



## Exempt Action Final Regulation Agency Background Document

<b>Agency name</b>	Virginia Department of Labor and Industry
<b>Virginia Administrative Code (VAC) citation</b>	16 VAC-25-120-1917.71 16 VAC 25-130-1918.85
<b>Regulation title</b>	Longshoring and Marine Terminals; Vertical Tandem Lifts, §§ 1917.71 and 1918.85; Public Sector Only
<b>Action title</b>	Revisions to Longshoring and Marine Terminals Vertical Tandem Lifts, §§ 1917.71 and 1918.85; Public Sector Only
<b>Final agency action date</b>	April 16, 2009
<b>Document preparation date</b>	April 16, 2009

When a regulatory action is exempt from executive branch review pursuant to § 2.2-4002 or § 2.2-4006 of the Virginia Administrative Process Act (APA), the agency is encouraged to provide information to the public on the Regulatory Town Hall using this form.

Note: While posting this form on the Town Hall is optional, the agency must comply with requirements of the Virginia Register Act, the *Virginia Register Form, Style, and Procedure Manual*, and Executive Orders 36 (06) and 58 (99).

### Summary

*Please provide a brief summary of all regulatory changes, including the rationale behind such changes. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.*

Federal OSHA revised the Marine Terminals Standard and related sections of the Longshoring Standard by issuing new provisions in the Marine Terminals Standard (29 CFR 1917) to regulate the use of Vertical Tandem Lifts (“VTLs”). The Longshoring Standard (29 CFR 1918) incorporates those requirements by reference. The new requirements are related to the practice of a container crane lifting two intermodal containers together, one on top of the other, connected by semiautomatic twistlocks (SATLs). This practice is known as a vertical tandem lift. SATLs were designed to connect and secure intermodal containers that are stowed on the deck of a vessel. The final standard permits VTLs of no more than two empty containers provided certain safeguards are followed.

The final rule includes additional provisions limiting the type of crane that may be used in VTLs,

requiring a prelift, prohibiting handling containers below deck as a VTL, limiting VTL operations in windy conditions, and prohibiting VTLs of platform containers. The final rule also contains new requirements for employee training and the safe ground transport of vertically coupled containers. Lastly, the final rule contains specifications on the strength of interbox connectors used in VTLs.

**Statement of final agency action**

*Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.*

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On April 16, 2009, the Safety and Health Codes Board adopted federal OSHA’s revisions to its final rule on Longshoring and Marine Terminals; Vertical Tandem Lifts, §§1917.71 and 1918.85, Public Sector Only, as it appeared in 73 FR 75245 on December 12, 2009, with an effective date of July 15, 2009.

**Family impact**

*Assess the impact of this regulatory action on the institution of the family and family stability.*

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These revisions will have no impact on the institution of the family and family stability.

To access the final rule for Longshoring and Marine Terminals; Vertical Tandem Lifts, Parts 1917 and 1918, Public Sector Only, please see attachment or go to:

[http://www.osha.gov/FedReg\\_osha\\_pdf/FED20081210.pdf](http://www.osha.gov/FedReg_osha_pdf/FED20081210.pdf)

**Longshoring and Marine Terminals; Vertical Tandem Lifts,  
§§1917.71 and 1918.85, Public Sector Only; Final Rule**

As Adopted by the  
Safety and Health Codes Board

Date: April 16, 2009



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: July 15, 2009

16 VAC 25-120-1917.71, Terminals handling intermodal containers or roll-on roll-off operations; Marine Terminals Standard, Public Sector Only, §1917.71

16 VAC 25-130-1918.85, Containerized cargo operations, Longshoring, Public Sector Only, §1918.85

When the regulations, as set forth in the final rule for Longshoring and Marine Terminals; Vertical Tandem Lifts, §§1917.71 and 1918.85, Public Sector Only, 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 9, 2009

July 15, 2009

§ 1917.71 Terminals handling intermodal containers or roll-on roll-off operations.

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(i) *Vertical tandem lifts.* The following requirements apply to operations involving the lifting of two or more intermodal containers by the top container (vertical tandem lifts or VTLs).

(1) Each employee involved in VTL operations shall be trained and competent in the safety-related work practices, safety procedures, and other requirements in this section that pertain to their respective job assignments.

(2) No more than two intermodal containers may be lifted in a VTL.

(3) Before the lift begins, the employer shall ensure that the two containers lifted as part of a VTL are empty.

Note to paragraph (i)(3): The lift begins immediately following the end of the prelift required by paragraph (i)(5) of this section. Thus, the weight may be determined during the prelift using a load indicating device meeting § 1917.46(a)(1)(i)(A) on the crane being used to lift the VTL.

(4) The lift shall be performed using either a shore-based container gantry crane or another type of crane that:

(i) Has the precision control necessary to restrain unintended rotation of the containers about any axis.

(ii) Is capable of handling the load volume and wind sail potential of VTLs, and

(iii) Is specifically designed to handle containers.

(5) The employer shall ensure that the crane operator pauses the lift when the vertically coupled containers have just been lifted above the supporting surface to assure that each interbox connector is properly engaged.

(6) Containers below deck may not be handled as a VTL.

(7) VTL operations may not be conducted when the wind speed exceeds the lesser of:

(i) 55 km/h (34 mph or 30 knots) or

(ii) The crane manufacturer's recommendation for maximum wind speed.

(8) The employer shall ensure that each interbox connector used in a VTL operation:

(i) Automatically locks into corner castings on containers but only unlocks manually (manual twistlocks or latchlocks are not permitted);

(ii) Is designed to indicate whether it is locked or unlocked when fitted into a corner casting;

(iii) Locks and releases in an identical direction and manner as all other interbox connectors in the VTL;

(iv) Has been tested and certificated by a competent authority authorized under § 1918.11 of this chapter (for

interbox connectors that are part of a vessel's gear) or § 1917.50 (for other interbox connectors):

(A) As having a bearing surface area of 800 mm<sup>2</sup> when connected to a corner casting with an opening that is 65.0 mm wide; and

(B) As having a safe working load of 98 kN (10,000 kg) with a safety factor of five when the loads are applied by means of two corner castings with openings that are 65.0 mm wide or equivalent devices;

(v) Has a certificate that is available for inspection and that attests that the interbox connector meets the strength criteria given in paragraph (i)(8)(iv) of this section; and

(vi) Is clearly and durably marked with its safe working load for lifting and an identifying number or mark that will enable it to be associated with its test certificate.

(9) The employer shall ensure that each container and interbox connector used in a VTL and each corner casting to which a connector will be coupled is inspected immediately before use in the VTL.

(i) Each employee performing the inspection shall be capable of detecting defects or weaknesses and be able to assess their importance in relation to the safety of VTL operations.

(ii) The inspection of each interbox connector shall include: a visual examination for obvious structural defects, such as cracks; a check of its physical operation to determine that the lock is fully functional with adequate spring tension on each head; and a check for excessive corrosion and deterioration.

(iii) The inspection of each container and each of its corner castings shall include: a visual examination for obvious structural defects, such as cracks; a check for excessive corrosion and deterioration; and a visual examination to ensure that the opening to which an interbox connector will be connected has not been enlarged, that the welds are in good condition, and that it is free from ice, mud or other debris.

(iv) The employer shall establish a system to ensure that each defective or damaged interbox connector is removed from service.

(v) An interbox connector that has been found to be defective or damaged shall be removed from service and may not be used in VTL operations until repaired.

(vi) A container with a corner casting that exhibits any of the problems listed in paragraph (i)(9)(ii) of this section may not be lifted in a VTL.

■ Accordingly, OSHA amends 29 CFR parts 1917 and 1918 as follows:

**PART 1917—MARINE TERMINALS**

■ 1. The authority citation for Part 1917 is revised to read as follows:

Authority: Section 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941); secs. 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 6-96 (62 FR 111), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31160), as applicable; and 29 CFR 1911.

Section 1917.28, also issued under 5 U.S.C. 553.

Section 1917.29, also issued under Sec. 29, Hazardous Materials Transportation Uniform Safety Act of 1990 (49 U.S.C. 1801-1819 and 5 U.S.C. 553).

■ 2. Section 1917.71 is amended by adding new paragraphs (i), (j), and (k) to read as follows:

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(10) No platform container may be lifted as part of a VTL unit.

(j) *Transporting vertically coupled containers.* (1) Equipment other than cranes used to transport vertically connected containers shall be either specifically designed for this application or evaluated by a qualified engineer and determined to be capable of operating safely in this mode of operation.

(2) The employer shall develop, implement, and maintain a written plan for transporting vertically connected containers. The written plan shall establish procedures to ensure safe operating and turning speeds and shall address all conditions in the terminal that could affect the safety of VTL-related operations, including communication and coordination among all employees involved in these operations.

(k) *Safe work zone.* The employer shall establish a safe work zone within which employees may not be present when vertically connected containers are in motion.

(1) The safe work zone shall be sufficient to protect employees in the event that a container drops or overturns.

(2) The written transport plan required by paragraph (j)(2) of this section shall include the safe work zone and procedures to ensure that employees are not in this zone when a VTL is in motion.

**PART 1918—SAFETY AND HEALTH REGULATIONS FOR LONGSHORING**

■ 3. The authority citation for Part 1918 is revised to read as follows:

Authority: Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970, 29 U.S.C. 653, 655, 657; Sec. 41, Longshore and Harbor Workers' Compensation Act, 33

U.S.C. 941; Secretary of Labor's Order No. 6-96 (62 FR 111), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31160), as applicable; and 29 CFR 1911.

Section 1918.90 also issued under 5 U.S.C. 553.

Section 1918.100 also issued under Sec. 29, Hazardous Materials Transportation Uniform Safety Act of 1990 (49 U.S.C. 1801-1819 and 5 U.S.C. 553).

■ 4. Section 1918.85 is amended by adding new paragraph (m) to read as follows:

**§ 1918.85 Containerized cargo operations.**  
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(m) *Vertical tandem lifts.* Operations involving the lifting of two or more intermodal containers by the top container shall be performed following § 1917.71(i) and (k)(1) of this chapter.

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