

**North Carolina Department of Labor
Division of Occupational Safety and Health
Raleigh, North Carolina**

Field Information System

Operational Procedure Notice #90

Subject: *Compliance Guidelines, Enforcement Procedures, and Safety Requirements for Logging and Other Tree Felling Operations.*

I. Purpose.

- A. This OPN transmits the procedures and criteria to be used by North Carolina Department of Labor employees while conducting "Special Emphasis Program" safety inspections of logging operations, and other similar tree felling operations.
- B. This OPN directs inspection efforts to specifically address those hazardous items and conditions that have been the leading causes of fatalities and injuries on logging sites and similar tree felling operations. Other violations of applicable standards in plain view of the compliance officer may be addressed and cited.
- C. This OPN conveys information contained in ["The Key Safety Requirements for Tree Felling"](#), a checklist compiled by, and in cooperation with The North Carolina Department of Labor's Bureau of Education, Training, and Technical Assistance, the Bureau of Consultative Services, and The North Carolina Forestry Association.
- D. This OPN transmits interpretations of certain standards contained in 29 CFR 1910.266, other applicable 29 CFR 1910 standards, and safety issues of priority in the logging industry and other tree felling operations.

II. Scope of the Inspection

- A. Site Inclusion.

Assigned inspections for the logging operations often **DO NOT** reflect the actual work site. In cases in which an assignment results in contact with the employer at an office site, attempt should be made to find out the location of any activity being conducted by the employer. All active sites should be inspected. When an employer covered by this special emphasis program is operating multiple sites, all such sites shall be covered by the inspection. When sites cross district lines, the district supervisor of the CSHO conducting the inspection shall provide additional guidance regarding the scope of the inspections. When it may not be feasible to conduct site inspections across district lines, the CSHO shall immediately make all information available to his supervisor who

will directly forward all information to the supervisor of the other district involved.

B. **Site Specific Instructions.**

1. Maintenance shops, buildings, or similar structures used for the storage of materials, tools, and equipment shall not normally be included in the Tree Felling Special Emphasis Program inspections. Where maintenance shops, buildings, or similar structures used for the storage of materials, tools, and equipment are located at the logging site being inspected, then they shall be included in the inspection.
2. Tractor trainers, trucks, and other vehicles and equipment used in the transportation of logs or similar products will be included in the on-site inspection process. DOT CDL (Commercial Drivers License) mandates a pre-trip inspection, records of these pre-trip inspections will be inspected to ensure operators compliance with load and vehicle pre-trip safety inspection criteria. A referral to DOT may be necessary.

III. **Site Location.**

Tree felling and related activity is normally conducted at non-fixed sites. A site assigned for inspection will often reflect the company office or the owner's home address. Arrival at these locations during normal business hours does not always assure contact with the employer or result in an inspection being initiated. There is also no assurance that the employer has an active site. When necessary to facilitate the inspection process, contact may be made with the employer by phone the night before the anticipated inspection to acquire sufficient information concerning site location and work status to ensure that an inspection can be conducted. When the employer is told that the call relates to OSH compliance activities, the CSHO shall inform the employer that the call represents an effort to locate the employer's work sites and to arrange for an accompanied site visit. All such telephone contacts shall be considered the beginning of the opening conference. If the on-site inspection is not initiated within 24 hours of the initial telephone contact, the CSHO shall contact a supervisor and advance notice proceedings shall be followed if the inspection is to proceed. If the employer delays or refuses to provide information to allow the initiation of an inspection, the situation shall be treated as a refusal of entry. An opening conference conducted by phone shall be approved by the District Supervisor and documented in the inspection narrative.

IV. **Pulpwood Logging Standard 1910.266.**

29 CFR 1910.266 is a vertical standard and will be cited during inspections in which any logging or processing of pulpwood may occur. During inspections of other tree felling operations such as land clearing by a construction crew, if a serious violation is observed and no other specific standard applies, the general duty clause can be cited and any provision of 1910.266 can be referenced in the citation.

V. **Inspection Guidelines And Standards Interpretations.**

A. Personal Protective Equipment (PPE).

Whenever and wherever there is a reasonable possibility or probability that an injury or death can be prevented by the use of personal protective equipment, citations shall be recommended requiring the use of personal protective equipment as required by 29 CFR 1910.266(c)(1) or 29 CFR 1910.132(a). This includes but is not limited by the following:

1. Leg protection in the form of chaps (which include nylon ballistic and Kevlar chaps) shall be worn when chain saws are being operated.
2. The footwear shall at a minimum meet the requirements of ANSI Z41.1-1967. This ANSI standard requires that all protective footwear be provided with a "**protective toe box**" which could be termed "**steel toe**" or other similar term. This footwear shall have uppers of a height sufficient to protect the ankles. Low cut footwear will not be permitted. Sneakers or tennis shoes will not be permitted.
3. Head protection, eye protection, hand protection, ear protection, and any other similar PPE appropriate for the hazards present shall be required.

B. First Aid, Safety, and Health Issues.

In instances where a hospital, clinic, infirmary is not within 15 minutes travel time to the work site, and no one on the work site is trained in first aid, a citation shall be issued for violation of 29 CFR 1910.151(b).

C. Vehicles and Equipment.

1. Cab enclosures shall be provided on skidders and dozers as required by 29 CFR 1910.266(d)(2).
2. The retro-fitting of doors is required on equipment including skidders and dozers. Retro-fitting of doors on skidders and dozers shall conform to manufacturers' recommendations.

3. Fire extinguishers approved as defined in 29 CFR 1910.155(c)(3) shall be provided at locations where machines are operated, and/or on each vehicle. Other exposures may require additional portable fire extinguishers and training for employees. Vehicles and equipment with operable fire suppression systems shall be determined to be in compliance with 29 CFR 1910.266(c)(4)(iii).
4. Seat belts as a requirement as stated in standard 29 CFR 1910.266(c)(6) (viii) shall be interpreted to mean seat belts will be provided and worn on all mobile equipment.

D. Noise Assessment.

The CSHO shall determine at the start of the inspection whether noise sampling is required. Dosimetry shall be utilized to evaluate compliance with 29 CFR 1910.95, and assessment shall be made of any established hearing conservation program. Verification of dosimetry results by use of a SLM (sound level meter) will not be possible in most cases.

E. Citation Processing.

Citations issued as result of an inspection conducted under this special emphasis program will be issued within 30 days of the inspection opening conference date. Arrangements shall be made by those involved in the inspection process to conduct their activity within a time frame to allow for adherence to this 30 day deadline.

F. Exemption From General Schedule Inspections Through Consultative Services.

Follow procedures listed in the FOM.

G. Closing Conference.

At the closing conference, any violations noted which **are on** the "Key Safety Requirements Checklist" shall be reviewed with the employer according to the Operations Manual guidance procedure for closing conference. Any violations which are identified during the inspection which **are not** included on the checklist shall be reviewed with the employer and identified as items which do not fall within the scope of the checklist. The employer shall be advised that a determination of the classification to the violation and accompanying penalties (if any) for such items will be made after additional supervisory review.

H. Supervisory Review.

Supervisor shall review CSHO documented recommendations and shall issue citations in accordance with established procedures, after taking the following actions:

1. Verify that for any items identified as inadequate on the checklist there is a properly documented 1-B or the narrative of the report contains adequate documentation as to why no violations exists.
2. Any violation for items which are not included on the checklist and which do not carry an IMIS gravity code of 10 (Higher/Greater) are to be changed by the supervisor to a classification of 01 (Minimal/Lesser). Any changes of gravity code shall be accompanied by a written confirmation from the supervisor.

Exception: Any violation which is the proximate cause of an accident resulting in death or serious physical harm to an employee shall be processed according to the Operations Manual and SHALL NOT BE ADJUSTED as set forth in section 8.a.2 above. Any violation which is the proximate cause of an accident which DID NOT RESULT IN DEATH OR SERIOUS PHYSICAL HARM but for which the CSHO can establish a reasonable predictability that death or serious physical harm could have resulted from the accident may also be cited.

(Signed on Original)
James E. Bruce Jr.
Safety Standards Officer
ETTA

Date: Sept 30, 1994

(Signed on Original)
Charles N. Jeffress, Director
OSH Division

Date: 9/30/94

KEY SAFETY REQUIREMENTS FOR TREE FELLING

GENERAL OPERATIONS		
Does Management Ensure That...	Yes	No
1. Employees are properly trained in the safest way to perform their duties?		
2. Employees exposed to overhead hazards wear hard hats?		
3. Employees wear adequate footwear?		
4. All log trucks have sturdy cab racks?		
5. All lodged or hung tress are pulled down as soon as possible?		
6. Dead trees and snags are felled when possible?		
7. Employees wear hearing protection when noise levels are exceeded?		
8. Employees wear nylon ballistic chaps where required?		
9. Employees wear safety glasses when flying particles are present?		
10. Loads are secure when binders are removed?		
11. Gasoline is stored in approved containers?		
12. Fire protection is provided?		

FELLING OPERATIONS		
Does Management Ensure That...	Yes	No
1. Employees check for overhead hazards before starting to fell a tree?		
2. Employees plan, clear and use a path of retreat?		
3. Employees undercut (notch) to an appropriate depth and plan direction the tree will fall?		
4. Other workers are a minimum of 2 tree lengths from the tree being felled?		

BUCKING AND LIMBING OPERATIONS		
Does Management Ensure That...	Yes	No
1. Where practical, all bow saws have a chain guard?		
2. Employees determine which way a log may move when a cut is complete?		
3. Employees do not cut with the tip of a straight blade saw?		
4. Employees cut and remove spring poles with caution?		
5. Employees always grip the saw with both hands and maintain control while sawing?		
6. The area is clear of overhead hazards?		
7. The area is clear of equipment movement?		

KEY SAFETY REQUIREMENTS FOR TREE FELLING (contd.)

<i>SKIDDING OPERATIONS</i>		
Does Management Ensure That...	Yes	No
1. Employees do not stand near moving skidders or logs?		
2. Drivers are not allowing passengers on skidders?		
3. Skidders are equipped with adequate side shields and canopy?		
4. Skidders are not operated at an excessive speed?		
5. Choker cable ends are properly maintained?		

<i>LOADING OPERATIONS</i>		
Does Management Ensure That...	Yes	No
1. The loader operator does not swing the boom or loads over other workers?		
2. The loader has an acceptable cab or railing to protect the operator?		
3. Loaders are not left unattended with the boom suspended over the work area?		
4. The loader has an adequate safety cable from the grapples?		
5. The logs are placed in a proper height, arrangement and binding on the truck?		
6. Employees keep an adequate distance from the truck being loaded?		
7. The trucks are equipped with adequate metal standards?		
8. The deckmen maintain a safe distance from the loader?		
9. Employees check and tighten the binders before entering a public highway?		
10. Truck drivers conduct a pre-trip inspection according to CDL requirements?		

KEY SAFETY REQUIREMENTS FOR TREE FELLING

GENERAL OPERATIONS		
Does Management Ensure That...	Yes	No
1. Employees are properly trained in the safest way to perform their duties?		
2. Employees exposed to overhead hazards wear hard hats?		
3. Employees wear adequate footwear?		
4. All log trucks have sturdy cab racks?		
5. All lodged or hung tress are pulled down as soon as possible?		
6. Dead trees and snags are felled when possible?		
7. Employees wear hearing protection when noise levels are exceeded?		
8. Employees wear nylon ballistic chaps where required?		
9. Employees wear safety glasses when flying particles are present?		
10. Loads are secure when binders are removed?		
11. Gasoline is stored in approved containers?		
12. Fire protection is provided?		

FELLING OPERATIONS		
Does Management Ensure That...	Yes	No
1. Employees check for overhead hazards before starting to fell a tree?		
2. Employees plan, clear and use a path of retreat?		
3. Employees undercut (notch) to an appropriate depth and plan direction the tree will fall?		
4. Other workers are a minimum of 2 tree lengths from the tree being felled?		

BUCKING AND LIMBING OPERATIONS		
Does Management Ensure That...	Yes	No
1. Where practical, all bow saws have a chain guard?		
2. Employees determine which way a log may move when a cut is complete?		
3. Employees do not cut with the tip of a straight blade saw?		
4. Employees cut and remove spring poles with caution?		
5. Employees always grip the saw with both hands and maintain control while sawing?		
6. The area is clear of overhead hazards?		
7. The area is clear of equipment movement?		

KEY SAFETY REQUIREMENTS FOR TREE FELLING (contd.)

<i>SKIDDING OPERATIONS</i>		
Does Management Ensure That...	Yes	No
1. Employees do not stand near moving skidders or logs?		
2. Drivers are not allowing passengers on skidders?		
3. Skidders are equipped with adequate side shields and canopy?		
4. Skidders are not operated at an excessive speed?		
5. Choker cable ends are properly maintained?		

<i>LOADING OPERATIONS</i>		
Does Management Ensure That...	Yes	No
1. The loader operator does not swing the boom or loads over other workers?		
2. The loader has an acceptable cab or railing to protect the operator?		
3. Loaders are not left unattended with the boom suspended over the work area?		
4. The loader has an adequate safety cable from the grapples?		
5. The logs are placed in a proper height, arrangement and binding on the truck?		
6. Employees keep an adequate distance from the truck being loaded?		
7. The trucks are equipped with adequate metal standards?		
8. The deckmen maintain a safe distance from the loader?		
9. Employees check and tighten the binders before entering a public highway?		
10. Truck drivers conduct a pre-trip inspection according to CDL requirements?		