree is uprooted.
- S. **Snag-** Any standing dead tree or portion thereof.
- T. **Spring Pole-** A tree, segment of a tree, limb, sapling, pole, or other similar object which is under stress or tension due to the pressure or weight of another object.
- U. **Undercut-** A notch cut in a tree to guide the direction of the tree fall and to prevent splitting or kickback.

Section 3: Program Requirements

A. Safe Use of Equipment

a. Chainsaws

- i. Prior to use, inspect chainsaws to ensure:
 1. The chainsaw is in good general condition, with no leaks or damage
 2. The throttle, safety throttle lock, and stop switch operate correctly
 3. The chain brake works
 4. The chain is lubricated, sharp, and tensioned correctly
 5. The sprocket and bar are in good condition
 6. The idle is properly adjusted
- ii. Only start chainsaws on the ground or on grounded surfaces.
- iii. Drop starting of chainsaws is absolutely prohibited.
- iv. Refueling:
 1. Refuel at least ten feet away from any hot items, or combustion sources, and at least fifty feet away from open flame
 2. Refuel only after the chainsaw motor has cooled
 3. Wipe any spilled fuel off of the saw
 4. Have a handheld portable fire extinguisher and fire watch immediately available

- v. Shut down chainsaws prior to carrying.
 - vi. After completion of work with a chainsaw:
 - 1. Clean the saw, especially the air filter, cooling inlets, and sprocket
 - 2. Reverse chain bar, top to bottom, to prevent wear and burring
 - 3. Clean the chain brake
 - 4. Clean out the chain bar groove
 - vii. Ensure that chains are kept sharp
 - viii. Required personal protective equipment:
 - 1. Hard hat
 - 2. Eye protection
 - 3. Hearing protection
 - 4. Protective footwear
 - 5. Chaps
- b. Chippers
- i. Prior to use, inspect chippers for the following:
 - 1. All safety devices and controls are in place and operational
 - 2. All clothing is tucked in and close-fitting
 - 3. Area around the chipper is free of trip hazards
 - 4. Hood latches and pins are in good condition
 - 5. Hood covering chipper knives or discs is completely closed and latched
 - 6. Run chipper at lowest possible speed and listen for irregularities (shut down immediately if any are detected)
 - ii. Do not feed raked material, very small twigs, etc. into chipper
 - iii. Lay short materials on top of longer materials to feed into chipper
 - iv. If any safety device is not operational, the chipper is not to be used until properly repaired
 - v. Always follow manufacturer's use recommendations
 - vi. Hands and feet are ALWAYS to remain outside of the chipper
 - vii. Feed brush and limbs into the chipper butt end first
 - viii. When feeding materials into the chipper, stand within reach of the emergency shut down switch
 - ix. Walk away from the chipper once an item is fed into it
 - x. Required personal protective equipment:
 - 1. Hard hat
 - 2. Eye protection
 - 3. Hearing protection
 - xi. Do not open any hoods or protective devices until the chipper has come to a complete stop and the power is locked and tagged out
- c. Other powered tools
- i. Always follow the manufacturer's recommended guidelines when using other powered tools
 - ii. Inspect powered tools prior to use to ensure that they are in good condition and all safety devices are in place and operational

- iii. All cords must be inspected prior to use
 - iv. All powered tools must have a working positive pressure switch
 - v. Employees must be properly trained and oriented on use of powered equipment
 - d. Hand Tools
 - i. Prior to use, all hand tools must be inspected to ensure they are in good condition
 - ii. Any hand tools with loose or mushroomed heads will be removed from service immediately
- B. CPR and First Aid
 - a. All employees assigned to logging operations must be trained in first aid and CPR
 - b. Employees must carry their validation card when performing logging operations
 - c. A first aid kit must be kept on site during logging operations. The first aid kit MUST contain at least the following:
 - i. Gauze pads (at least 4 x 4 inches)
 - ii. Two large gauze pads (at least 8 x 10 inches)
 - iii. Box adhesive bandages (band-aids)
 - iv. One package gauze roller bandage at least 2 inches wide
 - v. Two triangular bandages
 - vi. Wound cleaning agent such as sealed moistened towelettes
 - vii. Scissors
 - viii. At least one blanket
 - ix. Tweezers
 - x. Adhesive tape
 - xi. Latex gloves
 - xii. Resuscitation equipment such as resuscitation bag, airway, or pocket mask
 - xiii. Two elastic wraps
 - xiv. Splint
 - xv. Directions for requesting emergency assistance
- C. Personal Protective Equipment
 - a. Personal protective equipment is the last line of defense for an employee; because of this, violations of personal protective equipment requirements are considered a very serious safety violation.
 - b. See the AWAIR Policy for discipline procedures for employees who violate personal protective equipment requirements.
 - c. If a piece of personal protective equipment is damaged or inoperable, it must be destroyed and replaced.
 - d. It is the responsibility of the supervisor to ensure that employees wear the correct personal protective equipment.
- D. Emergency Procedures
 - a. Prior to beginning logging operations for the season, the logging crew(s) must review City of Clearwater emergency procedures.
 - b. Prior to beginning a logging operation in a new location, the logging

- crew(s) must review the following locations:
 - i. Nearest emergency medical center
 - ii. Area where emergency response vehicles will arrive if called
- c. Extreme hot and cold:
 - i. In temperature extremes, an area for climate relief should be set up
 - ii. An employee should be designated to monitor hot or cold drinks, climate relief area conditions, and time employees are exposed to the elements
- d. Tornado Watch/Warning
 - i. In the event of a tornado watch, all logging operations will suspend IMMEDIATELY.
- e. Lightning
 - i. Operations will suspend IMMEDIATELY if lightning is detected in the area.
- E. Vehicle Operations
 - a. Vehicles will be operated in accordance with the Fleet Safety Program.
- F. Fire Prevention and Fire Extinguishers
 - a. Gasoline and other fuels, and any other flammable or combustible liquids will be stored in self-closing metal safety cans.
 - b. Cans of flammable and combustible liquids will be stored in flammable storage cabinets when not in use.
 - c. Each vehicle will have a portable hand held fire extinguisher on board.
 - d. When refueling equipment from a portable can, a fire watch will be posted.
 - e. Equipment must be allowed to cool prior to refueling.
 - f. Portable fuel cans must be placed on the ground when being filled.

Section 4: Training Requirements

- A. ALL training discussed in this program must be completed PRIOR to an employee performing any logging operations, and at least annually thereafter.
- B. Logging Equipment
 - a. Employee training on logging equipment should be performed by either an outside expert, or the most competent senior employee.
 - b. Employees are prohibited from using any logging equipment they have not been trained to use.
 - c. Training should follow manufacturer and/or vendor guidelines.
 - d. If an employee exhibits unsafe use of logging equipment, the employee must be retrained before using the equipment again.
 - e. All training must be properly documented, and documentation kept on file.
- C. Personal Protective Equipment
 - a. Employees must demonstrate knowledge of proper use of required personal protective equipment.
 - b. Personal protective equipment training must be updated if hazards change.
 - c. If an employee exhibits unsafe or improper use of personal protective equipment, the employee must be retrained in the proper use of the equipment prior to returning to work.

D. First Aid and CPR

- a. Employees who participate in logging operations must have a card indicating that have had first aid and CPR training, and that the training card has not expired.

E. Vehicle Operation

- a. Employees must be trained according to the written Fleet Safety program.
- b. Employees who participate in logging operations must also receive training specific to any logging-specific vehicles used.
- c. Employees who operate any device that elevates employees must receive training specific to that vehicle, and elevation operations.

F. Fire Extinguisher and Fire Prevention

- a. Employees must be trained in fire protection practices specific to logging operations and storage flammable and combustible liquids. This training must include information about safely refueling logging equipment.

G. Employee Right-to-Know, AWAIR, Emergency Response

- a. Employees may not be assigned to logging operations if they have not completed training on the Employee Right-to-Know program, the AWAIR program, and City of Clearwater emergency response procedures.