ABE183

UF UNIVERSITY of FLORIDA IFAS Extension

Emergency Action Plans — OSHA Standard 1910.38 [1]

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The Impact of Safety on Florida Agriculture

Florida agriculture, including forestry and fishing, made an annual economic impact of $98 billion in 2004. More than 390,000 workers are directly employed in these industries in Florida, and another 380,000 people are employed in activities related to agriculture (Hodges 2006). The state's agricultural enterprises range from large citrus, vegetable, and cattle operations to small family-operated farms.

In spite of the popular images of agriculture, it is a highly mechanized, industrial profession with one of the highest injury and death rates among U.S. industries. The last study of death rates in Florida agriculture (Liller 2000) found 240 deaths from 1989 to 1998. In 2005, the Bureau of Labor Statistics (BLS 2005a) reported that death due to injury in agriculture was 31.4 deaths per 100,000 full-time workers, which was the highest rate among all major occupational groups and an increase of 14% over 2004. Also in 2005, the Bureau of Labor Statistics reported 6,100 injuries per 100,000 full-time workers (BLS 2005b).

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 information about the OSHA Standards and agricultural safety is available at the following Web sites:

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

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

National Agricultural Safety Database:
http://www.cdc.gov/nasd

Introduction

This standard, 1910.38, is one part of OSHA Standard 1910 Subpart E, "Exit Routes, Emergency Action Plans, and Fire Prevention Plans." The standards in Subpart E are:

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- 1910.33 — Table of Contents
- 1910.34 — Coverage and Definitions
- 1910.35 — Compliance with NFPA 101-2000, Life Safety Code
- 1910.36 — Design and Construction Requirements for Exit Routes
- 1910.37 — Maintenance, Safeguards, and Operational Features for Exit Routes
- 1910.38 — Emergency Action Plans
- 1910.39 — Fire Prevention Plans

In 2002, OSHA undertook a major restructuring of Subpart E, which was then called "Means of Egress." The goal was to make the standard easier to understand and to comply with. The term "means of egress" was replaced with "exit routes." In addition, there are fewer subparagraphs and fewer cross-references. Inconsistencies and duplicative requirements have been eliminated.

Overview

Author's Comment — Occupational safety has come a long way since 1911, when 146 workers were killed in a fire in New York's garment district. Nevertheless, workers still die because of inadequate exits. In 1990, 87 people died at the Happy-Land Social Club in New York City, a facility that had no fire suppression, no alarms, and no exits. In 1991, 25 workers died in a North Carolina poultry processing plant in which the fire exits were either blocked, locked, or inadequately marked. Other corporations, both large and small, have faced scrutiny in the past few years for their policies regarding locking or blocking emergency exits.

The June 14, 2006 explosion at Universal Form Clamp Company in Belleview, Illinois, resulted in the death of one worker and injury of two others. The investigation of this incident by the Chemical Safety and Hazard Investigation Board determined that the lack of an emergency action plan and evacuation drills were among the factors that contributed to the injuries in this incident. Also, there was no alarm system. When the explosion hazard was detected, workers were notified of the evacuation by word of mouth (Cable 2007).

Many owners and managers may feel that they cannot accurately identify the fire hazards which may exist in their operation. Therefore, it is recommended that you ask the local fire department (and possibly an electrician) to inspect your facilities for fire hazards and to recommend corrective action. They will be familiar with local building and fire codes, which may be more detailed than OSHA requirements in some cases.

An emergency plan is a critical part of standard emergency preparedness for any facility, but it is only part of the story. To be truly prepared, any operation must have the following elements in place:

1. Management commitment to worker safety

2. A facility designed for safe and efficient operation, including periodic inspections of all safety features, exits, signage, etc.;

3. Emergency plans that workers are trained in on a regular basis.

If any one of these elements is missing, the others quickly become irrelevant, and the stage is set for a disaster.

Emergency Plans

Application — An employer must have an emergency action plan whenever an OSHA standard requires one. The requirements in this section apply to such emergency action plans.

Written and oral emergency action plans — An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer workers may communicate the plan orally to employees.

Minimum elements of an emergency action plan — An emergency action plan must include at a minimum:

- procedures for reporting a fire or other emergency;

- procedures for emergency evacuation, including type of evacuation and exit route assignments;
- procedures to be followed by employees who remain to operate critical plant operations before they evacuate;
- procedures to account for all employees after evacuation;
- procedures to be followed by employees performing rescue or medical duties; and
- the name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

Employee alarm system — An employer must have and maintain an employee alarm system. The alarm system must use a distinctive signal for each purpose and comply with the requirements in the standard for employee alarm systems (OSHA Standard 1910.165).

Training — An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.

Review of emergency action plan — An employer must review the emergency action plan with every employee covered by the plan:

- when the plan is developed or the employee is assigned initially to a job;
- when the employee's responsibilities under the plan change; and,
- when the plan is changed.

Changes to the Standard

The standard for emergency action plans was initially created in September 1980 as "Employee Emergency Plans and Fire Prevention Plans: OSHA Standard 1910.38." In 2002, the content of the standard was divided into Standard 1910.38 — Emergency Action Plans and Standard 1910.39 — "Fire Prevention Plans". OSHA stated that the standards were separated in order to clarify for users the specific requirements of each subject.

References

Bureau of Labor Statistics. 2005(a). "Workplace Injuries and Illnesses in 2005." Washington, D.C.: United States Department of Labor. *News*, October 19, 2006. USDL 06-1816.

Bureau of Labor Statistics. 2005(b). "Census of Fatal Occupational Injuries Summary, 2005." Washington, D.C.: United States Department of Labor. *News*, August 10, 2006. USDL 06-1364.

Cable, J. 2007. "CSB: Lack of Emergency Plan Worsened Blast." Published on the Occupational Hazards web site http://www.occupationalhazards.com/News/Article/47504/CSB_Lack_of_Emergency_Plan_Worsened_Blast.aspx, accessed August 20, 2007.

Hodges, Alan W., Mohammad Rahmani, and W. David Mulkey. "Economic Impacts of Agricultural, Food, and Natural Resources Industries in Florida in 2004." Gainesville, Florida: Cooperative Extension Service. IFAS Publication FE680. http://edis.ifas.ufl.edu/FE680

Liller, Karen D., V. Noland, and Carol J. Lehtola. 2000. "An Analysis of Injury Deaths on Florida Farms for Years 1989 through 1998." *Journal of Agricultural Safety and Health* 6 (2): 131–140.