General Requirements for All Machines, including Hand-held and Portable Power Tools -- OSHA Standards 1910.212 and 1910.242

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The Impact of Safety on Florida Agriculture

Florida agriculture, including forestry and fishing, made an annual economic impact of $53 billion in 1998. More than 81,000 people work on the 40,000 farms in the state, and more than 50,000 are employed in other activities related to agriculture. The state's agricultural enterprises range from large citrus, vegetable and cattle operations to small family-operated farms.

From 1989 to 1998, there were approximately 240 deaths related to agriculture in Florida, according to data compiled by the Deep-South Agricultural Health and Safety Center. In addition, agriculture has one of the highest injury and death rates among U.S. industries.

Safety in Florida agriculture is challenging because:

- the state's agricultural enterprises are diverse,
- safety knowledge among workers varies,
- manual labor is used extensively,
- the climate creates year-round heat stress.

Therefore, it is vital to assist the public in learning about OSHA documents related to agriculture. More related information is available at the following Web sites:

Florida AgSafe: <http://www.flagsafe.ufl.edu>

OSHA Regulations: <http://www.osha.gov/comp-links.html>

Overview

This document, a condensation of Sections 1910.212 and 1910.242 of the Occupational Safety and Health Act (29 CFR), is not intended to be totally...
inclusive but rather to highlight the information and requirements in the complete OSHA standard that owners and managers of agricultural businesses should understand. Refer to the OSHA Web site given above for the complete standard and for court interpretations of the standard.

Contents of OSHA Standards 1910.212 and 1910.242

• General Requirements for All Machines -- OSHA Standard 1910.212

Section 1910.212(a) -- Machine Guarding

Section 1910.212(b) -- Anchoring Fixed Machinery

• Hand and Portable Powered Tools and Equipment, General -- OSHA Standard 1910.242

Section 1910.242(a) -- General Requirements

Section 1910.242(b) -- Compressed Air Used for Cleaning

General Requirements for All Machines -- OSHA Standard 1910.212

Section 1910.212(a) -- Machine Guarding

1910.212(a)(1) -- Types of Guarding. One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are barrier guards, two-hand tripping devices, electronic safety devices, etc.

1910.212(a)(2) -- General Requirements for Machine Guards. Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible. The guard shall be such that it does not offer an accident hazard in itself.

1910.212(a)(3) -- Point of Operation Guarding

(i) -- Point of operation is the area on a machine where work is actually performed upon the material being processed.

(ii) -- The point of operation of machines whose operation exposes an employee to injury, shall be guarded. The guarding device shall be in conformity with any appropriate standards therefor, or, in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

(iii) -- Special hand tools for placing and removing material shall be such as to permit easy handling of material without the operator placing a hand in the danger zone. Such tools shall not be in lieu of other guarding required by this section, but can only be used to supplement protection provided.

(iv) -- The following are some of the machines which usually require point of operation guarding:

(a) -- Guillotine cutters

(b) -- Shears

(c) -- Alligator shears

(d) -- Power presses

(e) -- Milling machines

(f) -- Power saws

(g) -- Jointers

(h) -- Portable power tools

(i) -- Forming rolls and calenders

1910.212(a)(4) -- Barrels, Containers, and Drums. Revolving drums, barrels, and containers shall be guarded by an enclosure which is interlocked with the drive mechanism, so that the barrel, drum, or container cannot revolve unless the guard enclosure is in place.

1910.212(a)(5) -- Exposure of Blades. When the periphery of the blades of a fan is less than seven (7) feet above the floor or working level, the blades shall be guarded. The guard shall have openings no larger than one-half (1/2) inch.
Section 1910.212(b) -- Anchoring Fixed Machinery

Machines designed for a fixed location shall be securely anchored to prevent walking or moving.

Hand and Portable Powered Tools and Equipment, General -- OSHA Standard 1910.242

Section 1910.242(a) -- General Requirements

Each employer shall be responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees.

Section 1910.242(b) -- Compressed Air Used for Cleaning

Compressed air shall not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment.