



VOSH PROGRAM DIRECTIVE: 12-226D

ISSUED: August 15, 1996

SUBJECT: Grain Handling Facilities Standard, § 1910.272; Technical Amendment

A. Purpose.

This directive re-transmits to field personnel the above-referenced revised standard (CHANGE I) and adds the technical amendment in CHANGE II.

The new requirements are designed to prevent workers from being asphyxiated or buried in grain stored in flat, warehouse-like grain structures and ensures that workers in flat storage areas receive essentially the same protections as those employees entering vertical storage structures, such as grain bins and silos..

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

B. Scope.

This directive applies to all VOSH personnel, and specifically to Occupational Safety Compliance and Consultation Services personnel.

C. Action.

The Deputy Commissioner and VOSH Directors shall assure that field personnel understand and comply with the provisions of this standard.

D. Effective Date.

CHANGE I: April 1, 1995
CHANGE II: September 1, 1996

E. Expiration Date.

Not Applicable.

F. Background.

CHANGE I: On December 31, 1987, federal OSHA published a final rule on the Grain Handling Facilities standard (52 FR 49624). On March 7, 1988, the Safety and Health Codes Board (“Board”) adopted the Grain Handling Facilities standard but amended paragraph (f)(2) of the Grain Handling standard by adding a reference to § 1910.146.8.D. of the Virginia unique Confined Space Standard. In 1993, the Board adopted the federal-identical Permit-Required Confined Spaces standard, § 1910.146, and, in turn, restricted the applicability of the Virginia unique Confined Space standard to the construction industry. This Board action deleted the Virginia unique Confined Space standard's applicability to general industry. As such, the need to reference Virginia's unique Confined Space standard in the Grain Handling Facilities standard no longer exists.

CHANGE II: In 1993, a 19-year old worker was killed in a grain handling accident partly because the employee was not equipped with a retrieval line before entering the grain storage facility. On October 19, 1995, OSHA published a proposed technical amendment to its standard for grain handling facilities. The technical amendment clarified OSHA’s original intention to protect employees from engulfment and other hazards while they worked in flat storage areas within grain handling facilities.

G. Summary.

CHANGE I: The Virginia unique standard for Grain Handling Facilities, § 1910.272, was amended to remove the reference to § 1910.146.8.D. of the Virginia unique Confined Space Standard for General Industry, which no longer exists. The effect of removing the reference to §1910.146.8.D. makes the Virginia unique Grain Handling Facilities standard identical to the federal Grain Handling Facilities standard.

CHANGE II: This amendment assures that protection against engulfment, mechanical, and other hazards is provided without regard to the point at which the employee enters the storage structure. It requires that employers ensure that workers entering flat grain storage structures are equipped with a body harness or some other type of lifeline to protect them in case they are engulfed by grain.

To clarify OSHA’s original intent as to the scope of the entry provisions of the standard, a key change replaced the term “flat storage facility” and substituted it with “flat storage structure” in paragraph (c). The definition of “flat storage structure” notes that such storage structures must have an unrestricted ground-level opening for entry, and not just “large doorways.” “Unrestricted” in the context of ground-level entry means that employees can enter by stepping, walking, or driving through these openings. Additionally, the structure must be of a type that will not empty completely by gravity. The latter element clearly distinguishes flat storage from silos, bins, and tanks, which rely on gravity for emptying. Finally, the definition recognizes that grain is often reclaimed through the ground-level openings using means other than motorized vehicles.

This technical amendment also clarifies requirements which provide protection for workers who enter bins, silos and tanks covered in paragraph (g). Flat grain storage structures, with no atmospheric hazards, that are entered at ground level through regular or larger-sized doorways or openings are covered in a new paragraph (h). Entries into flat storage structures at or above the level of the grain are covered by paragraph (g). [*Note: It is important that compliance officers be aware of the differing requirements of these two paragraphs. For example, in paragraph (g), the flat storage exception applies to the storage structure and not the entire facility. In both paragraphs, situations are*

anticipated in which employees will walk on the grain. A distinction is made between walking on the grain and walking down the grain, for example, for the purpose of eliminating bridging or moving it toward an auger or other removal mechanism.] “Walking down grain” and similar practices are prohibited (§ 1910.272(g)(1)(iv) and (h)(2)(i). Requirements for the use of lifelines and other equipment are specified, as are limited, exceptional circumstances in which the use of alternative means of protection is permitted.

Since walking on the grain has been demonstrated to be a source of hazards to workers, the standard requires that, where alternatives to lifeline and harness protections are used, employers take positive steps to verify conditions in the grain storage structure before workers are allowed to enter and walk on the grain. Employers must not allow employees to walk or work on the surface of the grain until the employer has verified that there is no bridging condition, pocket or void space below the surface of the grain to cause flow, avalanching, collapsing or sliding, or that the depth of the grain is not sufficient to present an engulfment hazard, or the employer can demonstrate that the employee is standing on a surface which does not present an engulfment hazard.

Employers also must ensure that equipment that poses a danger in flat storage areas, such as augers or other grain transport equipment, is de-energized whenever employees work in or stand on stored grain that could pose the threat of engulfment.

Theron J. Bell
Commissioner

E-Attachment: CHANGE I: None. Standard appears in the VOSH Standards for General Industry.

CHANGE II: 61 FR 9578 (March 8, 1996)
http://www.osha.gov/FedReg_oseha_pdf/FED19960308A.pdf

Distribution: Commissioner of Labor and Industry
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Program Directors
Regional Directors
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Grain Handling Facilities Standard, §1910.272

**As adopted by the
Safety and Health Codes Board**

Date: December 19, 1994



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: April 1, 1995

Grain Handling Facilities, §1910.272

VR 425-02-37

When the regulations, as set forth in the Grain Handling Facilities standard, §1910.272, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

December 31, 1987

April 1, 1995

Grain Handling Facilities Standard, §1910.272

**As adopted by the
Safety and Health Codes Board**

Date: June 17, 1996



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: September 1, 1996

Grain Handling Facilities, §1910.272

16 VAC25-90-1910.272

When the regulations, as set forth in the Grain Handling Facilities standard, §1910.272, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

April 8, 1996

September 1, 1996