COMMONWEALTH of VIRGINIA

DEPARTMENT OF LABOR AND INDUSTRY

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AGENDA

SAFETY AND HEALTH CODES BOARD

Wednesday, December 6, 2006

State Corporation Commission
Tyler Building
1300 East Main Street, Second Floor
Richmond, Virginia

Court Room A

10:00 a.m.

1. Call to Order

2. Approval of Agenda

3. Approval of Minutes of June 19, 2006 Board Meeting and October 26, 2006 Public Hearing

4. Election of Officers

5. Opportunity for the Public to Address the Board on the issues pending before the Board today or on any other topic that may be of concern to the Board or within the scope of authority of the Board.

   This will be the only opportunity for public comment at this meeting. Please limit remarks to 5 minutes in consideration of others wishing to address the Board.

6. Old Business

a) Regulation to Amend the General Industry Standard for Telecommunications, General, Approach Distances; Final Rule

b) Proposed Regulation to Amend the Medical Services and First Aid Standards for General Industry, and Proposed Regulation to Amend the Medical Services and First Aid Standards for the Construction Industry

c) Proposed Regulation to Amend Existing Reverse Signal Operation Safety Procedures for General Industry and the Construction Industry, Governing for Off-road Vehicles and Equipment;

and

Proposed Regulation to Establish Reverse Signal Operation Safety Requirements for Vehicles, Machinery and Equipment for General Industry and Construction Industry

7. New Business

a) Occupational Exposure to Hexavalent Chromium, Final Rule; Part 1910 for General Industry, Part 1915 for Shipyards and Part 1926 for Construction; Correcting Amendments;

b) Assigned Protection Factors for Respirators, Parts 1910, 1915 and 1926; Final Rule;

c) Roll-over Protective Structures for the Construction Industry and the Agriculture Industry, Final Rule; Corrections and Technical Amendments; and

d) Updating National Consensus Standards in OSHA=s Standard for Fire Protection in Shipyard Employment, Part 1915; Direct Final Rule

8. Items of Interest from the Department of Labor and Industry

9. Items of Interest from Members of the Board

10. Meeting Adjournment

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

Amendment to
16 VAC 25-75, General Industry Standard for Telecommunications,
General, Approach Distances, §1910.268(b)(7)(i)
Final Adoption

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption as a final regulation of the Board VOSH's proposed amendments to the General Industry Standard for Telecommunications, General, Approach Distances, §1910.268(b)(7)(i), pursuant to the §40.1-22(5).

II. Summary of the Proposed Regulation.

The final regulation will require telecommunications employers to implement protective measures for its workers identical to those afforded general industry and construction workers under the Electrical Power Generation, Transmission and Distribution Standard, 1910.269. The final regulation will clarify that when an employee is wearing insulating gloves and/or sleeves in accordance with 16 VAC 25-90-1910.269(l)(3), those insulating gloves or insulating gloves and sleeves will only be considered insulation of that part of the employee's extremities covered by the gloves and/or sleeves. If other parts of the employee's body or extremities are exposed to energized parts inside the minimum approach distances, additional protective measures outlined in 16 VAC 25-75-1910.268(b)(7)(i) will have to be provided.

NOTE: The requested proposed amendment would not affect the minimum approach distances referenced in §1910.268(b)(7) and contained in Table R-2.

III. Basis, Purpose and Impact of the Proposed Rulemaking.

A. Basis.

The need for this rulemaking became evident to the Department during the investigation of a fatal accident in the Commonwealth. A telecommunication employee was fatally electrocuted when he apparently touched an uninsulated 7200-volt power line with his body. The victim had not put insulating material around the power line, nor was he wearing properly rated insulating gloves. Although the victim was not in compliance with any part of §1910.268(b)(7), the discrepancy between §§1910.268(b)(7)(i) and 1910.269(l)(2)(i) was identified during the legal review of the case.

The current less stringent, Telecommunications Standard language in §1910.268(b)(7)(i) specifies that the wearing of protective gloves will qualify as insulation for any live electrical part in the area within the approach distances where the employee is working. Under the current standard, the employee can be legally exposed to uninsulated live electrical parts in his work area when working inside the approach distance, but only actually be protected from touching them with his hands (and possibly forearms) through the use of gloves. The standard requires no additional temporary blanketing or other means of insulation for nearby high voltage wires which might be inadvertently touched by other body parts of the employee while working inside the approach distances.

In comparison, the Electric Power Generation, Transmission, and Distribution standard, §1910.269, specifies that the wearing of protective gloves and sleeves only qualifies as insulation for the live electrical part upon which the employee is actually working. All other live or "hot" electrical parts and power lines in the work area which the employee could contact during normal work activities and while working inside the approach distances are required to be insulated to avoid an employee accidentally or inadvertently contacting an energized part or power line with an uninsulated part of his body, or other conductive object(s).

Making §1910.268(b)(7)(i), General Industry Standard for Telecommunications, General, Approach Distances and §1910.269(l)(2)(i), General Industry Standard for Electric Power Generation Transmission and Distribution identical will provide safety protections for telecommunication workers equal to that already afforded general industry electrical transmission workers and more recently afforded construction industry workers.

The following boxes highlight the differences between the existing standards on this issue:

The Safety and Health Codes Board is authorized by Title 40.1-22(5) to: "... adopt, alter, amend, or repeal rules and regulations to further, protect and promote the safety and health of employees in places of employment over which it has jurisdiction and to effect compliance with the federal OSH Act of 1970...as may be necessary to carry out its functions established under this title." "In making such rules and regulations to protect the occupational safety and health of employees, the Board shall adopt the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence that no employee will suffer material impairment of health or functional capacity".

NOTE: At its August 4, 2004 meeting, the Board adopted a similar change to the construction industry standard for power transmission and distribution workers which brought §1926.950(c)(1)(i) in line with §1910.269(l)(2)(i). The change to §1926.950(c)(1)(i) was recommended to the Board following a fatal accident that the VOSH Program investigated where a construction electrical transmission employee, who was wearing properly rated insulating gloves and sleeves, was fatally electrocuted when he apparently touched an uninsulated 7600-volt power line with his neck/shoulder.

NOTE*: The Department's staff has conducted a review of both the general industry and construction industry standards to ensure that there are no other such discrepancies in the regulations.*

B. Purpose.

The purpose of the proposed change is to amend the telecommunication standard to provide the same degree of protection to telecommunication employees working inside approach distances to live electrical lines and parts as their counterparts under the electrical power generation, transmission and distribution standard who work inside approach distances.

C. Impact on Employers.

The final amendment requires telecommunication employers to implement protective measures for its workers identical to those afforded general industry and construction workers under the Electrical Power Generation, Transmission and Distri bution Standard, §1910.269.

Telecommunication workers are currently required to be trained on methods for isolating or insulating themselves from live electrical parts through the use of gloves and blankets (see §§1910.268(c) and (f)). The use of blankets and other protective measures is already included in §1910.268. It is anticipated that there should be no significant additional cost or implementation impact placed on employers for complying with the requested changes to the regulation.

Based on information gathered by Department Staff from telecommunication and power industry representatives, the impact of the proposed amendment should not be significant because the options for protecting employees from electrical hazards available under proposed 16 VAC 25-75-1910.268(b)(7) are only used when the employer is going to work inside the R-2 approach distances, and current business practice is that telecommunication employers assure that their employees stay outside of the R-2 approach distances. In the very few cases where the telecommunication employer needs to operate inside the R-2 approach distances, they contact the power company to make arrangements to take appropriate actions for insulating or de-energizing the lines. (See further discussion on current business practices in section VI, Comments.).

NOTE: When the telecommunications employer and the power company need to make temporary safety arrangements, such a request involves advance warning and prior consultation to discuss among other things, a schedule for the work, and agreement on estimated costs and charges.

NOTE: The requested proposed amendment would not affect the minimum approach distances referenced in §1910.268(b)(7) and contained in Table R-2.

D. Impact on Employees.

Telecommunication employees would benefit from increased protection while engaged in work inside approach distance near live electrical lines or parts. Under the current standard, the qualifying language specifies that the wearing of protective gloves will serve as insulation for any live electrical part inside the approach distances in the area where the employee is working. The effect of the current telecommunications language is that the employee may be exposed to many uninsulated live electrical parts if working inside the approach distances, but only actually be protected from touching them with his hands (and possibly forearms) through the use of gloves.

The effect of the requested change is that, telecommunication employees working with insulated gloves or insulated gloves and sleeves working near live or "hot" electrical parts and power lines that are inside the approach distances must be insulated so that the employee cannot accidentally contact an energized part or power line with some other uninsulated part of his body, or other conductive object(s).

E. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department.

F. Summary of Public Participation Efforts.

The Notice of Intended Regulatory Action (NOIRA) was approved by the Board for this action at its December 14, 2004 regular meeting. The 30-day public comment period extended from July 11, 2005 through August 11, 2005. No comments were received. Prior to publication of the proposed regulation, Department Staff met with representatives of the telecommunication industry, Dominion Virginia Power and the Department of Planning and Budget to discuss issues related to the proposal on March 16, 2006. A summary of this meeting was entered into the administrative rulemaking record at the October 26, 2006, public hearing for the proposed regulation discussed further below.

The proposed amendment, in accordance with the Virginia Administrative Process Act (APA), was the subject of a 60-day public comment period that was held from September 18, 2006 to November 18, 2006. No written comments were received during the 60-day comment period. Additionally, the Board received two comments during the public hearing for this proposed regulation that was held on October 26, 2006 (see section VII. Comments, below).

IV. Technological Feasibility

Telecommunication workers are currently required to wear insulated gloves or be otherwise insulated when working inside approach distances to overhead lines and parts, and are further required to be trained on methods for isolating or insulating themselves from live electrical parts through the use of gloves and blankets (see §§1910.268(c) and (f)). The use of blankets and other protective measures is already included in §1910.268. It is anticipated that there no significant issues of feasibility associated with adoption of the proposed amendment.

V. Benefit/Cost

Based on information gathered by Department Staff from telecommunication and power industry representatives, the cost of the proposed amendment should not be significant because the options for protecting employees from electrical hazards available under proposed 16 VAC 25-75-1910.268(b)(7) are only used when the employer is going to work inside the R-2 approach distances, and current business practice is that telecommunication employers assure that their employees stay outside of the R-2 approach distances. In the very few cases where the telecommunication employer needs to operate inside the R-2 approach distances, they contact the power company to make arrangements to take appropriate actions for insulating or de-energizing the lines.
As discussed in detail in the section VI. Comments section below, four work activities were identified by telecommunication and power industry representatives where the proposed amendment could impact current business practices:

Setting poles in power
Work during storms or emergencies
Currently required testing of street light brackets
Placement of new cable through the use of silver strand wire

The Department has determined that current business practices for the above work activities, as described by industry representatives, will not have to be modified by the industry, so there should be no negative impact in those areas from the final amendment and no significant cost to the industry.

There may be some limited training cost to the telecommunications industry associated with informing employees of the amended language in the regulation, but since there are no changes in business practices contemplated, the training cost is presumed to be minimal.

VI. Comments.

The VOSH Program did not receive any comments during the 60-day comment period through Virginia's Regulatory Town Hall or any comments submitted directly to the Department.

The following comments were submitted at a public hearing of the Safety and Health Codes Board on October 26, 2006:

Commenter 1: Jay Withrow, Department of Labor and Industry

Mr. Withrow presented to the Board a summary of a meeting between VOSH Staff and members of the regulated community potentially affected by the proposed amendment the General Industry Standard for Telecommunications, General, Approach Distances, 16 VAC 25-75-1910.268(b)(7)(i):

“In response to several contacts received from members of the telecommunications industry potentially affected by the above proposed regulation, VOSH staff met to discuss issued raised both verbally and in writing with individuals representing Dominion Power, Verizon, Cox Communications, and the Department of Planning and Budget. The meeting was held on March 16, 2006. The following individuals were in attendance:

John Sharer, Dominion Power
Joe Murphy, Dominion Power
George Marget, Dominion Power
Mike Peck, Verizon

David Ogburn, Verizon
Jimmy Jackson, Verizon
Amy Wolstenholme, Department of Planning and Budget (DPB)

Spencer Russell, Cox Communications
Rory (Bud) Swanson, Cox Communications
Melanie West, DPB
Glenn Cox, Department of Labor and Industry (DOLI)
John Crisanti, DOLI
Jay Withrow, DOLI

Following is a summary of the meeting (this information was supplied to meeting participants after the meeting occurred, and staff agreed that the information would be presented to the Safety and Health Codes Board during the 60-day public comment process):

Jay Withrow provided background on why DOLI recommended the proposed regulation to the Safety and Health Codes Board and reviewed the regulatory history. He referenced previous Board action in updating the construction power generation standard at 1926.950(c)(1)(i) to provide the same protection to construction power generation workers as provided to general industry power generation workers under 1910.269(l)(2)(i) (the difference in the two standards originally came to DOLI's attention following the electrocution of a construction power generation worker, and the legal review of case law on the two standards that ensued). A second electrocution of a cable worker in 2004 resulted in DOLI recognizing that essentially the same language in 1926.950(c)(1)(i) was present in the telecommunications standard at 1910.268(b)(7)(i), which provides:

"Approach distances to exposed energized overhead power lines and parts. The employer shall ensure that no employee approaches or takes any conductive object closer to any electrically energized overhead power lines and parts than prescribed in Table R-2, unless:

(i) The employee is insulated or guarded from the energized parts **(insulating gloves rated for the voltage involved shall be considered adequate insulation),** or

(ii) The energized parts are insulated or guarded from the employee and any other conductive object at a different potential, or

(iii) The power conductors and equipment are de-energized and grounded." (Emphasis added). (Emphasis added).

DOLI recommended to the Board on December 14, 2004, that it initiate a regulatory process to amend 1910.268(b)(7) to provide the same protection to telecommunication workers who work in proximity to

overhead power lines as that provided to construction and general industry power generation workers. The Board agreed to publish a Notice of Intended Regulatory Action (NOIRA) on the issue and the NOIRA was published on July 11, 2005 with a 30 day comment period that ended August 11, 2005. No comments were received during the comment period. DOLI recommended the Board adopt a proposed regulation at its meeting on September 15, 2005 and the Board agreed. The proposed regulation provides in part:

"16 VAC 25-75. General. Approach Distances

A. No employee shall be permitted to approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in subsection B (Table R-2) unless:

1. The employee is insulated or guarded from the energized parts **(insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269(l)(3) are considered insulation of the employee only with regard to the energized part upon which work is being performed),** or

2. The energized part is insulated or guarded from him and any other conductive object at a different potential, or

3. The power conductors and equipment are de-energized and grounded." (Emphasis added)."

The proposed regulation [at the time of this meeting] is currently undergoing an internal state review by the Department of Planning and Budget prior to the Secretary's Office and then the Governor's Office. Mr. Withrow made clear that the proposed regulation must first go through that review process and would then be formally published and be subject to a 60 day comment period and public hearing, so that all interested parties still have ample opportunity to submit formal comments on the proposed regulation. The purpose of this meeting was primarily to assess any economic impact or hardship that the proposed regulation could have on the regulated community, employees and the Department.

Mr. Withrow also clarified how the regulation would be enforced by DOLI (i.e., the options available under §1910.268(b)(7) are only available for use when the employer is going to work inside the R-2 approach distances, and that current business practice is that telecom employers assure that their employees stay outside of the R-2 approach distances - and in the very few cases where the telecom employer needs to operate inside the R-2 approach distances, they contact the power company to take appropriate actions for insulating or de-energizing the lines).

Mr. Withrow also acknowledged informal discussions with both Verizon and Dominion Power officials and comments received to date (see attached correspondence from Verizon dated February 20, 2006).

Mr. Withrow informed the group that it had been and continued to be the position of the Department that the proposed regulation would impose no significant additional cost or implementation impact on telecommunication employers based on DOLI's unde rstanding of current business practices (see attached Economic Impact Analysis by the Virginia Department of Planning and Budget (DPB) for proposed regulation 16 VAC 25-75, dated June 12, 2006). To assess potential economic impact, the group discussed several specific work activities undertaken by Verizon and Cox Communication workers and what if any impact the proposed regulation would have on them. After discussing the work activities, DOLI indicated that it did not feel that the proposed regulation would interfere with them as discussed or impose any significant additional cost to employers; **and that DOLI would be willing to include interpretive language into the administrative record for the proposed regulation to formally address the work activities as outlined below.**

Mr. Withrow further noted that to formalize the interpretive language it would have to be added in response to comments raised during the 60-day public comment period or public hearing. The following work activities were discussed:

1. Setting poles in power - Verizon raised this work activity as an area they were concerned about being effected by the proposed regulation. They said that while employees do not cross the R-2 distances, the poles that are being set can cross the R-2 distances, but that the poles are wrapped in insulation material (blankets) prior to being set in the ground. Employees actually touch the pole at the base as it is being set, but employees wear insulated gloves. While it is being set, the top of the pole is blanketed. Once the pole is set and employees are installing Verizon equipment, the blankets under the neutral wire are removed so that the equipment can be installed (there is an approximate 40 inch clearance from the neutral line). Verizon employees do not breach the R-2 table while installing their equipment.

The neutral wire can possibly be subject to voltage in very limited circumstances such as a result of lightning or where a power line is down and laying on the neutral line (e.g. as the result of an accident or storm damage). Dominion Power stated that they do not consider the neutral wire to normally be an energized part, and did not see any safety reason to regularly blanket the neutral line. DOLI agreed with Dominion Power's assessment and stated it would be willing to issue interpretative language to address this work situation that concludes that current work practices would not need to be changed in response to the proposed regulation.

2. Storms/emergencies - Verizon said that during storms and emergencies they do no work until Dominion Power officials give clearance to them to work in an area. They also said they have special work procedures they utilize during such storms and emergencies, and agreed to provide copies of those procedures to DOLI. Cox Communications said they can run into exposure situations during storms and emergencies as well as in response to traffic accidents, tree falls, or to raise lines for houses under construction. Cox confirmed that they coordinate with the power company and keep hands off until the power company inspects the damaged pole and gives clearance to proceed with work. Cox Communications confirmed that they follow the same clearances as Verizon. Mr. Withrow related that DOLI follows the same approach as federal OSHA does during storms/emergencies by being in "consultation mode" for a set period of time after the event. DOLI again stated it would be willing to issue interpretative language to address this work situation.

3. Street light brackets - Verizon said they are required by 1910.268 to test certain street light brackets to determine if they are energized under certain conditions. Under normal conditions the brackets are not supposed to be energized. Testing must be done bare handed, but the tool used protects the worker from up to 20,000 volts. If the bracket is found to be hot, Verizon leaves it alone and reports it to the power company. DOLI again stated it would be willing to issue interpretative language to address this work situation that concludes that current work practices would not need to be changed in response to the proposed regulation.

4. Placement of new cables through use of silver strand line - Verizon said that during the installation of new cables, a silver strand line is first strung between poles and tensioned "banjo tight" before the cables are installed. Because there is a natural sag in the neutral line, it can come inside the R-2 approach distances to the tensioned silver strand line. Cox Communications said that they use Spanmaster and had the same issues as Verizon with regard to the neutral line. DOLI again stated it would be willing to issue interpretative language to address this work situation that concludes that current work practices would not need to be changed in response to the proposed regulation. (see discussion above concerning neutral lines during the setting of poles).

5. Municipally owned poles and municipally owned or operated telecommunication systems - Although not directly effecting them, Cox Communication related that municipalities that own or operate their own

telecommunication systems may have installations that are in violation of R-2 approach distances. They noted that municipalities are installing fiber optic networks and recommended DOLI contact the Virginia Municipal League (VML) and the Virginia Association of Counties (VACO). They also said they had responded to some incidents where localities had installations that got inside the R-2 approach distances. DOLI agreed that they would solicit comments from VML and VACO during the public comment process.

Other issues discussed included:

1. Dominion Power checked its records from 1999 to March, 2006, and could not find where they had charged Verizon for covering equipment in a manner that could be affected by the proposed regulation. Dominion Power agreed to check if there were any such instances involving Cox Communications.

2. DOLI clarified for Verizon that under the proposed regulation employees are still allowed to use just gloves, and are not required to use both gloves and sleeves.

3. Dominion Power felt the proposed language could be read to allow a telecommunication worker to knowingly work on an energized lines or equipment. All parties agreed that telecommunication workers are not authorized to engage in such work, and that it is not the intent of DOLI or the Board to allow such work. DOLI agreed that the language could be modified as part of the comment process to address this issue.

4. The group discussed whether the proposed language could in any way effect personal injury or worker's compensation law by changing in some manner the "minimal care standard." The group agreed that as far as their employees were concerned, they would be covered by Worker's Compensation laws and that the proposed regulation would have no effect on such cases."

Commenter 2 : John D. Sharer, Assistant General Counsel, Dominion Virginia Power

A copy of Mr. Sharer's complete comments is attached as Appendix A.

Mr. Sharer spoke in favor of the proposed amendment, provided that certain issues and concerns of Dominion Virginia Power were addressed by the Board.

1. Mr. Sharer expressed concern over certain words and phrases used in the briefing package ("[g]iven the similarity of situational exposure in this instance between the General Industry Standard for Electrical Power Generation…and General Standard for Telecommunications…equivalent safety precautions are appropriate to eliminate employee exposure to equivalent hazards."). He noted that the situational exposure of power employees and telecommunication employees is fundamentally different. As noted later in his comments, power employees work directly on live electrical lines and parts, while telecommunication employees are never supposed to actually work on live electrical lines or parts.

Agency Response:

The Department agrees with Mr. Sharer's comment and has modified the language in the briefing package for the final amendment to removed the words "situational exposure" and "equivalent."

2. Mr. Sharer noted that in a number of places in the briefing packages and in the proposed language of the regulation, there are references to telecommunication employees "working on" energized parts. Mr. Sharer noted that at the March 16, 2006, meeting between Department Staff, DPB Staff, and representatives of the telecommunications and power industries, it was agreed by all parties that telecommunication workers are not

authorized to engage in such work, and that it is not the intent of the Department or the Board to allow such work.

Agency Response:

The Department agrees with Mr. Sharer's comment and has deleted references in the briefing package to telecommunication employees "working on" energized parts. The Department has revised the amendment language so that it will read in its final form as follows:

"The employee is insulated or guarded from the energized parts (insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269(l)(3) are only considered insulation of that part of the employee's extremities covered by the insulating gloves or insulating gloves and sleeves, or…."

Mr. Sharer expressed a concern that the following sentence "does not clarify the important distinction between minimum approach distances and reaching distances":

"Moreover, ***if every energized part within reach of the employee*** were insulated, electrical contacts involving other parts of the body, such as the employee's head or back would be averted as well." (emphasis added by Commenter).

Mr. Sharer further elaborated that it is "conceivable that a telecommunications worker could be in compliance with the Table R-2 minimum approach distances yet reach out and touch an energized part. Accordingly, the Board should clarify whether everything within the telecommunications worker's reach must be either covered or deenergized. If so, this may have a significant impact both on telecommunications companies and electric utilities."

Agency Response:

The Agency agrees that the highlighted language could cause confusion, so it has been deleted. In addition, the Department wants to make clear that in adopting the proposed amendment, it does not intend to change any current interpretations applied to language that remains unchanged in the current Telecommunications regulation, 1910.268, or the current Electric Power Generation, Transmission and Distribution regulations at 1910.269 and 1926.950. Following is an excerpt from a federal OSHA interpretation concerning minimum approach distances in 1910.269, the Electric Power Generation, Transmission and Distribution Standard, from which the proposed amendment derive s, and which addresses the Commenter's concern:

"As specified in Table R-6 of 1910.269 for phase to phase nominal voltages of 46.1 to 72.5 kilovolts, the minimum approach distance when phase to ground exposure is the concern is 3 feet (0.9 m) which is the clearance between the blade side on the bottom and the jaw at the top of the switch. **To comply with this requirement, the employer must ensure that employees position themselves so that the minimum approach distance is maintained over the full range of anticipated movements. These include movements planned as part of the job and other movements that the employee could reasonably be expected to take, such as adjusting a hard hat or reaching for a tool. In short, employees must be positioned so that the employees and any conductive objects they handle, over the full range of their anticipated movements, are outside the minimum approach distance."** (Emphasis added.).

Federal OSHA interpretation issued February 26, 1996, by John B. Miles, Jr., Director, Directorate of Compliance Program, addressed to Mr. John Cadick, the Cadick Corporation. A copy of the complete interpretation can be found at Appendix B.

Mr. Sharer felt a phrase in the Department's briefing package referring to a procedure where a telecommunications employer wishing to work inside of approach distances must call the power company to either cover the power lines or disconnect the power, could leave a telecommunications employer with the mistaken impression that the power company would have to respond immediately to such a request. Mr. Sharer explained that any such request would have involve advance warning and prior consultation to discuss among other things, a schedule for the work, and agreement on estimated costs and charges.

Agency Response:

The Agency agrees with Mr. Sharer's comment, has modified the language in the briefing package, and has placed the following note in the briefing package:

NOTE: When the telecommunications employer and the power company need to make temporary safety arrangements, such a request would have involve advance warning and prior consultation to discuss among other things, a schedule for the work, and agreement on estimated costs and charges.

Mr. Sharer noted that there were several phrases used in the Department's briefing package ("electrical transmission workers" and "telecommunication electrical transmission workers") that he was not familiar with and requested they be corrected.

Agency Response:

The Agency has corrected the references to eliminate any confusion they might have caused.

The VOSH Program received one comment during the 60-day comment period through Virginia's Regulatory Town Hall or any comments submitted directly to the Department.

Commenter 3: Kenneth P. Shaw, CIH, National Manager - Safety Management, Verizon Telecom

A copy of Mr. Shaw's complete comments is attached as Appendix B.

1. Mr. Shaw submitted the following written comment:

"Verizon shares the desire of the Virginia Safety and Health Codes Board (the Board) to protect employees working aloft. However, Verizon is concerned that the amendment as written may be misunderstood with unintended results that substantial additional costs would be incurred by Verizon and other Telecommunication companies without any additional protections being provided to employees.

"It is important to note that no Verizon employee should be performing work on electrical lines. Indeed, Verizon requires that its employees maintain safe approach distances so that they do not inadvertently come into contact with energized lines. As such, Verizon employees should not be exposed to the same hazards that electric company employees face and, further, there is no need to require the same protections for telecommunications employees as are required of electric company employees who actually work on energized lines. Verizon is concerned that the proposed amendments imply that it is acceptable for telecommunications employees to work closer to power lines than is now the case. Verizon is equally concerned that the

regulations could be improperly construed to require additional protection even when employees maintain the safe approach distances."

Agency Response:

As noted above in response to a similar comment from Commenter 2, the Agency agrees and has deleted references in the briefing package to telecommunication employees "working on" energized parts. The Department has revised the amendment language so that it will read in its final form as follows:

"The employee is insulated or guarded from the energized parts (insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269(l)(3) are only considered insulation of that part of the employee's extremities covered by the insulating gloves or insulating gloves and sleeves), or…."

2. Mr. Shaw submitted the following written comment:

"The provision of an approved insulating handle would require additional equipment to be purchased, stored, transported, inspected, Verizon does not believe that the following language is appropriate for a telecommunication standard:

A. No employee shall be permitted to approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in subsection B (Table R-2) of this section unless: "

As noted above, Verizon does *not* permit employees to handle electric conductors or energized conductive objects. The wording implies that it is permissible to approach and manipulate energized conductors or equipment using an insulating handle and Verizon believes that this implication may be dangerous. As such, the revisions could be construed as being less protective than the current wording of 29CFR1910.268 by introducing new procedures that are not currently permitted. At present, electrical training for telecommunication employees focuses on hazard recognition and avoidance, testing for energized equipment using a Voltage Detector, and proper use of insulating gloves. Manipulation of conductors (energized or not) and potentially energized power equipment attachments (i.e., hardware, power guy wires and conductive metallic components). Verizon believes that all manipulation of power conductors or power transmission equipment be performed by power utility workers only following safety procedures in 1910.269."

Agency Response:

The Agency agrees that the proposed regulation reference to the use of "insulating handles " is unnecessary in a telecommunications setting and could lead to confusion or unintended consequences. The Department has revised the amendment language so that it will read in its final form as follows:

"No employee shall be permitted to approach or take any conductive object closer to exposed energized parts than shown in subsection B (Table R-2) unless:"

3. Mr. Shaw submitted the following written comment:

"Verizon also believes that the following language should be deleted:

"1. The employee is insulated or guarded from the energized parts (insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269(l)(3) are considered insulation of the employee only with regard to the energized part upon which work is being performed);"

Verizon presently provides insulating gloves and leather protective outer gloves that cover the hands and lower part of the forearm. Verizon does not presently provide insulating sleeves to be worn by employees. It is not permitted that employees work on energized parts (including conductors or energized metal parts. The insulating gloves are provided as a precaution in the event of incidental contact with an energized metallic object, when attaching a precautionary temporary bonding wire or for other procedures involving potentially energized equipment. In addition to the reasons noted above, Verizon objects to this language to the extent that this new language requires an additional item of protective equipment to be purchased, stored, transported, inspected, periodically tested, and worn,. Verizon notes that to the extent that such is required, additional specific training regarding this protective equipment would need to be provided to employees who would wear it (i.e., all employees who would wear insulating rubber gloves.). This would be costly and unnecessary. Again, Verizon does not permit employees to perform any of the installation, repair, or switching work operations included in 1910.269(l)."

Agency Response:

Nothing in the proposed language would require the employer to provide insulating sleeves. The reference to "insulating gloves **or** insulating gloves and sleeves" (emphasis added) clearly gives the employer the option to provide to employees either "insulating gloves", or "insulating gloves and sleeves." No changes will be made to the final regulation in response to the comment.

4. Mr. Shaw submitted the following written comment:

"Please note that Verizon finds the following language relating to approach distances acceptable as it is consistent with the present 1910.268 Table R-2."

Agency Response:

No change in the final regulation is needed in response to the comment.

Contact Person:

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board consider for adoption the final regulation to amend §1910.268(b)(7)(i), General Industry Standard for Telecommunications, General, Approach Distances, as authorized by Virginia Code §40.1-22(5).

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation.

16 VAC 25-75, Final Regulation to Amend the General Industry Standard for Telecommunications, General, Approach Distances, §1910.268(b)(7)

As Adopted by the

Safety and Health Codes Board

Date: _____

TELECOMMUNICATIONS, GENERAL, APPROACH DISTANCES
16VAC25-90-1910.268(b)(7)

~~(b) General.~~

~~(7) Approach distances to exposed energized overhead power lines and parts. The employer shall ensure that no employee approaches or takes any conductive object closer to any electrically energized overhead power lines and parts than prescribed in Table R-2, unless:~~
~~(i) The employee is insulated or guarded from the energized parts (insulating gloves rated for the voltage involved shall be considered adequate insulation), or~~
~~(ii) The energized parts are insulated or guarded from the employee and any other conductive object at a different potential, or~~
~~(iii) The power conductors and equipment are deenergized and grounded.~~

REQUIREMENTS FOR TELECOMMUNICATIONS, GENERAL, APPROACH DISTANCES
16 VAC 25-75

16 VAC 25-75. General. Approach Distances
A. No employee shall be permitted to approach or take any conductive object [~~without an approved in insulating handle~~] closer to exposed energized parts than shown in subsection B (Table R-2) unless:
1. The employee is insulated or guarded from the energized parts (insulating gloves or insulating gloves and sleeves worn in accordance with 16 VAC 25-90-1910.269(l)(3) are [only] considered insulation of [that part of] the employee[’s extremities covered by the insulating gloves or insulating gloves and sleeves] [~~only with regard to the energized part upon which work is being performed~~]), or
2. The energized part is insulated or guarded from him and any other conductive object at a different potential, or
3. The power conductors and equipment are deenergized and grounded.
B. Approach Distances to Exposed Energized Overhead Power Lines and Parts

REQUIREMENTS FOR TELECOMMUNICATIONS, GENERAL, APPROACH DISTANCES
16 VAC 25-75

TABLE R-2 – Approach Distances to Exposed Energized Overhead Power Lines and Parts

Voltage range (phase to phase, RMS)	Approach distance (inches)
300 V and less	(1)
Over 300 V, not over 750V	12
Over 750 V not over 2 kV	18
Over 2 kV, not over 15 kV	24
Over 15 kV, not over 37 kV	36
Over 37 kV, not over 87.5 kV	42
Over 87.5 kV, not over 121 kV	48
Over 121 kV, not over 140kV	54

1. Avoid contact.

VIRGINIA SAFETY AND HEALTH CODES BOARD

REVISED BRIEFING PACKAGE

FOR DECEMBER 6, 2006

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16 VAC 25-95, Proposed Regulation to Amend the Medical Services and First Aid Standards for General Industry, §1910.151(b);

16 VAC 25-177, Proposed Regulation to Amend the Medical Services and First Aid Standards for the Construction Industry, §1926.50(c)

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption as a proposed regulation of the Board these proposed amendments to the medical services and first aid standards for general industry, §1910.151(b), and the construction industry, §1926.50(c), pursuant to Va. Code §40.1-22(5).

II. Summary of the Proposed Regulations.

The VOSH Program seeks the amendment of medical services and first aid standards for general industry, §1910.151(b), and the construction industry, §1926.50(c), to require employers to train employee(s) to render first aid and cardio pulmonary resuscitation (CPR) when employees are exposed to occupational hazards which could result in serious physical harm or death. Worksites covered by the current regulations that are do not contain occupational hazards which could result in serious physical harm or death will be exempted from first aid and CPR requirements under the proposed regulation.

Under the proposed regulations employers with employees in job classifications or exposed to workplace hazards that could result in serious physical harm or death would be required to have at each job site and for each work shift at least one employee trained in first aid and CPR.

The following boxes highlight the differences between the existing standards on this issue:

The General Industry Standard for Medical and First Aid

Section 1910.151(b) provides:

"In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available."

The Construction Industry Standard for Medical Services and First Aid Section 1926.50(c) provides:

"In the absence of an infirmary, clinic, hospital or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first aid training from the U. S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid."

Other issues that are addressed in the proposed language include:

A. Allowing an employer to make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders, to lessen the cost of compliance with the standard;

B. Clarifying that employers of mobile work crews (i.e., crews that travel to more than one worksite per day) of two or more employees that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. Assure that at least one employee on the mobile crew is designated and adequately trained to render immediate first aid and CPR during all workshifts; or

2. Make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders.

C. Clarifying that employers of individual mobile employees (i.e., an employee who travels alone to more than one worksite per day), that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. Assure that the mobile employee is adequately trained to self-administer first aid;

2. Make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders; or

3. Assure that their employees have access to a communication system that will allow them to immediately request medical assistance through a 911 emergency call or comparable communication system.

III. Basis, Purpose and Impact of the Proposed Rulemaking.

A. Basis for Proposed Action.

1. Existing Federal Identical Standards Are Insufficient.

The existing general industry and construction first aid standards do not assure that adequate first aid attention for employees will be provided in certain hazardous occupations. It should be noted that based on long years of injury and illness rates, the Construction Industry, in toto, is considered by OSHA to be a high hazard industry. Also, the existing general industry standard is overly inclusive in that it requires first aid training in certain occupational settings where there is no occupational exposure to hazards that could cause serious physical harm or death, such as in an office setting.

These federal identical standards do not include a requirement for training to include CPR as well as first aid; nor do they clearly state that designated first aid providers will be available at each work location and work shift. The current standards could potentially allow an employer to opt to physically move an employee who had suffered a head or spinal injury by transporting them to a medical facility in an area where emergency medical responders were not available within the prescribed 3 to 4 minute time limit, in lieu of having a trained first aid responder present.

In addition, both existing standards are confusing as written and difficult for the VOSH Program to enforce. The standards do not define the terms "near proximity" and "reasonably accessible," which have been formally interpreted by federal OSHA to mean a 3 to 4 minute response time for life threatening injuries and up to 15 minutes for non-life threatening injuries.

According to statistics from the Department of Emergency Medical Services (EMS) for 2003, EMS providers arrived at the scene of 522,345 calls with an average response time of approximately 12 minutes. Approximately 72 % of all reported calls were provided in less than 10 minutes, and approximately 87 % of all reported calls were provided in less than 15 minutes.
The response time for emergency responders will vary widely around the state and is dependant upon factors as whether the establishment or worksite is in an urban or rural location, and whether the medical/emergency response facility is staffed 24 hours a day. This response time is further impacted by such variables as traffic congestion, road construction and weather. Therefore, injured employees are unlikely to receive timely, reliable and consistent first aid CPR response to injuries suffered on the job especially in cases of life threatening injuries under current regulatory requirements and actual response times.

During calendar year 2005, out of a total of 3,379 inspections conducted by the VOSH Program, 17 violations of §1910.151(b) in General Industry and 424 violations of §1926.50(c) in the Construction Industry for a total of 541 first aid violations. A total of 16 % of all VOSH inspections received first aid violations under the current regulations).

DOLI does not have the capability to provide statistics to indicate what percentage of the remaining 2,838 VOSH inspections that did not receive first aid violations were indeed located in close enough proximity to medical facilities to assure a 3 to 4 minute response time. However, based on the above EMS figures, the Department believes that most establishments and sites in Virginia cannot meet the 3 to 4 minute requirement under the current regulations.

Finally, from an enforcement standpoint, the VOSH Program is faced under the current regulations with having to determine and document whether an infirmary, clinic or hospital is, or would have been, accessible within the required 3 to 4 minutes, often by going to such lengths as having to drive from the inspection site

to the facility and trying to realistically estimate the impact of the above mentioned variables at the time of the injury.

2. Similar Requirements Exist in Other Specific Standards.

a.. General Industry Standards.

Logging Industry employers must assure that all logging employees receive first aid and CPR training - §1910.266(i)(7);

Electric Power Generation, Transmission and Distribution Industry employers must assure that trained first aid and CPR providers are present for field work and fixed work locations - §1910.269(b)(1);

Employers engaged in **Welding, Cutting and Brazing** must assure that first aid can be rendered to an injured employee until medical attention can be provided - §1910.252(c)(13);

Telecommunications Industry employers must assure that employees are trained in first aid CPR - §1910.268(c)(3);

Employers with a **Temporary Labor Camp** must assure that a trained first aid and CPR provider is present at the camp - §1910.142(k)(2);

Commercial Dive Operation employers must assure that all dive team members are trained in first aid and CPR - §1910.410(a)(3).

b. Construction Industry Standards.

Power Generation and Distribution employers must assure that employees are trained in first aid and CPR - §1926.950(e)(1)(ii);

Employers involved in **Underground Construction, Caissons, Cofferdams and Compressed Air** must provide a first aid station at each project (see §1926.803(b)(7);

3. Board Authorization and Mandate.

The Safety and Health Codes Board is authorized to regulate occupational safety and health under Title 40.1-22(5) of the *Code of Virginia* to:

"... adopt, alter, amend, or repeal rules and regulations to further, protect and promote safety and health of employees in places of employment over which it has jurisdic and to effect compliance with the federal OSH Act of 1970...as may be necessary to ca out its functions established under this title".

In this same statutory section, the Board is further mandated:

> "In making such rules and regulations to protect the occupational safety and health employees, the Board shall adopt the standard which most adequately assures, to extent feasible, on the basis of the best available evidence that no employee will su material impairment of health or functional capacity".
>
> "However, such standards shall be at least as stringent as the standards promulgated the federal OSH Act of 1970 (P.L.91-596). In addition to the attainment of the high degree of health and safety protection for the employee, other considerations shall be latest available scientific data in the field, the feasibility of the standards, and experien gained under this and other health and safety laws."

4. Public Comment / Inquiry.

The Notice of Intended Regulatory Action (NOIRA) was approved by the Board for this action at its March 7, 2006, regular meeting. The associated 30-day public comment period extended from October 16, 2006, through November 16, 2006.

Commenter 1: Gregory Stull, Health & Safety Specialist, Air Products & Chemicals, Inc. (e-mail inquiry)

1. Mr. Stull made the following inquiry about the NOIRA:

> "I am seeking clarification as to the intended application of the new regulation concerning "Medical Services and First Aid". If this new regulation is intended to cover all "general industry" is there a minimum on site employee requirement? The reason I ask is the company I represent has several "one man" facilities located in Virginia. The facilities are not manned on a daily basis. These facilities are located on our customers sites and we rely on the emergency services of these customers. Our company has several policies and standards that cover lone workers. This includes a "call out" systems that is activated when the employee is on site. It is time based and can be manually activated in the event our employee becomes incapacitated or injured. Any clarification you can offer on this matter would be greatly appreciated."

Agency Response:

The language in the proposed amendments address the issue of "one man facilities" by providing the employer with the option of either training the employee in first aid, making written arrangements with other employers or contractors at the worksite to provide first aid and CPR, or assuring that their employee has access to a communication system that will allow them to immediately request medical assistance through a 911 emergency call or comparable communication system.

This issue is particularly problematic from a regulatory standpoint. The optimal solution for assuring prompt delivery of first aid and CPR services, and the one presented in the proposed regulations, is the presence of a trained individual at the worksite. However, it is the nature of these "one man facilities" that they often work alone or in remote areas. Obviously a single employee cannot administer CPR to himself or treat certain other injuries or illnesses. However, an individual trained in first aid can self-administer first aid to serious cuts resulting in loss of blood, wrap or set a broken bone, apply a tourniquet, etc. The rationale for giving employers the above options is a recognition of the difficulties posed in providing safety protections for one man facilities, and an attempt to provide some regulatory flexibility to such employers.

Commenter 2: **Donald L. Hall, President, Virginia Automobile Dealer's Association (VADA)**

1. Mr. Hall stated that the VADA is very proud of their safety record in their dealership operations as a whole and in their service departments specifically and has been very active in promoting worker safety. VADA and its members do not disagree with the general principal of improving already safe workplaces. However, VADA is very concerned the proposed changes will have unintentioned and costly consequences for Virginia motor vehicle dealers.

Agency Response:

While some VADA members will have employees already trained in first aid and CPR, some employers would have to incur the additional cost of securing such training if their worksite is classified as one where employees are exposed to occupational hazards which could result in serious physical harm or death.

2. Mr. Hall stated the following:

> "Motor vehicle dealer service departments are not hazardous occupations under existing federal or Virginia regulations. See 16 VAC 15-30-10, et seq."

Agency Response:

The Department's VOSH Program has not, through regulation or statute, defined the term "hazardous occupations". VOSH does use federal OSHA's annual determination of what are the highest hazard industries based on reported national injury and illness data. This data is used for statewide general industry inspection targeting purposes.

The regulation cited by the commenter, 16 VAC 15-30-10, et seq., is promulgated by the Commissioner of Labor and Industry for the enforcement of child labor laws in the Commonwealth and has applicability to child labor only. This child labor regulation is **not** part of the body of statutes and regulation that is applicable to occupational safety and health enforcement in the Commonwealth by VOSH. All occupational safety and health standards, rules and regulations for Virginia's OSHA State Plan are required to be promulgated by the Safety and Health Codes Board which is the mandated rulemaking body *(see Code of Virginia §40.1-22)*.

3. Mr. Hall stated the following:

> "...(Y)our Department has taken the enforcement position that motor vehicle service departments are highly hazardous occupations and that first aid and CPR training is required. The apparent basis for this position is the Department's publication of a list which includes automobile mechanics among the most hazardous occupations in Virginia. See Most Hazardous Occupations, Virginia, 2000, http://www.doli.virginia.gov/whatwedo/enforcement/mosthaz.htm (Oct. 11, 2006). Publication of a list by your Department is not an appropriate basis for this classification. Where neither federal agencies nor state agencies have found auto dealer occupations to be hazardous, such a designation by your (D)epartment requires specific rulemaking. We are concerned that your proposal is simply a bootstrap to a list that was never developed in formal rulemaking. Identifying motor vehicle dealer occupations as hazardous cannot be done without a formal rulemaking designating such dealer occupations to be hazardous."

Agency Response:

The commenter's assertion that the Department has assumed that motor vehicle service departments are highly hazardous occupations is in error. Our website listing of the most hazardous occupations, simply notes the occupations with the greatest number of fatalities in the Commonwealth that year for general informational purposes. It has not been used in determining our emphasis programs or general inspection program priorities. Nor has it been used to date as a method to compile a list of hazardous occupations.

In regard to the statement of there has been no state agency finding auto dealer occupations to be hazardous, any such determination, for the purposes of occupational safety and health, would be solely the responsibility of DOLI and OSHA.

A review of fatal and catastrophic accidents for the period 1996 to 2006 involving mechanics (not limited to VADA members or auto dealerships as a whole) and auto and truck dealerships revealed the following descriptions of the accidents:

* An employee at a truck dealership was killed while using a forklift when it overturned.
* A driver was killed while attempting to off load a full-sized pickup truck from a tractor trailer full of vehicles. The victim became caught between the truck door and the cab post.
* A mechanic at a truck repair shop was killed while looking for the part number on an air bag for brakes underneath a tractor trailer. The driver went to move the trailer and ran over the victim.
* A mechanic was killed while attempting to install wooden blocks under the belly pan of a bulldozer when the hydraulic system failed, causing the bulldozer to fall on the victim.
* Three employees were killed at auto repair shop while welding near a 275 gallon fuel oil tank.
* Two mechanics in an auto repair shop were killed while working in a pit changing a fuel pump on a van when some of the fuel was ignited by an unidentified ignition source.
* Mechanic killed when elevated bulldozer he was working on fell on him.
* Mechanic killed at auto repair shop was repairing a gasoline tank on a van when the gasoline fumes were apparently ignited by an LPG gas heater, resulting in a fire and explosion.
* Three employees serious injured at automotive garage when employees used gasoline as accelerant to start a rubbish fire.
* Auto dealership employee killed while working on a sign from an aerial lift when the lift contacted an overhead high voltage line.
* Mechanic killed when he was backed over by a dump truck after servicing the vehicle

As a point of clarification, upon identification of a certain specific hazardous procedures or occupations, such as pick-up truck bed spray-in liners, they may be then specifically targeted and inspected under national or local emphasis programs either (or both federal OSHA and VOSH). This may indeed be done without requirements of formal rulemaking.

4. Mr. Hall stated the following:

"...VADA is very concerned that the Department's proposed extension of the §1910.151 standard to 'employees in hazardous occupations' and to worksites containing job classifications or workplace hazards that would 'expose employees to serious physical harm or death' will have unintended and costly consequences for Virginia motor vehicle dealers."

Agency Response:

All general industry occupations, including those such as auto mechanics, auto body repairmen, general office workers, parts clerks, sales staff, customer service associates, and building maintenance personnel are already covered by the §1910.151 standard and have been so covered since the § 1910.151 standard's initial inception by federal OSHA for its then direct enforcement in 1974 *(See 39 Fed Reg 33466).* One impact of the proposed regulation would be that worksites covered by the current regulations that do not contain occupational hazards which could result in serious physical harm or death will be exempted from first aid and CPR requirements under the proposed regulation.

5. Mr. Hall stated the following:

"We question the necessity of the proposal.....VADA members....generally have business locations in metropolitan and more populous areas. These dealerships enjoy ready access to emergency services, should an incident occur.".....Many dealers have personnel trained in first aid and CPR on staff. However, a regulation that imposes additional designated first aid and CPR responders to be on duty at all times to an industry that is located where timely emergency service in nearly universal will be highly burdensome and a potentially serious personnel problem.

Agency Response:

VOSH concurs that many dealerships have personnel trained in first aid and CPR. However, such training presently by individuals is voluntary and done out of personal responsibility and for the intrinsic humanitarian value of having such skills. Therefore the incidence of such training across the general industry workforce is self-selective and does not provide the assurance of uniform availability and coverage (assuming adequate skill level and refreshers) that the proposed regulatory amendments will provide. As demonstrated by statistics provided by the Department of Emergency Services and discussed above in the Basis for Proposed Action section.
According to statistics from the Department of Emergency Medical Services (EMS) for 2003, EMS providers arrived at the scene of 522,345 calls with an average response time of approximately 12 minutes. Approximately 72 % of all

reported calls were provided in less than 10 minutes, and approximately 87 % of all reported calls were provided in less than 15 minutes.

The response time for emergency responders will vary widely around the state and is dependant upon factors as whether the establishment or worksite is in an urban or rural location, and whether the medical/emergency response facility is staffed 24 hours a day. This response time is further impacted by such variables as traffic congestion, road construction and weather. Therefore, injured employees are unlikely to receive timely, reliable and consistent first aid CPR response to injuries suffered on the job especially in cases of life threatening injuries under current regulatory requirements and actual response times.

6. Mr. Hall stated the following:

"We ask that any proposed rulemaking proceeding eliminate motor vehicle dealers from consideration"

Agency Response:

The comments offered by VADA fail to provide a substantive argument for exempting automotive dealerships from the proposed regulatory amendments. There does not appear to be a rationale to provide less protection to auto dealership employees than would be provided to similarly situated employees in other industries.

B. Purpose.

The purpose of the proposed changes is to provide additional first aide/CPR services to employees in hazardous occupations in construction and general industry and providing employers with some flexibility to make arrangements for first aid/CPR services on individual work sites. Current regulations do not require CPR training for designated first aid providers, and the proposed regulations would correct this oversight. The proposed regulations will also exclude certain low hazard industries and employers from the requirement to provide first aid and CPR training. In addition, the proposed changes will also clarify requirements for employers of mobile crews and individual mobile employees.

C. Impact on Employers.

Employers covered by the proposed regulation would be required to have at each job site and for each work shift at least one employee trained in first aid and CPR. While many employers in construction and general industry already assure that some employees are trained in first aid and CPR, some employers would have to incur the additional cost of securing such training. As an example, the Central Virginia Chapter of the American Red Cross currently charges $38.00 for adult first aid training and $41.00 for adult CPR training.

Costs associated with compliance with the proposed regulation will be lessened by the specific language in the proposal that allows an employer to make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders.

Costs associated with the current regulation will be eliminated for low hazard employers who will be excluded from coverage. The current regulation is interpreted by federal OSHA to require low hazard employers to provide first aid if no medical assistance can be provided within 15 minutes by EMS or other personnel. As previously noted in the aforementioned EMS statistics, approximately 13% of all responses by EMS personnel exceeded 15 minutes.

As Virginia Employment Commission 2005 statistics demonstrate (see chart), there are a significant number of employers who will now be exempt from the current regulations because they are in low hazard industries and likely have no job classification or worksite hazards that pose a threat of serious physical harm or death. These sectors include[a]:

Sector	Number of establishments
Information	3,991
Financial Activities	20,120
Professional and Business Services	41,574
Leisure and Hospitality	16,438
Public Administration	3,918
	86,041

These approximately 86,000 establishments are approximately 40 % of all industries that would be otherwise impacted by unamended regulations. The Department believes that the majority of General Industry employers that were cited under the current regulations would also be covered by the proposed regulatory amendments.

However, it should be noted that within a particular industry that is normally

[a]Any of the listed industries that did have job classifications or worksite hazards that pose a threat of serious physical harm or death, would be covered by the proposed regulation.

considered to be low hazard, there may be some specific worksites or portions of establishments that have job classifications or workplace hazards that could trigger application of the proposed regulations (e.g., a large department store that has service personnel who deal directly with customers who would not be exposed to serious or life threatening hazards, may also have warehouse personnel who operate forklifts who are exposed to such hazards; a large grocery or supermarket have retail clerks who would not be covered by the proposed regulations, but may have forklift operators, or other employees that use potentially dangerous equipment such as a meat slicing machine).

Other issues that are addressed in the proposed language include:

1. Allowing an employer to make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders, to lessen the cost of compliance with the standard;

2. Clarifying that only worksites containing job classifications or workplace hazards that would expose employees to serious physical harm or death would be required to provide immediate access to first aid and CPR;

3. Clarifying that employers of mobile work crews (i.e. crews that travel to more than one worksite per day) of two or more employees that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

a. Assure that at least one employee on the mobile crew is designated and adequately trained to render immediate first aid and CPR during all workshifts; or

b. Make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders.

4. Clarifying that employers of individual mobile employees (i.e. an employee who travels alone to more than one worksite per day) that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

a. Assure that the mobile employee and adequately trained to self-administer first aid;

b. Make written arrangements with another contractor/employer on the same job site to provide designated employees to serve as first aid responders; or

c. Assure that their employee has access to a communication system that will allow them to immediately request medical assistance through a 911 emergency call or comparable communication system.

D. Impact on Employees.

Construction and General Industry employees in covered industries across the state would benefit from the immediate presence of trained first aid/CPR responders at their work locations.

E. Impact on the Department of Labor and Industry.

No significant regulatory or fiscal impact is anticipated on the Department beyond the cost of promulgating this regulation.

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board consider for adoption the proposed regulation to amend the medical services and first aid standards for

general industry, 16 VAC 25-95, and the construction industry, 16 VAC 25-177, to require employers to train employee(s) to render first aid and cardio pulmonary resuscitation (CPR), when employees are exposed to occupational hazards which could result in serious physical harm or death.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation.

16 VAC 25-95

Medical Services and First Aid Standards for General Industry

~~(a)~~ A. The employer shall ensure the ready availability of medical personnel for advice and consultation on matters of plant health.

~~(b)~~ B. ~~In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a~~ A person or persons shall be designated by the employer and adequately trained to render immediate first aid and cardio pulmonary resuscitation (CPR) during all workshifts on worksites containing job classifications or workplace hazards that could potentially expose employees to serious physical harm or death. The designated person or persons shall have a valid, current certificate in first aid and CPR training from the U. S. Bureau of Mines, the American Red Cross, the National Safety Council, or equivalent training that can be verified by documentary evidence, and shall be available at the worksite to render first aid and CPR to injured or ill employees. ~~Adequate first aid supplies shall be readily available.~~

C. Covered employers are permitted to make written arrangements with and reasonably rely on another contractor or employer on the same job site or establishment to provide designated employees to serve as first aid and CPR responders for employees of the covered employer.

D. Employers of mobile work crews (i.e., crews that travel to more than one worksite per day) of two or more employees that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. assure that at least one employee on the mobile crew is designated and adequately trained to render immediate first aid and CPR during all workshifts; or

2. comply with section C. above.

E. Employers of individual mobile employees (i.e. an employee who travels alone to more than one worksite per day) that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. assure that the mobile employee is adequately trained to self-administer first aid;

2. comply with section C. above; or

3. assure that their employee has access to a communication system that will allow them to immediately request medical assistance through a 911 emergency call or comparable communication system.

F. Sections A. through E. of this regulation do not apply to worksites that do not contain job classifications or workplace hazards that expose employees to serious physical harm or death.

G Adequate first aid supplies shall be readily available.

~~(e)~~ H. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

~~(a)~~ A. The employer shall insure the availability of medical personnel for advice and consultation on matters of occupational health.

~~(b)~~ B. Provisions shall be made prior to commencement of the project for prompt medical attention in case of serious injury.

~~(c)~~ C. ~~In the absence of an infirmary, clinic, hospital or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a~~ A person or persons shall be designated by the employer and adequately trained to render immediate first aid and cardio pulmonary resuscitation (CPR) during all workshifts on worksites containing job classifications or workplace hazards that could potentially expose employees to serious physical harm or death. The designated person or persons shall have ~~a person who has~~ a valid, current certificate in first aid and CPR training from the U. S. Bureau of Mines, the American Red Cross, the National Safety Council, or equivalent training that can be verified by documentary evidence, and shall be available at the worksite to render first aid and CPR to injured or ill employees.

D. Covered employers are permitted to make written arrangements with and reasonably rely on another contractor or employer on the same job site or establishment to provide designated employees to serve as first aid and CPR responders for employees of the covered employer.

E. Employers of mobile work crews (i.e., crews that travel to more than one worksite per day) of two or more employees that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. assure that at least one employee on the mobile crew is designated and adequately trained to render immediate first aid and CPR during all workshifts; or

2. comply with section D. above.

F. Employers of individual mobile employees (i.e. an employee who travels alone to more than one worksite per day) that assign employees to travel to worksites or engage in work activities that could potentially expose those employees to serious physical harm or death shall either:

1. assure that the mobile employee is adequately trained to self-administer first aid;

2. comply with section D. above; or

3. assure that their employee has access to a communication system that will allow them to immediately request medical assistance through a 911 emergency call or comparable communication system.

G. Sections A. through F. of this regulation do not apply to worksites that do not contain job classifications or workplace hazards that expose employees to serious physical harm or death.

~~(d)(1)~~ H. ~~First aid supplies shall be easily accessible when required~~. Adequate first aid supplies shall be readily available.

~~(2)~~ I. The contents of the first aid kit shall be placed in a weatherproof container with individual sealed packages for each type of item, and shall be checked by the employer before being sent out on each job and at least weekly on each job to ensure that the expended items are replaced.

~~(e)~~ J. ~~Proper equipment for prompt transportation of the injured person to a physician or hospital, or a~~ A communication system for contacting necessary ambulance service, shall be provided.

~~(f)~~ K. In areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances shall be conspicuously posted.

~~(g)~~ L. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

COMMONWEALTH of VIRGINIA

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

Proposed Regulation 16 VAC 25-96 to Amend Reverse Signal Operation Safety Procedures Dealing with Vehicular Equipment, Motor Vehicles, Material Handling Equipment and Motor Vehicle Equipment in Existing Standards: 16 VAC 25-90-1910.269; 16 VAC 25-175- 1926.601; 16 VAC 25-175- 602 and 16 VAC 25-175- 952;
and
Proposed Regulation 16 VAC 25-97 to Establish Reverse Signal Operation Safety Requirements for Vehicles, Machinery and Equipment for General Industry and the Construction Industry.

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption as a proposed regulation of the Board the following VOSH proposed amendments pursuant to Va. Code §40.1-22(5):

A. Amend the following Part 1910 General Industry and Part 1926 Construction Industry standards governing the reverse signal operation safety procedures for off-road motor vehicles and vehicular or mechanical equipment, 16 VAC 25-96:

§1910.269(p)(1)(ii)	-	Vehicular Equipment for Electric Power Generation, Transmission and Distribution
§1926.601(b)	-	Motor Vehicles
§1926.602(a)(9)(ii)	-	Material Handling Equipment

§1926.952(a)(3) - Mechanical Equipment, Power Transmission and Distribution;

B. Establish new reverse signal operation safety procedures for all vehicles, machinery and equipment with an obstructed view to the rear in General Industry and the Construction Industry, 16 VAC 25-97.

II. Summary of the Proposed Regulations.

Construction Standards

The VOSH Program seeks the amendment of reverse signal operation safety procedures in standards for the construction industry in §§1926.601(b)(4), 1926.602(a)(9)(ii), and 1926.952(a)(3); and to establish a comprehensive reverse signal operation procedures regulation for all construction vehicles, machinery and equipment with an obstructed view to the rear, whether for operation in off-road work zones or over the road transportation or hauling.

The following boxes highlight the differences between the existing standards on this issue:

§1926.601(b)(4): "No employer shall use any motor vehicle equipment having an obstructed view to the rear unless:

(i)The vehicle has a reverse signal alarm audible above the surrounding noise level or;
(ii)The vehicle is backed up only when an observer signals that it is safe to do so."

§1926.602(a)(9)(ii): "No employer shall permit earthmoving or compacting equipment which has an obstructed view to the rear to be used in reverse gear unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or an employee signals that it is safe to do so."

§1926.952(a)(3): "No employer shall use any motor vehicle equipment having an obstructed view to the rear unless:

(i)The vehicle has a reverse signal alarm audible above the surrounding noise level or;
(ii)The vehicle is backed up only when an observer signals that it is safe to do so."

General Industry Standard

The VOSH Program seeks the amendment of the reverse signal operation safety procedures for the Electric Power Generation, Transmission and Distribution standard for general industry contained in §1910.269(p)(1)(ii); and to establish a comprehensive reverse signal operation

safety procedures regulation for all general industry vehicles or equipment with an obstructed view to the rear, whether for operation in off-road work zones or over the road transportation or hauling.
The following box highlights the existing standard on this issue:

> §1910.269(p)(1)(ii): "No vehicular equipment having an obstructed view to the rear may be operated on off-highway jobsites where any employee is exposed to the hazards created by the moving vehicle unless:
> (i)The vehicle has a reverse signal alarm audible above the surrounding noise level, or;
> (ii)The vehicle is backed up only when a designated employee signals that it is safe to do so."

The proposed regulation provides additional protection for employees by requiring the following for all vehicles, machinery and equipment in construction and general industry with an obstructed view to the rear, whether for operation in off-road work zones or over the road transportation or hauling:

The back-up alarm requirements in the current regulations at 1910.269(p)(1)(ii), 1926.601(b), 1926.602(a)(9)(ii), 1926.952(a)(3), will be deleted by 16 VAC 25-96, and the regulated community is referred to the new comprehensive proposed regulation at:

> Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry, 16 VAC 25-97

The new comprehensive proposed regulation at 16 VAC 25-97 will provide that construction and general industry vehicles, machinery and equipment (hereafter referred to as covered vehicles), whether for operation in off-road work zones or over the road transportation or hauling, shall not be operated in reverse unless the vehicle has a reverse signal alarm audible above the surrounding noise level and the vehicle is backed up only when a designated observer or ground guide signals that it is safe to do so. The proposed regulation provides a definition of the phrase "obstructed view to the rear."

While engaged in signaling activities, designated signalers/ground guides must have no other assigned duties, must not be distracted by such things as personal cellular phones or headsets and must be provided with and wear high visibility/reflective warning garments. No driver of a covered vehicle will travel in reverse unless they maintain constant visual contact with the designated signaler/ground guide. If visual contact is lost, the driver must immediately stop the vehicle until visual contact is regained and a positive indication is received from the signaler/ground guide that backup operations can proceed.

Prior to permitting an employee to engage in any covered activity, the employer shall ensure that each driver of a covered vehicle and each designated signaler/ground guide is trained in the requirements of this section. Refresher training shall be provided by the employer for any driver of a covered vehicle or any designated signaler/ground guide

when the driver or designated signaler has been observed to violate the requirements of this section or involved in an accident or near miss accident; or has received an evaluation that reveals that the driver or designated signaler/ground guide is not operating in a safe manner.

Covered vehicles with video or similar technological capability to provide the driver with a full view behind the vehicle are exempt from the requirement to have a designated signaler/ground guide.

Covered vehicles are exempt from the requirement to have a designated signaler/ground guide if the driver visually determines from outside the vehicle that no employees are in the backing zone and that it is reasonable to expect that no employees will enter the backing zone during reverse operation of the vehicle.

Covered vehicles that were not equipped with a reverse-signal alarm upon manufacture or were not later retrofitted with an alarm are exempt from having a reverse signal alarm audible above the surrounding noise level, but must still comply with other requirements in the proposed regulation.

To the extent that any federal Department of Transportation (DOT) regulation applies to covered vehicles conflicts with this section, the DOT regulation will take precedence.

III. Basis, Purpose and Impact of the Proposed Rulemaking.

A. Basis for Proposed Action.

1. Existing Federal Identical Standards Are Insufficient

Construction

A review of VOSH fatal accident investigations from 1992 to 2005 found 15 fatal vehicle or equipment accidents in construction work zones where employees were struck:

Number of fatalities	Type of vehicle
8	dump truck
7	1 each: cement truck, fuel truck, pavement planer, vacuum truck, tandem truck, trackhoe and other-unspecified.
Total 15	

While in some cases it was found that reverse signal alarms were not operational, many accidents occurred even with operational reverse signal alarms. In a situation where an existing standard appears to be applicable, VOSH is often faced with the difficulty of having to document whether a reverse signal alarm was audible over the surrounding construction noise at the time of the accident.

This can be problematic at best, since exact accident conditions cannot be recreated. In at least two cases, an employee operating as the signaler was struck by the vehicle when the driver lost sight of the employee while backing-up.

Fatal accidents also occurred to employees engaged in their own work unrelated to such vehicles or equipment where they apparently became de-sensitized to the familiar and repeated sounds of reverse signal alarms and other construction noise in the work zone.

In addition, the existing standards are limited in their scope and do not apply to all construction vehicles or equipment with an obstructed view to the rear. For instance, §1926.601(b)(4) only applies to motor vehicles on an off-highway jobsite not open to public traffic, and specifically does not apply to earthmoving equipment covered by §1926.602(a)(9)(ii). Neither regulation covers compactors or "skid-steer" equipment.

In VOSH investigations of a back-up accidents involving vehicles or equipment not covered by the previously cited standards, the only enforcement tool available is the use of §40.1-51.1.A. This statutory provision, used in the absence of an applicable regulatory standard, is more commonly referred to as the "general duty clause." It provides, in part, that:

> "It shall be the duty of every employer to furnish to each of his employees safe employment and a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees...."

This general wording does not specifically mention hazards associated with vehicles or equipment or any other specific situation. Therefore, according to case law VOSH must document that the hazard in question was "recognized" either through industry recognition (e.g. a national consensus standard), employer recognition (e.g. a company safety rule, or the existence of an operator's manual for the vehicle), or common sense recognition.

A concern with the use of the general duty clause is that it does not always result in consistent application of safety rules. This occurs as the use of the clause is often fact specific and dependent on a particular industry's national consensus standard, or employer work rule or equipment operator's manual.

Another issue regarding the general duty clause is that the statute has been interpreted in case law to only apply to "serious" violations, i.e., those that would cause "death or serious physical harm". It cannot be used to eliminate "other-than-serious" hazards before they can become serious in nature.

General Industry

The requirements of §1910.269(p)(1)(ii) do not provide adequate protection for employees under the Electric Power Generation, Transmission and Distribution standard and provide no coverage at all for all other areas in general industry.

A review of VOSH fatal accident investigations from 1992 to 2005 found nine fatal accidents in general industry work zones where employees were struck:

Number of fatalities	Type of vehicle
3	logging vehicles
2	garbage trucks
2	tractor-trailer trucks
1	fork lift
1	tow truck
Total 9	

As with the accident history in construction, general industry also had cases where it was found that reverse signal alarms were not operational, but other accidents occurred even with operational reverse signal alarms. Again, as in construction, general industry fatal accidents often occurred to employees who were engaged in their own work who apparently became de-sensitized to the sound of reverse signal alarms and other sounds in the work zone.

In addition, the standard is limited in its scope and does not apply to all general industry vehicles or equipment with an obstructed view to the rear. Section 1910.269(p)(1)(ii) only applies to motor vehicles in the electric power generation, transmission and distribution industry. When VOSH investigates a back-up accident involving a vehicle not covered by the above Part 1910 standard, the only enforcement tool available is the use of §40.1-51.1.A., referred to as the "general duty clause." The same concerns regarding the use of the statute in the Construction Industry apply to its use in the General Industry sector as well.

2. Board Authorization and Mandate

The Safety and Health Codes Board is authorized by Title 40.1-22(5) to:

> "... adopt, alter, amend, or repeal rules and regulations to further, protect and promote the safety and health of employees in places of employment over which it has jurisdiction and to effect compliance with the federal VOSH Act of 1970...as may be necessary to carry out its functions established under this title."
>
> "In making such rules and regulations to protect the occupational safety and health of employees, the Board shall adopt the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence that no employee will suffer material impairment of health or functional capacity."
>
> "However, such standards shall be at least as stringent as the standards promulgated by the federal OSH Act of 1970 (P.L.91-596). In addition to

the attainment of the highest degree of health and safety protection for the employee, other considerations shall be the latest available scientific data in the field, the feasibility of the standards, and experiences gained under this and other health and safety laws."

3. Public Comment/Inquiry

The Notice of Intended Regulatory Action was approved by the Board for this action at its March 7, 2006, regular meeting. The 30-day public comment period extended from September 4, 2006, through October 4, 2006.

No comments were received.

B. Purpose.

The purpose of the proposed change is to provide more comprehensive protection to employees in construction and general industry work areas exposed to vehicular, machinery and equipment traffic covered by the aforementioned standards and to provide the same degree of protection to employees in similar working conditions where vehicles, machinery and equipment with obstructed views to the rear are not otherwise covered by current regulations. The proposed regulation will apply to all covered vehicles, machinery and equipment in both construction and general industry, whether during operations in off-road work zones or over the road transportation or hauling.

C. Impact on Employers.

Employers would be required to train both drivers of covered vehicles, machinery and equipment and designated employee signalers/ground guides on the requirements of the amended and new regulations. Some costs to employers would be associated with the training required under the standard. Other issues that were added to the proposed regulation to provide employers with flexibility to achieve safe vehicle back-up operations include:

* Covered vehicles with video or similar technological capability to provide the driver with a full view behind the vehicle can be operated in reverse without a designated employee signaler/ground guide.

* Covered vehicles could be exempted from using a designated employee signaler/ground guide if it has a reverse signal alarm audible above surrounding noise and the driver visually determines from outside the vehicle that no employees are in the backing zone and that it is reasonable to expect that no employees will enter the backing zone during reverse operations.

* Covered vehicles that were not equipped with a reverse-signal alarm upon manufacture or later retrofitted with an alarm are exempt from the reverse signal alarm requirement if they either use a designated employee signaler/ground guide,

or if the driver visually determines from outside the vehicle that no employees are in the backing zone and that it is reasonable to expect that no employees will enter the backing zone during back-up.

* To the extent that any federal Department of Transportation (DOT) regulation applying to covered vehicles conflicts with any proposed regulation adopted by the Board, the DOT regulation would preempt any Board regulation in accordance with Va. Code §40.1-1, which provides in part that:

> "...however, nothing in the occupational safety and health provisions of this title or regulations adopted hereunder shall apply to working conditions of employees or duties of employers with respect to which the Federal Occupational Safety and Health Act of 1970 does not apply by virtue of § 4 (b) (1) of the federal act."

[NOTE: Section 4(b)(1) of the OSH Act provides that "Nothing in this Act shall apply to working conditions of employees with respect to which other Federal agencies...exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health."]

D. Impact on Employees.

Construction and general industry employees across the state would benefit from increased safety requirements from vehicular, machinery and equipment back-up operations. A significant reduction in employee deaths attributed to covered vehicles is anticipated.Employees that are drivers of covered vehicles or designated signalers/ground guides will have to receive training on the requirements of the proposed regulation.

E. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department.

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board consider for adoption the proposed regulation, 16 VAC 25-96, to amend the following standards:

Vehicular Equipment for Electric Power Generation, Transmission and Distribution in General Industry, 16 VAC 25-90-1910.269(p)(1)(ii);

Motor Vehicles in the Construction Industry, 16 VAC 25-175-1926.601(b)(4);

Material Handling Equipment in the Construction Industry, 16 VAC 25-175-1926.602(a)(9)(ii); and,

Mechanical Equipment, Power Transmission and Distribution in the Construction Industry, 16 VAC 25-175-1926.952(a)(3).

and also consider for adoption the proposed comprehensive regulation:

Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry, 16 VAC 25-97.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation.

16 VAC 25-96

16 VAC 25-90-1910.269(p)(1)(ii)

Electric Power Generation, Transmission, and Distribution; Mechanical Equipment

1910.269(p)(1)(ii): ~~No vehicular equipment having an obstructed view to the rear may be operated on off-highway jobsites where any employee is exposed to the hazards created by the moving vehicle unless:~~

~~(i) The vehicle has a reverse signal alarm audible above the surrounding noise level, or;~~

~~(ii) The vehicle is backed up only when a designated employee signals that it is safe to do so.~~

See Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry, 16 VAC 25-97.

16 VAC 25-175-1926.601(b)(4)

Motor Vehicles

§1926.601(b)(4): ~~No employer shall use any motor vehicle equipment having an obstructed view to the rear unless:~~

~~(i) The vehicle has a reverse signal alarm audible above the surrounding noise level or;~~

~~(ii) The vehicle is backed up only when an observer signals that it is safe to do so.~~

See Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry, 16 VAC 25-97.

16 VAC 25-175-1926.602(a)(9)(ii)

Material Handling Equipment

§1926.602(a)(9)(ii): ~~No employer shall permit earthmoving or compacting equipment which has an~~

~~obstructed view to the rear to be used in reverse signal unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or an employee signals that it is safe to do so.~~

See Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry, 16 VAC 25-97.

16 VAC 25-175-1926.952(a)(3)

Mechanical Equipment

~~§1926.952(a)(3): No employer shall use any motor vehicle equipment having an obstructed view to the rear unless:~~

~~(i) The vehicle has a reverse signal alarm audible above the surrounding noise level or;~~

~~(ii) The vehicle is backed up only when an observer signals that it is safe to do so.~~

See Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in the Construction Industry, 16 VAC 25-97.

Reverse Signal Operation Safety Requirements for Motor Vehicles, Machinery and Equipment in General Industry and the Construction Industry

A. This section shall apply to all general industry and construction industry vehicles, machinery or equipment capable of traveling in reverse and with an obstructed view to the rear (hereafter referred to as "covered vehicles"), whether intended for operation in off-road work zones or over the road transportation or hauling.

B. The phrase "obstructed view to the rear" means anything that interferes with the overall view of the operator of the vehicle to the rear of the vehicle at ground level, and includes, but is not limited to, such obstacles as any part of the vehicle (e.g., structural members); its load (e.g., gravel, dirt, machinery parts); its height relative to ground level viewing; damage to windows or side mirrors, etc., used for rearview movement of the vehicle; restricted visibility due to weather conditions (e.g., heavy fog, heavy snow); or work being done after dark without proper lighting.

C. No employer shall use any covered vehicle unless:

1. the covered vehicle has a reverse signal alarm audible above the surrounding noise level, and
2. the covered vehicle is backed up only when a designated observer or ground guide signals that it is safe to do so.

D. While engaged in signaling activities, the designated observer/ground guide shall:

1. have no other assigned duties;
2. shall not engage in any other activities unrelated to back-up operations other than those related to the covered vehicle being signaled;

3. shall not use personal cellular phones, personal head phones or similar items that could pose a distraction for the designated observer/ground guide; and

4. shall be provided with and wear:

a. during daytime operations a safety vest or jacket in orange, yellow strong yellow green or fluorescent versions of these colors, reflective warning garments; and

b. during nighttime operations a safety vest or jacket with retroreflective material in orange, yellow, white, silver, strong yellow green or a fluorescent version of these colors and shall be visible at a minimum distance of 1,000 feet.

E. No driver of a covered vehicle shall travel in reverse unless they maintain constant visual contact with the designated observer/ground guide. If visual contact is lost, the driver shall immediately stop the vehicle until visual contact is regained and a positive indication is received from the designated observer/ground guide to restart back-up operations.

F. Prior to permitting an employee to engage in any covered activity under this section, the employer shall ensure that each driver of a covered vehicle and each designated observer/ground guide is trained in the requirements of this section.

G. Refresher training shall be provided by the employer for any driver of a covered vehicle or any designated observer/ground guide when the driver or designated observer/ground guide:

1. has been observed to violate the requirements of this section;

2. has been involved in an accident or near miss accident; or

3. has received an evaluation that reveals that the driver or designated signaler is not operating under this section in a safe manner.

H. Covered vehicles with video or similar technological capability to provide the driver with a full view behind the vehicle are exempt from section C.2.

I. Covered vehicles are exempt from section C.2. if the driver visually determines from

outside the vehicle that no employees are in the backing zone and that it is reasonable to expect that no employees will enter the backing zone during reverse operation of the vehicle.

J. Covered vehicles that were not equipped with a reverse-signal alarm upon manufacture or were not later retrofitted with an alarm are exempt from section C.1.

K. To the extent that any federal Department of Transportation (DOT) regulation applies to covered vehicles conflicts with this section, the DOT regulation shall take precedence.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF LABOR AND INDUSTRY

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

Occupational Exposure to Hexavalent Chromium, Final Rule;
Part 1910 for General Industry, Part 1915 for Shipyards and Part 1926 for Construction;
Correcting Amendments

I. <u>Action Requested</u>.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption federal OSHA's correcting amendments to the final rule for the Occupational Exposure to Hexavalent Chromium for Parts 1910, 1915 and 1926, as published in 71 FR 36008 on June 23, 2006.

The proposed effective date is for March 15, 2007.

II. <u>Summary of the Amendment</u>.

Federal OSHA has corrected errors in Parts 1910, 1915 and 1926 of the final rule addressing occupational exposure to hexavalent chromium, or CR(VI), that appeared in the *Federal Register* on February 28, 2006 (71 FR 10099). The following correcting amendments were made to the final rule for Chromium (VI).

In §1910.1000, Air Contaminants, Table Z-1, the entry was revised for "tert-Butyl chromate (as CRO_3)", footnote 5 was also revised by removing the entry for "Chromic acid and chromates (as CrO_3)", and a new footnote 6 was added. Also, in Table Z-2 of §1910.1000, footnote c was revised.

In §1915.1000 and in Appendix A of §1926.55 -- "Gases, vapors, fumes, dusts, and mists", corrections were made to Table Z by revising the entry for "tert-Butyl chromate (as CrO_3)", removing the entry for "Chromic acid and chromates (asCrO_3)", and adding

an entry for “Chromium (VI) compounds”.

III. Basis, Purpose and Impact of the Amendment.

A. Basis.

The basis for this regulatory action includes the December 24, 2002 decision of the U. S. Court of Appeals for the Third Circuit, *(Public Citizen Health Research Group v. Chao, 314 F.3d 143 (3rd Cir. 2002))* which ordered OSHA to proceed expeditiously with a Cr(VI) standard with a Court established schedule of promulgation deadlines including a January 18, 2006 publication of a final standard.

On February 28, 2006, federal OSHA published the final rules and related amendments for the Occupational Exposure to Hexavalent Chromium. (71 FR 10099) This final rule also amended the following standards:

Part 1910.1000, Air Contaminants;
Part 1917.1, Scope and Applicability for Marine Terminals;
Part 1918.1, Scope and Application for Longshoring; and
Part 1926.55, Gases, Vapor, Fumes, Dusts and Mists

On March 7, 2006, the Safety and Health Codes Board adopted federal OSHA’s final rules and related amendments for the Occupational Exposure to Hexavalent Chromium. The initial effective date was May 30, 2006, other start-up dates also apply. These amendments make corrections to that initial action.

B. Purpose.

Federal OSHA has corrected errors in the regulatory text of the final rule that appeared in the Federal Register on February 28, 2006 (71 FR 10099).

C. Impact on Employers.

The error correcting amendments are not anticipated to have a significant impact on employers.

D. Impact on Employees.

No significant impact on employees is anticipated by the adoption of the error correcting amendments.

E. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department.

Federal regulations 29 CFR 1953.23(a) and (b) require that Virginia, within six months of the occurrence of a federal program change, to adopt identical changes or promulgate equivalent changes which are at least as effective as the federal change. The Virginia Code reiterates this requirement in ' 40.1-22(5). Adopting these revisions will allow Virginia to conform to the federal program change.

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board adopt the correcting amendments to the final rule for the Occupational Exposure to Hexavalent Chromium, §§ 1910.1000, 1915.1000 and 1926.55, as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c), with an effective date of March 15, 2007.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation which has been adopted in accordance with the above-cited subsection A.4(c) of the Administrative Process Act.

Occupational Exposure to Hexavalent Chromium for Parts 1910, 1915 and 1926; Corrections

As Adopted by the

Safety and Health Codes Board

Date: _____

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: _____

Occupational Exposure to Hexavalent Chromium for:

16 VAC 25-90-1910.1000, Air Contaminants
16 VAC 25-100-1915.1000, Air Contaminants
16 VAC 25-175-1926.55, Gases, vapors, fumes, dusts, and mists

When the regulations, as set forth in the correcting amendments to the final rule for Occupational Exposure to Hexavalent Chromium, §§ 1910.1000, 1915.1000 and 1926.55, 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
June 23, 2006	March 15, 2007

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910, 1915, and 1926

[Docket No. H054A]

RIN 1218–AB45

Occupational Exposure to Hexavalent Chromium; Corrections

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Correcting amendments.

SUMMARY: The Occupational Safety and Health Administration (OSHA) is correcting errors in the final rule addressing occupational exposure to hexavalent chromium that appeared in the **Federal Register** on February 28, 2006.

DATES: Effective June 23, 2006.

FOR FURTHER INFORMATION CONTACT: Mr. Kevin Ropp, Director, OSHA Office of Communications, Room N–3647, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693–1999.

SUPPLEMENTARY INFORMATION: On February 28, 2006 (71 FR 10099), OSHA issued a revised standard for occupational exposure to hexavalent chromium. Subsequently, errors were discovered in the regulatory text. This notice is being published to correct these errors.

Correction of Publication

The following correcting amendments are made to the final rule for Chromium (VI) published in the **Federal Register** on February 28, 2006 (71 FR 10099).

■ Accordingly, 29 CFR parts 1910, 1915, and 1926 are corrected by making the following correcting amendments.

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS

■ 1. The authority citation for part 1910 continues to read as follows:

Authority: Secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order Numbers 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), or 5–2002 (67 FR 65008), as applicable.

■ 2. Section 1910.1000 is corrected as follows:

■ a. In Table Z–1 by revising the entry for "tert-Butyl chromate (as CrO_3)" and footnote 5, removing the entry for "Chromic acid and chromates (as CrO_3)", and adding a new footnote 6;

■ b. In Table Z–2 by revising footnote c.

The revisions and additions read as follows:

§ 1910.1000 Air contaminants.

* * * * *

TABLE Z–1.—LIMITS FOR AIR CONTAMINANTS

Substance	CAS No.[c]	ppm[a] [1]	mg/m³[b] [1]	Skin designation
* * * *	*	*	*	*
tert-Butyl chromate (as CrO_3); see 1910.1026[6]	1189–85–1			
* * * *	*	*	*	*
Chromium (VI) compounds; see 1910.1026[5].				
* * * *	*	*	*	*

[1] The PELs are 8-hour TWAs unless otherwise noted; a (C) designation denotes a ceiling limit. They are to be determined from breathing-zone air samples.

[a] Parts of vapor or gas per million parts of contaminated air by volume at 25 °C and 760 torr.

[b] Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is approximate.

[c] The CAS number is for information only. Enforcement is based on the substance name. For an entry covering more than one metal compound, measured as the metal, the CAS number for the metal is given—not CAS numbers for the individual compounds.

* * * * *

[5] See Table Z–2 for the exposure limit for any operations or sectors where the exposure limit in § 1910.1026 is stayed or is otherwise not in effect.

[6] If the exposure limit in § 1910.1026 is stayed or is otherwise not in effect, the exposure limit is a ceiling of 0.1 mg/m³.

TABLE Z–2

Substance	8-hour time weighted average	Acceptable ceiling concentration	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	
			Concentration	Maximum duration
* * * * * * *				
Chromic acid and chromates (Z37.7–1971) (as CrO_3) [c]	.....	1 mg/10m³.		
* * * * * * *				

[c] This standard applies to any operations or sectors for which the exposure limit in the Chromium (VI) standard, § 1910.1026, is stayed or is otherwise not in effect.

* * * * *

PART 1915—OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR SHIPYARD EMPLOYMENT

■ 3. The authority citation for part 1915 continues to read as follows:

Authority: Section 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941); sections 4, 6, 8, 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), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (65 FR 50017) or 5–2002 (67 FR 65008), as applicable.

■ 4. Section 1915.1000 is corrected in Table Z by revising the entry for "tert-Butyl chromate (as CrO_3)", removing the entry for "Chromic acid and chromates (as CrO_3)", and adding an entry for "Chromium (VI) compounds."

The revisions and additions read as follows:

§ 1915.1000 Air contaminants.

* * * * *

TABLE Z.—SHIPYARDS

Substance	CAS No.[d]	ppm[a] *	mg/m³[b] *	Skin designation
* * * * * * *				
tert-Butyl chromate (as CrO_3); see 1915.1026[n]	1189–85–1			
* * * * * * *				
Chromium (VI) compounds; see 1915.1026[o].				

* The PELs are 8-hour TWAs unless otherwise noted; a (C) designation denotes a ceiling limit. They are to be determined from breathing-zone air samples.

[a] Parts of vapor or gas per million parts of contaminated air by volume at 25 °C and 760 torr.

[b] Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is approximate.

[d] The CAS number is for information only. Enforcement is based on the substance name. For an entry covering more than one metal compound, measured as the metal, the CAS number for the metal is given—not CAS numbers for the individual compounds.

[n] If the exposure limit in § 1915.1026 is stayed or is otherwise not in effect, the exposure limit is a ceiling of 0.1 mg/m³.

[o] If the exposure limit in § 1915.1026 is stayed or is otherwise not in effect, the exposure limit is 0.1 mg/m³ (as CrO_3) as an 8-hour TWA.

PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

■ 5. The authority citation for part 1926 continues to read as follows:

Authority: Section 107, Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 333); secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order 12–71 (36 FR 8754), 8–76 (41 FR 25059), 1–90 (55 FR 9033),), or 6–96 (62 FR 111), as applicable; 29 CFR part 1911.

■ 6. Section 1926.55 is corrected in Appendix A by revising the entry for "tert-Butyl chromate (as CrO_3)", removing the entry for "Chromic acid and chromates (as CrO_3)", and adding an entry for "Chromium (VI) compounds."

The revisions and additions read as follows:

§ 1926.55 Gases, vapors, fumes, dusts, and mists.

* * * * *

Appendix A to § 1926.55—1970 American Conference of Governmental Industrial Hygienists' Threshold Limit Values of Airborne Contaminants

THRESHOLD LIMIT VALUES OF A MINANTS FOR CONSTRUCTION

Substance	No. [d]	ppm [a]	mg/m³ [b]	Skin designation
* * * * * * *				
tert-Butyl chromate (as CrO_3); see 1926.1126 [n]	1189–85–1			
* * * * * * *				
Chromium (VI) compounds; See 1926.1126 [o].				
* * * * * * *				

[3] Use Asbestos Limit § 1926.58.

[a] Parts of vapor or gas per million parts of contaminated air by volume at 25 °C and 760 torr.

[b] Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is approximate.

[d] The CAS number is for information only. Enforcement is based on the substance name. For an entry covering more than one metal compound, measured as the metal, the CAS number for the metal is given—not CAS numbers for the individual compounds.

[n] If the exposure limit in § 1926.1126 is stayed or is otherwise not in effect, the exposure limit is a ceiling of 0.1 mg/m³.

[o] If the exposure limit in § 1926.1126 is stayed or is otherwise not in effect, the exposure limit is 0.1 mg/m³ (as CrO_3) as an 8-hour TWA.

Signed at Washington, DC, this 15th day of June, 2006.

Edwin G. Foulke, Jr.,

Assistant Secretary of Labor.

[FR Doc. 06–5590 Filed 6–22–06; 8:45 am]

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COMMONWEALTH of VIRGINIA

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

ASSIGNED PROTECTION FACTORS FOR RESPIRATORS,
Parts 1910, 1915 and 1926; FINAL RULE

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption federal OSHA's revised final rule for the Assigned Protection Factors for Respirators, as published in 71 FR50121 on August 24, 2006.

The proposed effective date is for March 15, 2006.

II. Summary of the Amendment.

Federal OSHA revised its existing Respiratory Protection Standard to add definitions and requirements for Assigned Protection Factors (APFs) and Maximum Use Concentrations (MUCs). The revisions also supersede the respirator selection provisions of existing substance-specific standards with these new APFs (except for the respirator selection provisions of the 1,3—Butadiene Standard). (71 FR 50122)

The APF final rule completes the revision of the reserve sections of OSHA's Respiratory Protection Standard as published in 1998. The Respiratory Protection program will now contain provisions necessary for a comprehensive plan, including selection and use of respiratory training, medical evaluation, and fit testing.

APFs are numbers that indicate the level of workplace respiratory protection that a respirator or class of respirators is expected to provide to employees when used as part of an effective respiratory protection program. An APF table is included in the final standard to guide employers in the selection of air-purifying, powered air-purifying, supplied-air (or airline respirator), and self-contained breathing apparatus (SCBA) respirators.

Federal OSHA amended 1910.134, respiratory protection, and the respirator selection provisions of these standards in general industry, construction, shipyards, longshoring and marine terminal workplaces.

The amended sections are in 1910 Subpart Z and are as follows:

1910.1001, asbestos	1910.1043, cotton dust
1910.1017, vinyl chloride	1910.1044, 1,2-dibromo-3-chloropropane
1910.1018, inorganic arsenic	1910.1045, acylonitrile
1910.1025, lead	1910.1047, ethylene oxide
1910.1027, cadmium	1910.1048, formaldehyde
1910.1028, benzene	1910.1050, methylenedianiline
1910.1029, coke oven emissions	1910.1052, methylene chloride

OSHA also amended the following:

1915.1001, asbestos	1926.1101, asbestos
1926.60, methylenedianiline	1926.1127, cadmium
1926.62, lead	

III. Basis, Purpose and Impact of the Amendment.

A. Basis.

When federal OSHA published the final Respiratory Protection Standard in January 1998, it noted that the revised standard was to "serve as a 'building block' standard with respect to future standards that may contain respiratory protection requirements" (63 FR 1265). OSHA's final Respiratory Protection Standard established the minimum elements of a comprehensive program that are necessary to ensure effective performance of a respirator. The only parts missing from this building block standard are the APF and MUC provisions that are being finalized in this rulemaking. (71 FR 50126-27)

Throughout the Respiratory Protection Standard rulemaking, OSHA emphasized that the Assigned Protection Factors (APF) and Maximum Use Concentrations (MUC) definitions

and the APF table are an integral part of the overall standard. (Id.)

Federal OSHA developed the final APFs after thoroughly reviewing the available literature, including chamber-simulation studies and workplace protection factor studies, comments submitted to the record, and hearing testimony. (71 FR 50128) The studies OSHA analyzed were conducted on employees in actual workplaces who were performing their normal job duties. Consequently, the particle sizes, work rates, work times, and environmental conditions varied among these studies. OSHA concluded that using data collected under these various conditions presents a more accurate picture of workplace use of these respirators and is a better measure of the protection provided by half mask respirators than data collected only from other highly controlled studies. (71 FR 50131)

Throughout the Respiratory Protection Standard rulemaking, federal OSHA emphasized that the APFs and MUC definitions and the APF table were an integral part of the overall standard.

B. Purpose.

The APF rule amends 29 CFR 1910.134(d)(3)(i)(A) of the Respiratory Protection Standard by specifying a set of APFs for each class of respirators. This final rule ensures that respirators reduce or eliminate the significant risk to employee health resulting from exposure to hazardous airborne substances. It is necessary to guide employers in selecting the appropriate class of respirators needed to reduce hazardous exposures to acceptable levels to adequately protect employees. The final APFs for a class of respirators specify the workplace level of protection that a class of respirators should provide under an effective respiratory protection program. (71 FR 50127)

C. Impact on Employers.

OSHA believes that harmonizing the APFs of the substance-specific standards with the APFs in the Respiratory Protection Standard will reduce confusion among the regulated community and aids in uniform application of APFs, while maintaining employee protection at levels at least as protective as the existing APF requirements. (71 FR 50145)

Some employers who now hire consultants to aid in choosing the proper respirator should be able to make this choice on their own with the aide of this rule. Now, employers benefit from greater administrative ease in proper respirator selection. In addition to having only one set of numbers (i.e., APFs) to assist them with respirator selection for nearly all substances, some employers may be able to streamline their respirator stock by using one respirator type to meet their respirator needs instead of several respirator types. The increased ease of compliance would also yield additional health benefits to employees using respirators. (71 FR 50152)

Alternatively, these APFs would clarify when employers can safely place employees in respirators that impose less stress on the cardiovascular system (e.g., filtering facepiece respirators). Many of these alternative respirators may have the additional benefit of being less expensive to purchase and operate. (Id.)

OSHA estimates that nationally over 15,000 employees currently use respirators that fall in this group (i.e., shift to a less expensive respirator). (71 FR 50152) In Virginia, it is estimated that over 375 employees currently use respirators that fall in this group.

Federal OSHA believes that using plain language will improve the uniformity and comprehensibility of these provisions. These improvements will, in turn, enhance employer compliance with the provisions, along with increasing the protection afforded to employees. Rewriting the respiratory-selection provisions of the existing substance-specific standards into plain-language provisions did not alter the substantive requirements of the existing provisions.

D. Impact on Employees.

The final APFs are necessary to protect employees who must use respirators to protect them from airborne contaminants. OSHA estimates that the final APFs will increase protection for workers by reducing significantly employee exposures to the hazardous airborne substances regulated by these substance-specific standards, especially asbestos, lead, cotton dust, and arsenic. Consequently, employees will receive additional protection against the chronic illnesses resulting from exposure to these hazardous substances, notably a variety of cancers and cardiovascular diseases. (71 FR 50185)

Nationally, OSHA estimates that 29,655 employees would have a higher degree of respiratory protection under this APF standard. Of these employees, an estimated 8,384 have exposure to lead, 7,287 to asbestos, and 3,747 to cotton dust, all substances with substantial health risks. (71 FR 50185)

In Virginia, it is estimated that approximately 740 employees would have a higher degree of respiratory protection under this APF standard. Of these employees, an estimated 200 have exposure to lead, more than 180 employees to asbestos, and approximately 90 to cotton dust.

E. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department.

Federal regulations 29 CFR 1953.23(a) and (b) require that Virginia, within six months of the occurrence of a federal program change, to adopt identical changes or promulgate equivalent changes which are at least as effective as the federal change. The Virginia Code reiterates this requirement in § 40.1-22(5). Adopting these revisions will allow Virginia to conform to the federal program change.

F. Technology Feasibility

While the standard doe not raise issues of technological feasibility, Federal OSHA believes that the standard is technologically feasible since the protective measures it requires already exist, can be brought into existence with available technology, or can be developed using technology that can reasonably be expected to be available. This amendment requires that employers use respirators already on the market. Further, these respirators are already in use and have proven feasible in a wide variety of industrial settings. (71 FR 50148, 50185)

G. Benefits/Costs

Federal OSHA concluded that the APF and MUC provisions of the final rule constitute the most cost-effective alternative for meeting its statutory objective of reducing risk of adverse health effects to the extent feasible. OSHA believes that several benefits will accrue to respirator users and their employers from this final rule. First, the standard would benefit workers by reducing their exposures to respiratory hazards. Improved respirator selection would enhance previous improvements to the Respiratory Protection Standard, such as better fit-test procedures and improved training, contributing substantially to greater worker protection. (71 FR 50150)

In addition to health benefits, OSHA believes other benefits result from the harmonization of APF specifications, thereby making compliance with the respirator rule easier for employers who also benefit from greater administrative ease in proper respirator selection. Employers will no longer have to consult several sources and several OSHA standards to determine the best choice of respirator, but can make their choices based on a single, easily found regulation. (71 FR 50182)

The increased ease of compliance would also yield additional health benefits to employees using respirators. (71 FR 51052)

OSHA estimated that the Respiratory Protection standard would prevent between 351 and 1626 (in Virginia, between approximately 10 and 40) deaths annually from cancer and many other chronic diseases, including cardiovascular disease, with a best estimate (expected value) of 932 (in Virginia, approximately 20) averted deaths from these causes. The APFs in the final rule will help ensure that these benefits are achieved, as well as provide an additional degree of protection. These APFs also will reduce employee exposures to several §6(b)(5) chemicals covered by standards with outdated APF criteria, thereby reducing exposures to chemicals, such as asbestos, lead, cotton dust, and arsenic. (Id.)

Costs for the APF standard result from requiring some users to switch to more protective respirators than they currently use. When the APF is lower than the baseline (current) APF, respirator users must upgrade to a more protective model. Both the 1992 ANSI Z88.2 Respiratory Protection Standard and the 1987 NIOSH RDL specify APFs for certain classes of respirators. Federal OSHA assumed that employers currently use the

ANSI or NIOSH APFs for certain classes of respirators. In most cases, adhering to the existing ANSI APFs fulfills employers' legal obligation for proper respirator selection under the existing Respiratory Protection Standard. In the case of full facepiece negative pressure respirators, OSHA has established that an APF of 50, as opposed to ANSI's APF of 100, is currently acceptable. (71 FR 50148)

OSHA also analyzed the costs of upgrading from the current respirator to a more protective alternative. OSHA calculated the incremental cost for each combination of upgrades from an existing model to a more protective one, taking into account the effect of replacement before the end of the respirator's useful life. These annualized costs range from $49.98 (for upgrading from a supplied-air, demand mode, full facepiece respirator to a supplied-air, continuous flow, half-mask respirator) to $963.73 (for upgrading from a non-powered, air purifying full facpiece respirator to a full facepiece PAPR). (71 FR 50149-50)

Nationally, OSHA estimates that the final rule would require 1,918 users of non-powered air-purifying respirators to upgrade to some respirator more expensive than they are now using at a cost of $1.8 million. OSHA estimates that 22,848 PAPR users would upgrade their respirators at a cost of $2.3 million. (Id.)

In Virginia, it is estimated that the final rule would require approximately 50 users of non-powered air-purifying respirators to upgrade to some respirator more expensive than they are now using at a cost of approximately $45,000. Virginia estimates that approximately 570 PAPR users would upgrade their respirators at an estimated cost of $57,500.

In many cases, employers use respirators when respirators are not required by OSHA, or use respirators more protective than required by OSHA. As a result, OSHA's cost analysis overestimates the number of employees who are affected by the standard, and therefore overestimates costs associated with the standard.

Contact Person:

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board adopt the final rule for Assigned Protection Factors for Respirators, Parts 1910, 1915 and 1926, as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c), with an effective date of March 15, 2007.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation which has been adopted in accordance with the above-cited subsection A.4(c) of the Administrative Process Act.

ASSIGNED PROTECTION FACTORS FOR RESPIRATORS, PARTS 1910, 1915 and 1926; FINAL RULE

As Adopted by the

Safety and Health Codes Board

Date: _____

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: _____

16 VAC 25-90-1910.134, Respiratory Protection;
16 VAC 25-90-1910.1001, Abestos;
16 VAC 25-90-1910.1017, Vinyl Chloride;
16 VAC 25-90-1910.1018, Inorganic Arsenic;
16 VAC 25-90-1910.1025, Lead;
16 VAC 25-90-1910.1027, Cadmium;
16 VAC 25-90-1910.1028, Benzene;
16 VAC 25-90-1910.1029, Coke Oven Emissions;
16 VAC 25-90-1910.1043, Cotton Dust;
16 VAC 25-90-1910.1044, 1,2-Dibromo-3-chloropropane;
16 VAC 25-90-1910.1045, Acrylonitrile;
16 VAC 25-90-1910.1047, Ethylene Oxide;
16 VAC 25-90-1910.1048, Formaldehyde;
16 VAC 25-90-1910.1050, Methylenedianiline;
16 VAC 25-90-1910.1052, Ethylene Chloride;
16 VAC 25-100-1915.1001, Asbestos;
16 VAC 25-175-1926.60, Methylenedianiline;
16 VAC 25-175-1926.62, Lead
16 VAC 25-175-1926.1101, Asbestos; and
16 VAC 25-175-1926.1127, Cadmium

When the regulations, as set forth in the final rule for Assigned Protection Factors For Respirators, Parts 1910, 1915 and 1926, 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
November 22, 2006	March 15, 2007

VIII. Amendments to Standards

■ For the reasons stated in the preamble of this final rule, the Agency is amending 29 CFR parts 1910, 1915, and 1926 to read as follows:

PART 1910—[AMENDED]

Subpart I—[Amended]

■ 1. Revise the authority citation for subpart I of part 1910 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, and 657); and Secretary of Labor's Order No. 12–71 (36 FR 8754), 6–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (62 FR 50017), or 5–2002 (67 FR 65008), as applicable.

Sections 1910.132, 1910.134, and 1910.138 of 29 CFR also issued under 29 CFR part 1911.

Sections 1910.133, 1910.135, and 1910.136 of 29 CFR also issued under 29 CFR part 1911 and 5 U.S.C. 553.

■ 2. Amend § 1910.134 as follows:
■ a. Add the text of the definitions for "Assigned protection factor (APF)" and "Maximum use concentration (MUC)" to paragraph (b);
■ b. Add the text of paragraphs (d)(3)(i)(A), including Table 1, and (d)(3)(i)(B); and
■ c. Revise paragraph (n).

The added and revised text reads as follows:

§ 1910.134 Respiratory protection.

* * * * *

(b) * * *

Assigned protection factor (APF) means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by this section.

* * * * *

Maximum use concentration (MUC) means the maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when wearing a respirator, and is determined by the assigned protection factor of the respirator or class of respirators and the

exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short-term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine an MUC on the basis of relevant available information and informed professional judgment.

* * * * *

(d) * * *

(3) * * *

(i) * * *

(A) *Assigned Protection Factors (APFs).* Employers must use the assigned protection factors listed in Table 1 to select a respirator that meets or exceeds the required level of employee protection. When using a combination respirator (e.g., airline respirators with an air-purifying filter), employers must ensure that the assigned protection factor is appropriate to the mode of operation in which the respirator is being used.

TABLE 1.—ASSIGNED PROTECTION FACTORS [5]

Type of respirator [1,2]	Quarter mask	Half mask	Full facepiece	Helmet/hood	Loose-fitting facepiece
1. Air-Purifying Respirator	5	[3] 10	50		
2. Powered Air-Purifying Respirator (PAPR)		50	1,000	[4] 25/1,000	25
3. Supplied-Air Respirator (SAR) or Airline Respirator					
• Demand mode		10	50		
• Continuous flow mode		50	1,000	[4] 25/1,000	25
• Pressure-demand or other positive-pressure mode		50	1,000		
4. Self-Contained Breathing Apparatus (SCBA)					
• Demand mode		10	50	50	
• Pressure-demand or other positive-pressure mode (e.g., open/closed circuit)			10,000	10,000	

Notes:

[1] Employers may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required respirator use is independent of concentration.

[2] The assigned protection factors in Table 1 are only effective when the employer implements a continuing, effective respirator program as required by this section (29 CFR 1910.134), including training, fit testing, maintenance, and use requirements.

[3] This APF category includes filtering facepieces, and half masks with elastomeric facepieces.

[4] The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmets/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.

[5] These APFs do not apply to respirators used solely for escape. For escape respirators used in association with specific substances covered by 29 CFR 1910 subpart Z, employers must refer to the appropriate substance-specific standards in that subpart. Escape respirators for other IDLH atmospheres are specified by 29 CFR 1910.134 (d)(2)(ii).

(B) *Maximum Use Concentration (MUC).* (*1*) The employer must select a respirator for employee use that maintains the employee's exposure to the hazardous substance, when measured outside the respirator, at or below the MUC.

(*2*) Employers must not apply MUCs to conditions that are immediately dangerous to life or health (IDLH); instead, they must use respirators listed for IDLH conditions in paragraph (d)(2) of this standard.

(*3*) When the calculated MUC exceeds the IDLH level for a hazardous substance, or the performance limits of the cartridge or canister, then employers must set the maximum MUC at that lower limit.

* * * * *

(n) *Effective date.* Paragraphs (d)(3)(i)(A) and (d)(3)(i)(B) of this section become effective November 22, 2006.

* * * * *

Subpart Z—[Amended]

■ 3. Revise the authority citation for subpart Z of part 1910 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, and 657); Secretary of Labor's Orders 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), or 3–2000 (62 FR 50017); and 29 CFR part 1911.

* * * * *

■ 4. Amend § 1910.1001 by:

■ a. Removing Table 1 in paragraph (g)(3);

■ b. Redesignating Table 2 in paragraph (l)(3)(ii) as Table 1;

■ c. Removing the reference to "Table 2" in paragraph (l)(3)(ii) and adding "Table 1" in its place; and

■ d. Revising paragraphs (g)(2)(ii) and (g)(3).

The revisions read as follows:

§ 1910.1001 Asbestos.

* * * * *

(g) * * *

(2) * * *

(ii) Employers must provide an employee with a tight-fitting, powered air-purifying respirator (PAPR) instead of a negative pressure respirator selected according to paragraph (g)(3) of this standard when the employee chooses to use a PAPR and it provides adequate protection to the employee.

* * * * *

(3) *Respirator selection.* Employers must:

(i) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use filtering facepiece respirators for protection against asbestos fibers.

(ii) Provide HEPA filters for powered and non-powered air-purifying respirators.

* * * * *

■ 5. In § 1910.1017, remove the table in paragraph (g)(3)(i), remove paragraph (g)(3)(iii), and revise paragraph (g)(3)(i) to read as follows:

§ 1910.1017 Vinyl chloride.

* * * * *

(g) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide an organic vapor cartridge that has a service life of at least one hour when using a chemical cartridge respirator at vinyl chloride concentrations up to 10 ppm.

(C) Select a canister that has a service life of at least four hours when using a powered air-purifying respirator having a hood, helmet, or full or half facepiece, or a gas mask with a front-or back-mounted canister, at vinyl chloride concentrations up to 25 ppm.

* * * * *

■ 6. In § 1910.1018, remove Tables I and II and paragraph (h)(3)(ii), redesignate paragraph (h) (3)(iii) as paragraph (h)(3)(ii), and revise paragraph (h)(3)(i) to read as follows:

§ 1910.1018 Inorganic arsenic.

* * * * *

(h) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Ensure that employees do not use half mask respirators for protection against arsenic trichloride because it is absorbed rapidly through the skin.

(C) Provide HEPA filters for powered and non-powered air-purifying respirators.

(D) Select for employee use:

(*1*) Air-purifying respirators that have a combination HEPA filter with an appropriate gas-sorbent cartridge or canister when the employee's exposure exceeds the permissible exposure level for inorganic arsenic and the relevant limit for other gases.

(*2*) Front-or back-mounted gas masks equipped with HEPA filters and acid gas canisters or any full facepiece supplied-air respirators when the inorganic arsenic concentration is at or below 500 mg/m^3; and half mask air-purifying respirators equipped with HEPA filters and acid gas cartridges when the inorganic arsenic concentration is at or below 100 $\mu g/m^3$.

* * * * *

■ 7. In § 1910.1025, remove Table II in paragraph (f)(2)(ii) and revise paragraphs (f)(3)(i) and (f)(3)(ii) to read as follows:

§ 1910.1025 Lead.

* * * * *

(f) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide employees with full facepiece respirators instead of half mask respirators for protection against lead aerosols that cause eye or skin irritation at the use concentrations.

(C) Provide HEPA filters for powered and non-powered air-purifying respirators.

(ii) Employers must provide employees with a powered air-purifying respirator (PAPR) instead of a negative pressure respirator selected according to paragraph (f)(3)(i) of this standard when an employee chooses to use a PAPR and it provides adequate protection to the employee as specified by paragraph (f)(3)(i) of this standard.

* * * * *

■ 8. In § 1910.1027, remove Table 2 in paragraph (g)(3)(i) and revise paragraph (g)(3)(i) to read as follows:

§ 1910.1027 Cadmium.

* * * * *

(g) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide employees with full facepiece respirators when they experience eye irritation.

(C) Provide HEPA filters for powered and non-powered air-purifying respirators.

* * * * *

■ 9. In § 1910.1028, remove Table 1 in paragraph (g)(3)(ii) and revise paragraphs (g)(2)(i) and (g)(3)(i) to read as follows:

§ 1910.1028 Benzene.

* * * * *

(g) * * *

(2) * * *

(i) Employers must implement a respiratory protection program in accordance with 29 CFR 1910.134 (b) through (d) (except (d)(1)(iii)), and (f) through (m).

* * * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide employees with any organic vapor gas mask or any self-contained breathing apparatus with a full facepiece to use for escape.

(C) Use an organic vapor cartridge or canister with powered and non-powered air-purifying respirators, and a chin-style canister with full facepiece gas masks.

(D) Ensure that canisters used with non-powered air-purifying respirators have a minimum service life of four hours when tested at 150 ppm benzene at a flow rate of 64 liters per minute (LPM), a temperature of 25 °C, and a relative humidity of 85%; for canisters used with tight-fitting or loose-fitting powered air-purifying respirators, the flow rates for testing must be 115 LPM and 170 LPM, respectively.

* * * * *

■ 10. In § 1910.1029, remove Table I in paragraph (g)(3) and revise paragraph (g)(3) to read as follows:

§ 1910.1029 Coke oven emissions.

* * * * *

(g) * * *

(3) *Respirator selection.* Employers must select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers may use a filtering facepiece respirator only when it functions as a filter respirator for coke oven emissions particulates.

* * * * *

■ 11. In § 1910.1043, remove Table I in paragraph (f)(3)(i) and revise paragraphs (f)(3)(i) and (f)(3)(ii) to read as follows:

§ 1910.1043 Cotton dust.

* * * * *

(f) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use filtering facepieces for protection against cotton dust concentrations greater than five times (5 ×) the PEL.

(B) Provide HEPA filters for powered and non-powered air-purifying respirators used at cotton dust concentrations greater than ten times (10 ×) the PEL.

(ii) Employers must provide an employee with a powered air-purifying respirator (PAPR) instead of a non-powered air-purifying respirator selected according to paragraph (f)(3)(i) of this standard when the employee chooses to use a PAPR and it provides adequate protection to the employee as specified by paragraph (f)(3)(i) of this standard.

* * * * *

■ 12. In § 1910.1044, remove Table 1 in paragraph (h)(3) and revise paragraph (h)(3) to read as follows: § 1910.1044 1,2-Dibromo-3-chloropropane.

* * * * *

(h) * * *

(3) *Respirator selection.* Employers must:

(i) Select, and provide to employees, the appropriate atmosphere-supplying respirator specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(ii) Provide employees with one of the following respirator options to use for entry into, or escape from, unknown DBCP concentrations:

(A) A combination respirator that includes a supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure or continuous-flow mode, as well as an auxiliary self-contained breathing apparatus (SCBA) operated in a pressure-demand or positive-pressure mode.

(B) An SCBA with a full facepiece operated in a pressure-demand or other positive-pressure mode.

* * * * *

■ 13. In § 1910.1045, remove Table I in paragraph (h)(3) and revise paragraphs (h)(2)(i) and (h)(3) to read as follows:

§ 1910.1045 Acrylonitrile.

* * * * *

(h) * * *

(2) * * *

(i) Employers must implement a respiratory protection program in accordance with 29 CFR 1910.134 (b) through (d) (except (d)(1)(iii)), and (f) through (m).

* * * * *

(3) *Respirator selection.* Employers must:

(i) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(ii) For escape, provide employees with any organic vapor respirator or any self-contained breathing apparatus permitted for use under paragraph (h)(3)(i) of this standard.

* * * * *

■ 14. In § 1910.1047, remove Table 1 in paragraph (g)(3) and revise paragraph (g)(3) to read as follows:

§ 1910.1047 Ethylene oxide.

* * * * *

(g) * * *

(3) *Respirator selection.* Employers must:

(i) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use half masks of any type because EtO may cause eye irritation or injury.

(ii) Equip each air-purifying, full facepiece respirator with a front-or back-mounted canister approved for protection against ethylene oxide.

(iii) For escape, provide employees with any respirator permitted for use under paragraphs (g)(3)(i) and (ii) of this standard.

* * * * *

■ 15. In § 1910.1048, remove Table 1 in paragraph (g)(3)(i) and revise paragraphs (g)(2) and (g)(3) to read as follows:

§ 1910.1048 Formaldehyde.

* * * * *

(g) * * *

(2) *Respirator program.* (i) Employers must implement a respiratory protection program in accordance with 29 CFR 1910.134 (b) through (d) (except (d)(1)(iii)), and (f) through (m).

(ii) When employees use air-purifying respirators with chemical cartridges or canisters that do not contain end-of-service-life indicators approved by the National Institute for Occupational Safety and Health, employers must replace these cartridges or canisters as specified by paragraphs (d)(3)(iii)(B)(1) and (B)(2) of 29 CFR 1910.134, or at the end of the workshift, whichever condition occurs first.

(3) *Respirator selection.* (i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Equip each air-purifying, full facepiece respirator with a canister or cartridge approved for protection against formaldehyde.

(C) For escape, provide employees with one of the following respirator options: A self-contained breathing apparatus operated in the demand or pressure-demand mode; or a full facepiece respirator having a chin-style, or a front-or back-mounted industrial-size, canister or cartridge approved for protection against formaldehyde.

(ii) Employers may substitute an air-purifying, half mask respirator for an air-purifying, full facepiece respirator when they equip the half mask respirator with a cartridge approved for protection against formaldehyde and provide the affected employee with effective gas-proof goggles.

(iii) Employers must provide employees who have difficulty using negative pressure respirators with powered air-purifying respirators permitted for use under paragraph (g)(3)(i)(A) of this standard and that affords adequate protection against formaldehyde exposures.

* * * * *

■ 16. In § 1910.1050, remove Table 1 in paragraph (h)(3)(i) and revise paragraph (h)(3)(i) to read as follows:

§ 1910.1050 Methylenedianiline.

* * * * *

(h) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide HEPA filters for powered and non-powered air-purifying respirators.

(C) For escape, provide employees with one of the following respirator options: Any self-contained breathing apparatus with a full facepiece or hood operated in the positive-pressure or continuous-flow mode; or a full facepiece air-purifying respirator.

(D) Provide a combination HEPA filter and organic vapor canister or cartridge with powered or non-powered air-purifying respirators when MDA is in liquid form or used as part of a process requiring heat.

* * * * *

■ 17. In § 1910.1052, remove Table 2 in paragraph (g)(3) and revise paragraph (g)(3) to read as follows:

§ 1910.1052 Methylene chloride.

* * * * *

(g) * * *

(3) *Respirator selection.* Employers must:

(i) Select, and provide to employees, the appropriate atmosphere-supplying respirator specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use half masks of any type because MC may cause eye irritation or damage.

(ii) For emergency escape, provide employees with one of the following respirator options: A self-contained breathing apparatus operated in the continuous-flow or pressure-demand mode; or a gas mask with an organic vapor canister.

* * * * *

PART 1915—[AMENDED]

■ 18. Revise the authority citation for part 1915 to read as follows:

Authority: Section 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (20 U.S.C. 653, 655, and 687); and Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (62 FR 50017), or 5–2002 (67 FR 65008) as applicable.

Sections 1915.120 and 1915.152 of 29 CFR also issued under 29 CFR part 1911.

Subpart Z—[Amended]

■ 19. In § 1915.1001, remove Table 1 in paragraph (h)(2)(iii) and revise paragraph (h)(2) to read as follows:

§ 1915.1001 Asbestos.

* * * * *

(h) * * *

(2) *Respirator selection.* (i) Employers must select, and provide to employees at no cost, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use filtering facepiece respirators for use against asbestos fibers.

(ii) Employers are to provide HEPA filters for powered and non-powered air-purifying respirators.

(iii) Employers must:

(A) Inform employees that they may require the employer to provide a tight-fitting, powered air-purifying respirator (PAPR) permitted for use under paragraph (h)(2)(i) of this standard instead of a negative pressure respirator.

(B) Provide employees with a tight-fitting PAPR instead of a negative pressure respirator when the employees choose to use a tight-fitting PAPR and it provides them with the required protection against asbestos.

(iv) Employers must provide employees with an air-purifying, half mask respirator, other than a filtering facepiece respirator, whenever the employees perform:

(A) Class II or Class III asbestos work for which no negative exposure assessment is available.

(B) Class III asbestos work involving disturbance of TSI or surfacing ACM or PACM.

(v) Employers must provide employees with:

(A) A tight-fitting, powered air-purifying respirator or a full facepiece, supplied-air respirator operated in the pressure-demand mode and equipped with either HEPA egress cartridges or an auxiliary positive-pressure, self-contained breathing apparatus (SCBA) whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be at or below 1 f/cc as an 8-hour time-weighted average (TWA).

(B) A full facepiece, supplied-air respirator operated in the pressure-demand mode and equipped with an auxiliary positive-pressure SCBA whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be above 1 f/cc as an 8-hour TWA.

* * * * *

PART 1926—[AMENDED]

Subpart D—[Amended]

■ 20. Revise the authority citation for subpart D of part 1926 to read as follows:

Authority: Section 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 *et seq.*); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, and 657); Secretary of Labor's Orders 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (62 FR 50017), or 5.2002 (67 FR 650008); as applicable; and 29 CFR part 11.

Sections 1926.58, 1926.59, 1926.60, and 1926.65 also issued under 5 U.S.C. 553 and 29 CFR part 1911.

Section 1926.62 of 29 CFR also issued under section 1031 of the Housing and Community Development Act of 1992 (42 U.S.C. 4853).

Section 1926.65 of 29 CFR also issued under section 126 of the Superfund Amendments and Reauthorization Act of 1986, as amended (29 U.S.C. 655 note), and 5 U.S.C. 553.

■ 21. In § 1926.60, remove Table 1 and revise paragraph (i)(3)(i) to read as follows:

§ 1926.60 Methylenedianiline.

* * * * *

(i) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide HEPA filters for powered and non-powered air-purifying respirators.

(C) For escape, provide employees with one of the following respirator options: Any self-contained breathing apparatus with a full facepiece or hood operated in the positive-pressure or continuous-flow mode; or a full facepiece air-purifying respirator.

(D) Provide a combination HEPA filter and organic vapor canister or cartridge with air-purifying respirators when MDA is in liquid form or used as part of a process requiring heat.

* * * * *

■ 22. In § 1926.62, remove Table 1 in paragraph (f)(3)(ii) and revise paragraph (f)(3)(i) to read as follows:

§ 1926.62 Lead.

* * * * *

(f) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide employees with a full facepiece respirator instead of a half mask respirator for protection against lead aerosols that may cause eye or skin irritation at the use concentrations.

(C) Provide HEPA filters for powered and non-powered air-purifying respirators.

* * * * *

Subpart Z—[Amended]

■ 23. Revise the authority citation for subpart Z of part 1926 to read as follows:

Authority: Section 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 *et seq.*); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Orders 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (62 FR 50017), or 5–2002 (67 FR 65008) as applicable; and 29 CFR part 11.

Section 1926.1102 of 29 CFR not issued under 29 U.S.C. 655 or 29 CFR part 1911; also issued under 5 U.S.C. 553.

■ 24. In § 1926.1101, remove Table 1 in paragraph (h)(3)(i) and revise paragraph (h)(3) to read as follows:

§ 1926.1101 Asbestos.

* * * * *

(h) * * *

(3) *Respirator selection.* (i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use filtering facepiece respirators for use against asbestos fibers.

(B) Provide HEPA filters for powered and non-powered air-purifying respirators.

(ii) Employers must provide an employee with tight-fitting, powered air-purifying respirator (PAPR) instead of a negative pressure respirator selected according to paragraph (h)(3)(i)(A) of this standard when the employee chooses to use a PAPR and it provides adequate protection to the employee.

(iii) Employers must provide employees with an air-purifying half mask respirator, other than a filtering facepiece respirator, whenever the employees perform:

(A) Class II or Class III asbestos work for which no negative exposure assessment is available.

(B) Class III asbestos work involving disturbance of TSI or surfacing ACM or PACM.

(iv) Employers must provide employees with:

(A) A tight-fitting powered air-purifying respirator or a full facepiece, supplied-air respirator operated in the pressure-demand mode and equipped with either HEPA egress cartridges or an auxiliary positive-pressure, self-contained breathing apparatus (SCBA) whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be at or below 1 f/cc as an 8-hour time-weighted average (TWA).

(B) A full facepiece supplied-air respirator operated in the pressure-demand mode and equipped with an auxiliary positive-pressure SCBA whenever the employees are in a regulated area performing Class I asbestos work for which a negative exposure assessment is not available and the exposure assessment indicates that the exposure level will be above 1 f/cc as an 8-hour TWA.

* * * * *

■ 25. In § 1926.1127, remove Table 1 in paragraph (g)(3)(i) and revise paragraph (g)(3)(i) to read as follows:

§ 1926.1127 Cadmium.

* * * * *

(g) * * *

(3) * * *

(i) Employers must:

(A) Select, and provide to employees, the appropriate respirators specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134.

(B) Provide employees with full facepiece respirators when they experience eye irritation.

(C) Provide HEPA filters for powered and non-powered air-purifying respirators.

* * * * *

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF LABOR AND INDUSTRY

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

Roll-over Protective Structures
for the Construction Industry and the Agriculture Industry, Final Rule;
Corrections and Technical Amendments

16VAC25-175-1926.1002;
and Appendix "A" to Subpart "W" of 16VAC25-175.

16VAC 25-190-1928.52; 16VAC 25-190-1928.53
and Appendix "B" to Subpart "C" of 16VAC25-190.

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption federal OSHA's revised final rule on Roll-Over Protective Structures in Construction (§1926.1002) and agriculture (§§1928.52 and 1928.53), as published in 71 FR 41127 on July 20, 3006.

The proposed effective date is for March 15, 2007.

II. Summary of the Amendment.

Federal OSHA published corrections and Technical Amendments to its direct final rule on Roll-Over Protective Structures (ROPS) in construction (1926.1002) and agriculture

(1928.53) on December 29, 2005. No adverse comments were received. In addition to

editorial corrections, federal OSHA made technical changes to improve the consistency among the figures used in the standards and replaced a number of figures with new computer-generated images.

III. Basis, Purpose and Impact of the Amendment.

A. Basis.

In 1996, OSHA removed the ROPS standards and replaced them with references to national consensus standards for ROPS testing requirements.

OSHA identified several substantive differences in testing options between the national consensus standards and the original pre-1996 OSHA developed ROPS standards. In its December 29, 2005 direct final rule, OSHA rectified this situation by reinstating its original construction and agriculture standards that regulate the testing of roll-over protective structures (ROPS) used to protect employees who operate wheel-type tractors. This revision provides equipment manufacturers with additional ROPS testing options without reducing employee protections. In reinstating the original standards, OSHA reinstated the cold-temperature testing and impact-testing option in 29 CFR 1926.1001, 1002 and 1003, and reinstated static or dynamic testing at 00 f as well as the testing exemption in the original ROPS.

B. Purpose.

Federal OSHA made corrections and technical amendments to the ROPS standards in response to comments received, as a result of editorial errors found in the ROPS standards published in the direct final rule, and to improve consistency among the figures generated for these standards.

C. Impact on Employers.

These corrections and technical amendments do not change the substantive safety requirements of the ROPS standards. As with other standards, the direct final rule applies to employers in construction and agriculture so that their employees may operate safe equipment (i.e., wheel-type tractors), however, its impact directly affects equipment manufacturers who must design and build machines that have ROPS to meet the testing criteria specified in OSHA's ROPS standards which then are available to be purchased by employers.

Employers in the construction and agriculture industries who purchase and whose employees use wheel-type tractors would be in violation of OSHA's ROPS standards and are subject to penalty if the tractors do not have protective

structures meeting these amended standards. Therefore, employers in the construction and agriculture industries would be affected indirectly if changing the ROPS testing procedures were to change the price of equipment.

The corrections and technical amendments will improve the clarity of the ROPS standards and, thus, improve compliance with the ROPS standards.

Fewer than 10 original equipment manufacturers nationally are directly affected by the direct final rule and OSHA states that none of the changes impose conditions that would generate new costs for these equipment manufacturers, including small manufacturing firms.

D. Impact on Employees.

No significant impact is anticipated on employees.

E. Impact on the Department of Labor and Industry.

No significant impact is anticipated on the Department.

Federal regulations 29 CFR 1953.23(a) and (b) require that Virginia, within six months of the occurrence of a federal program change, to adopt identical changes or promulgate equivalent changes which are at least as effective as the federal change. The Virginia Code reiterates this requirement in § 40.1-22(5). Adopting these revisions will allow Virginia to conform to the federal program change.

Contact Person:

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RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board adopt the Corrections and Technical Amendments to federal OSHA's direct final rule on Roll-Over Protective Structures in Construction (§1926.1002) and agriculture (§§1928.52 and 1928.53), as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c), with an effective date of March 15, 20007.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation which has been adopted in accordance with the above-cited subsection A.4(c) of the Administrative Process Act.

Roll-over Protective Structures
for the Construction Industry and the Agriculture Industry, Final Rule;
Corrections and Technical Amendments

16VAC25-175-1926.1002;
and Appendix "A" to Subpart "W" of 16VAC25-175

16VAC 25-190-1928.52; 16VAC 25-190-1928.53
and Appendix "B" to Subpart "C" of 16VAC25-190

As Adopted by the

Safety and Health Codes Board

Date: _____

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: _____

16VAC25-175-1926.1002;
and Appendix "A" to Subpart "W" of 16VAC25-175

16VAC 25-190-1928.52; 16VAC 25-190-1928.53
and Appendix "B" to Subpart "C" of 16VAC25-190

When the regulations, as set forth in the Corrections and Technical Amendments to the direct final rule on Roll-Over Protective Structures in Construction and Agriculture, 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
July 20, 2006	March 15, 2006

Amended Standards

■ Based on the explanations provided by the preamble to this document, OSHA is amending 29 CFR parts 1926 and 1928 as follows:

PART 1926—[AMENDED]

Subpart W—[Amended]

■ 1. The authority citation for subpart W of part 1926 continues to read as follows:

Authority: Section 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); and Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (65 FR 50017), or 5–2002 (67 FR 65008), as applicable.

■ 2. Revise paragraph (h)(1)(v) of § 1926.1002 to read as follows:

§ 1926.1002 Protective frames (roll-over protective structures, known as ROPS) for wheel-type agricultural and industrial tractors used in construction.

* * * * *

(h) * * *

(1) * * *

(v) Means shall be provided for indicating the maximum instantaneous deflection along the line of impact. A simple friction device is illustrated in Figure W–18.

* * * * *

■ 3. In Appendix A to subpart W, remove existing Figures W–14 through W–28 and add in their place new Figures W–14 through W–28. [insert figures W–14 through W–28]

* * * * *

PART 1928—[AMENDED]

Subpart C—[Amended]

■ 4. The authority citation to part 1928 continues to read as follows:

BILLING CODE 4510–26–P

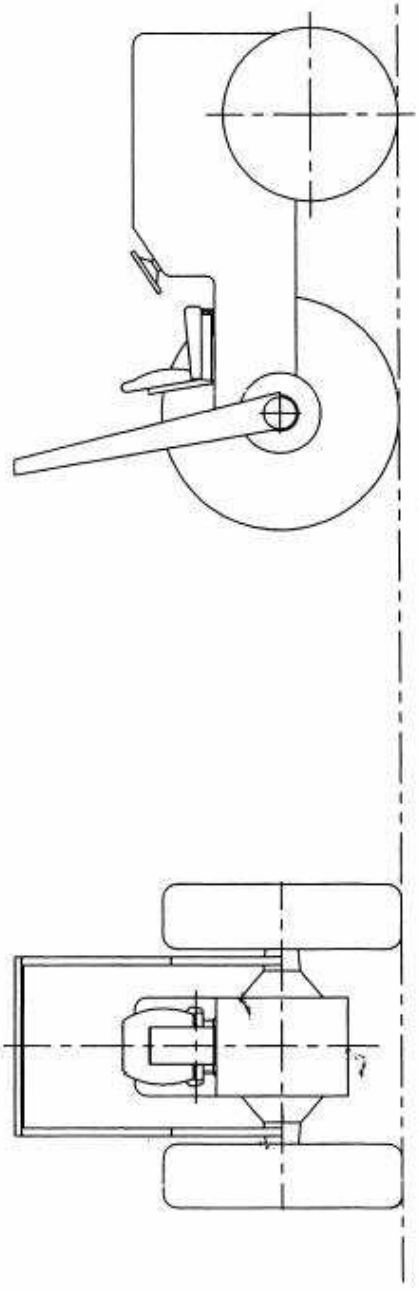


FIGURE W-14 - TYPICAL FRAME CONFIGURATION.

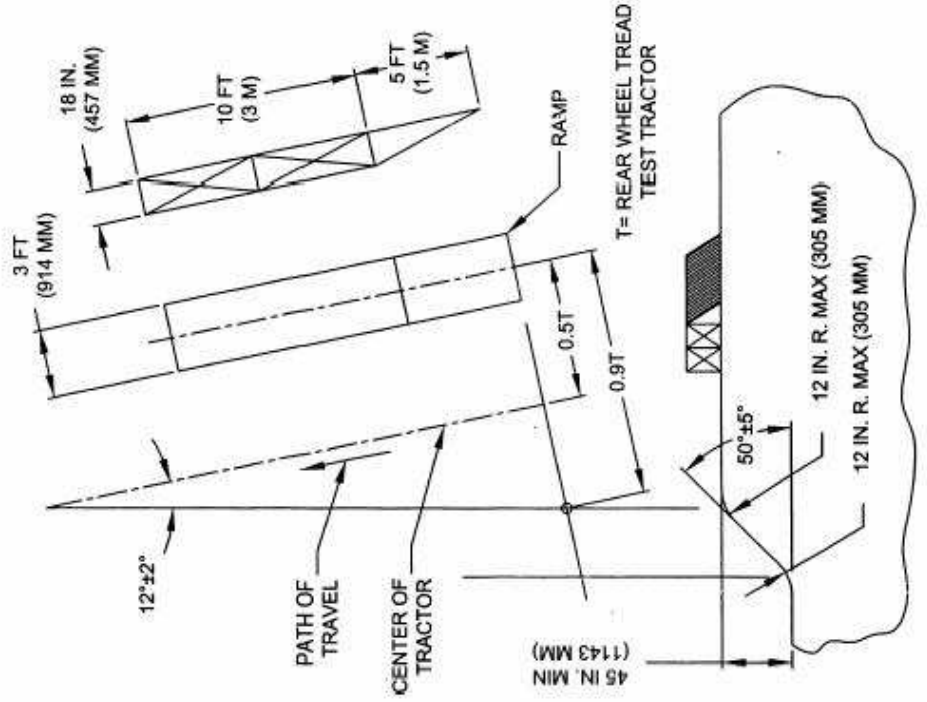


FIGURE W-15 - SIDE OVERTURN BANK AND RAMP.

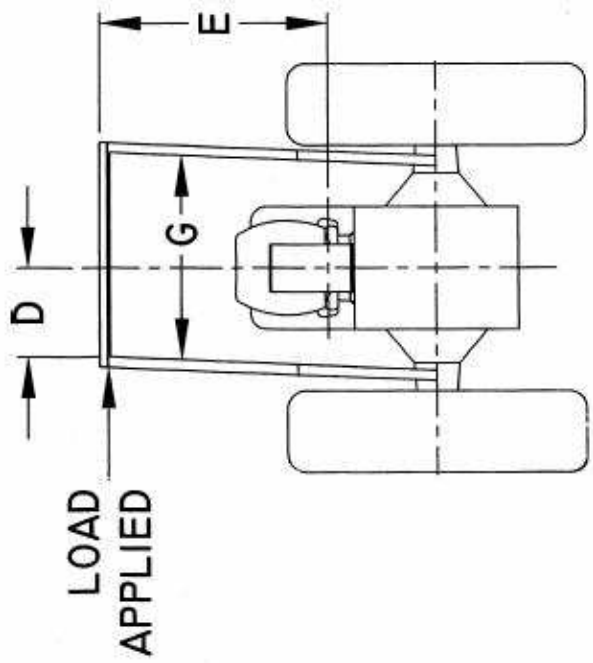


FIGURE W-16 - SIDE LOAD APPLICATION.

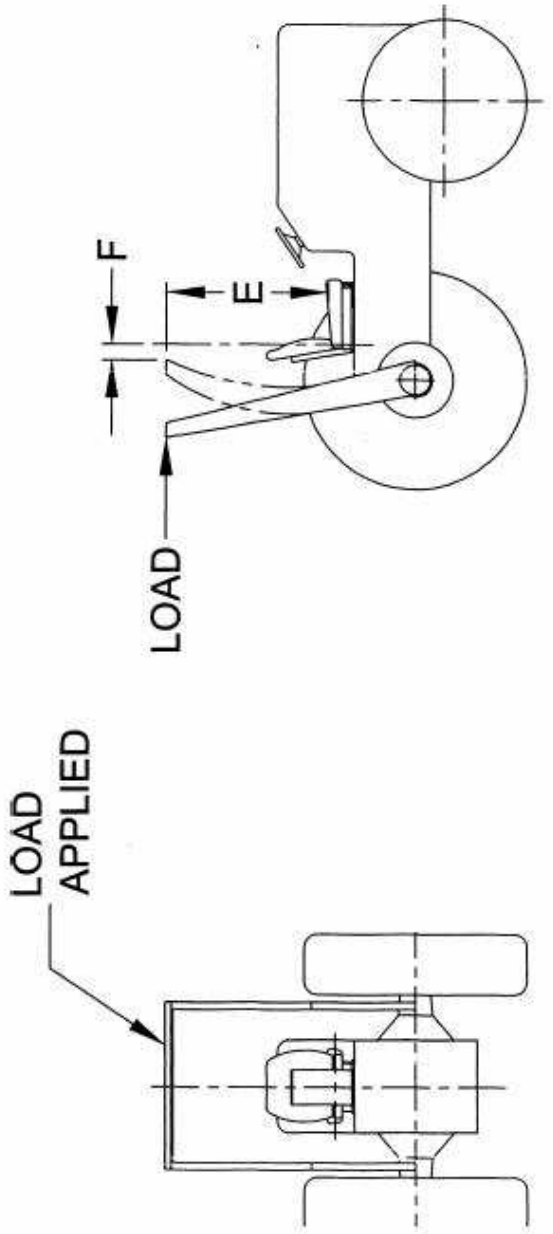


FIGURE W-17 - REAR LOAD APPLICATION.

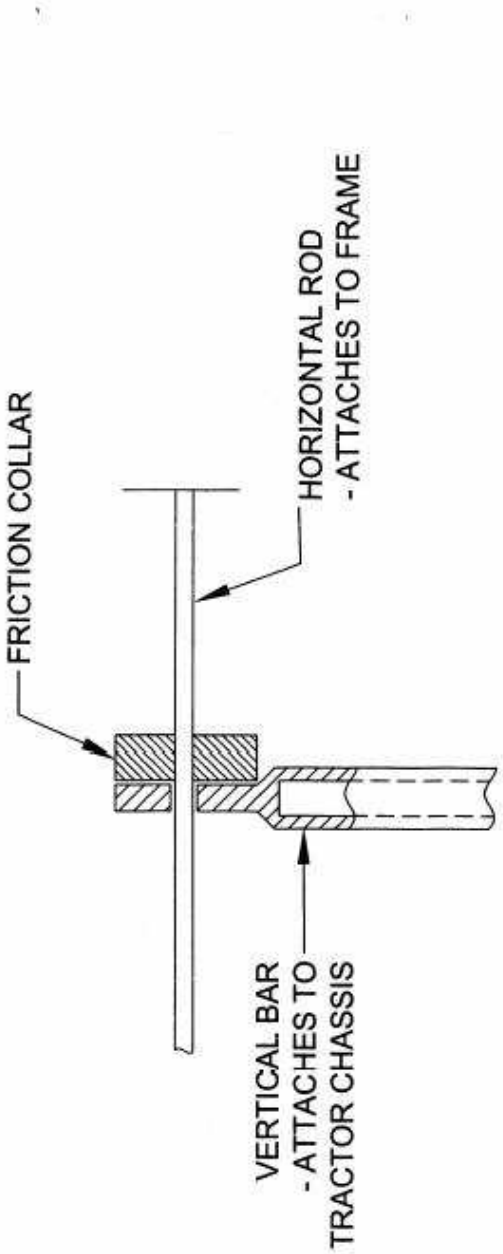


FIGURE W-18 - METHOD OF MEASURING INSTANTANEOUS DEFLECTION.

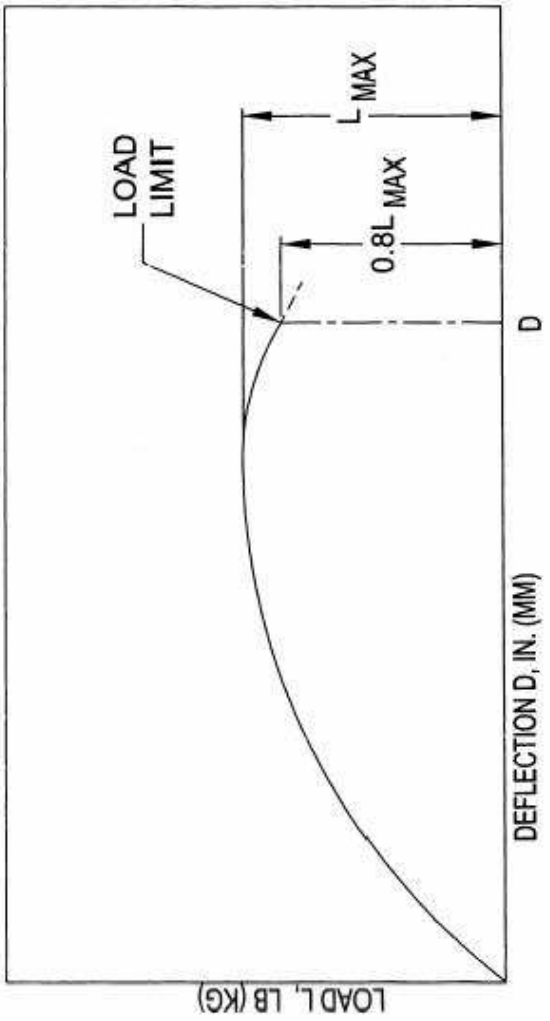


FIGURE W-19 - TYPICAL L-D DIAGRAM.

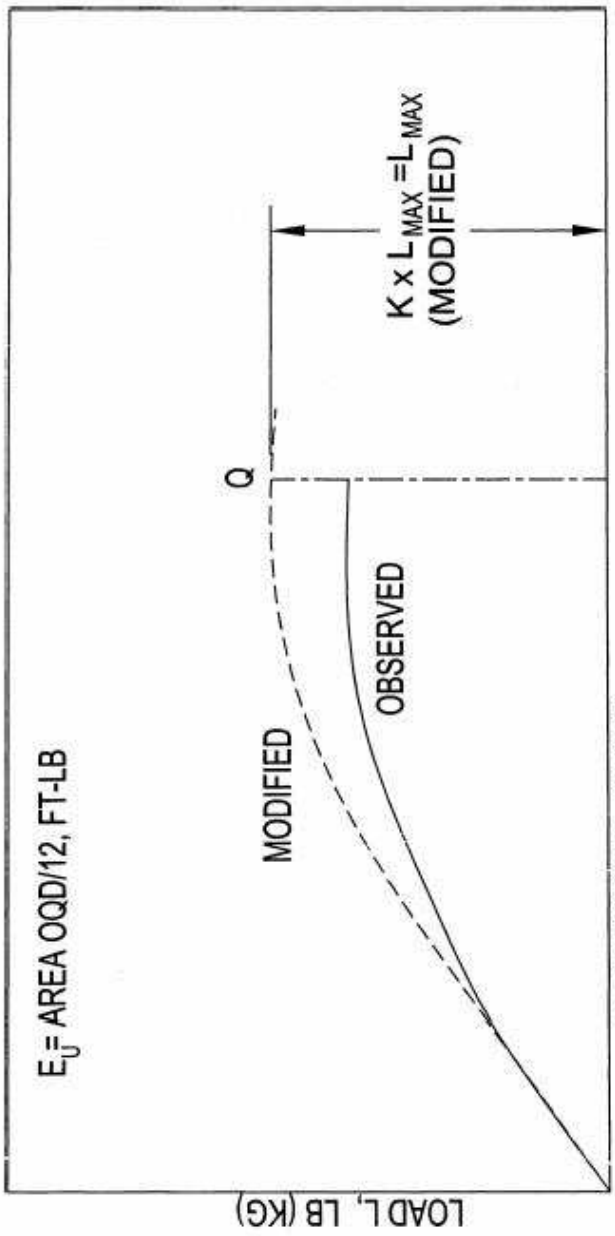


FIGURE W-20 - TYPICAL MODIFIED L_M-D_M DIAGRAM.

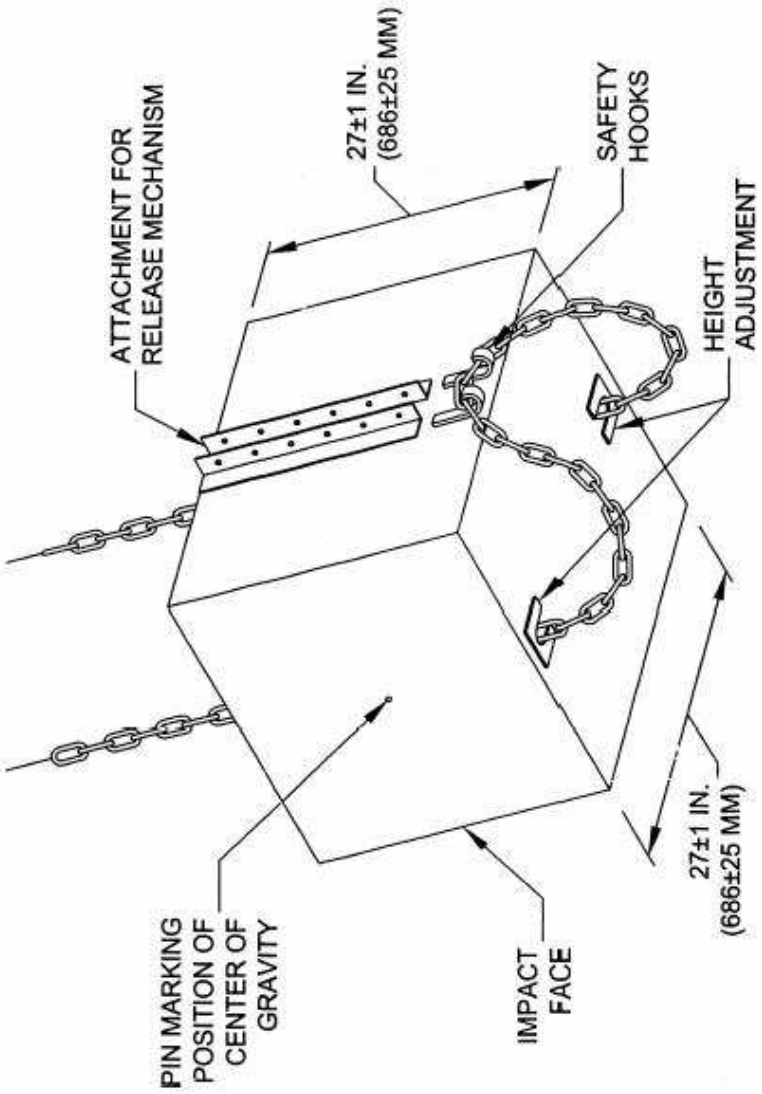


FIGURE W-21 - PENDULUM.

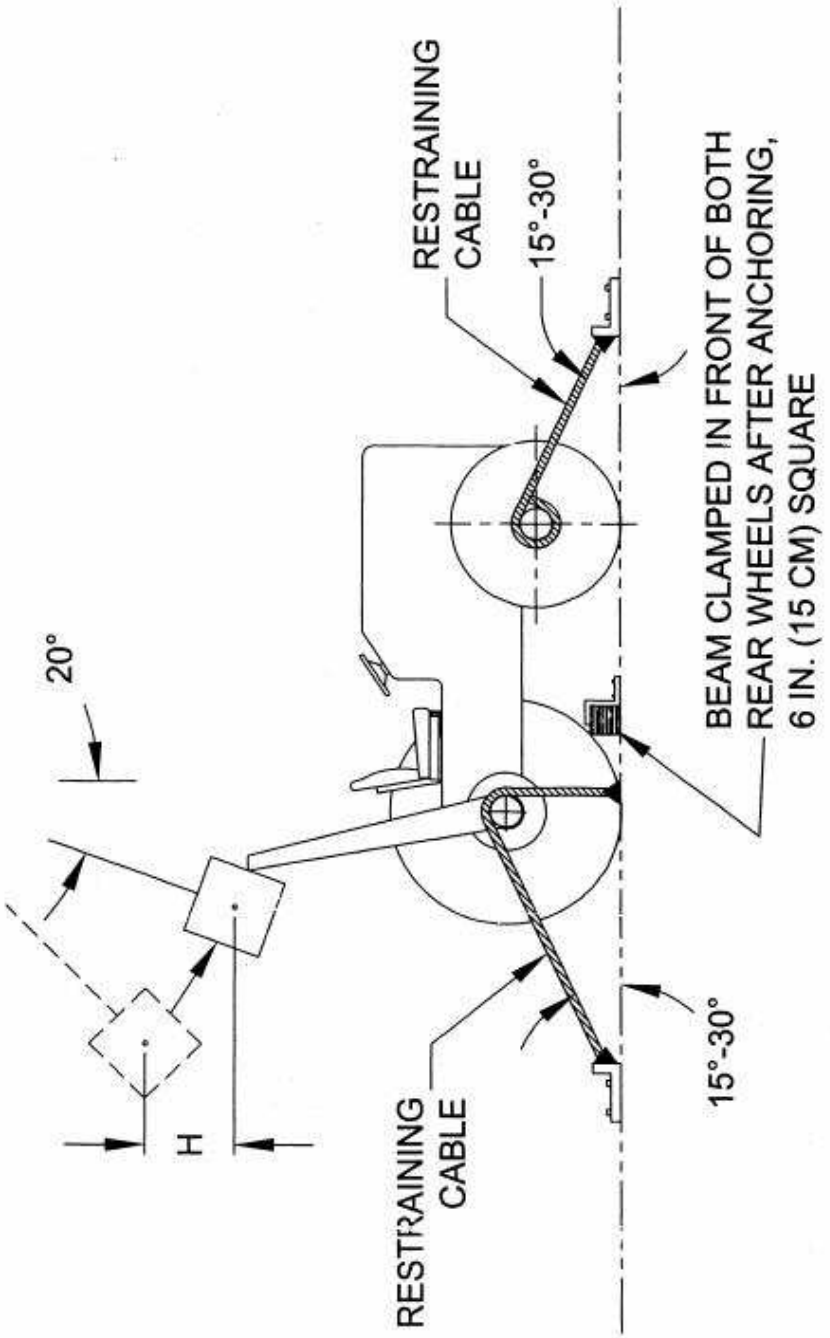


FIGURE W-22 - METHOD OF IMPACT FROM REAR.

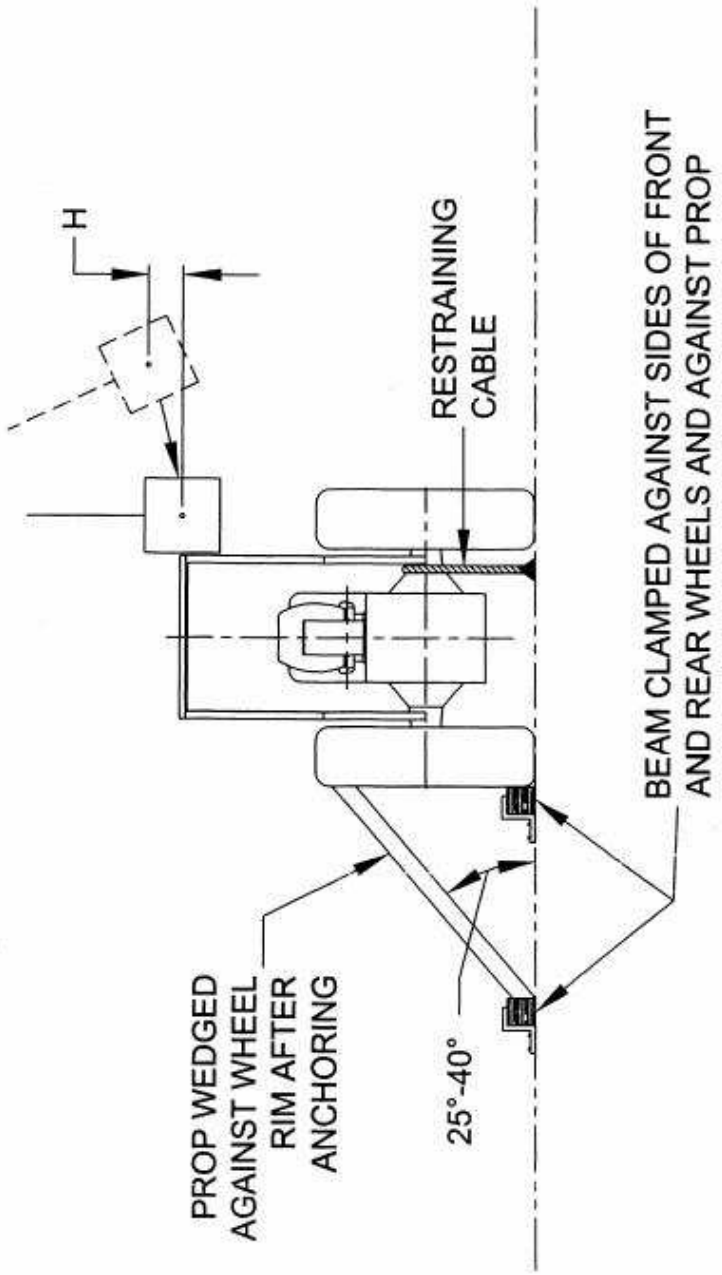
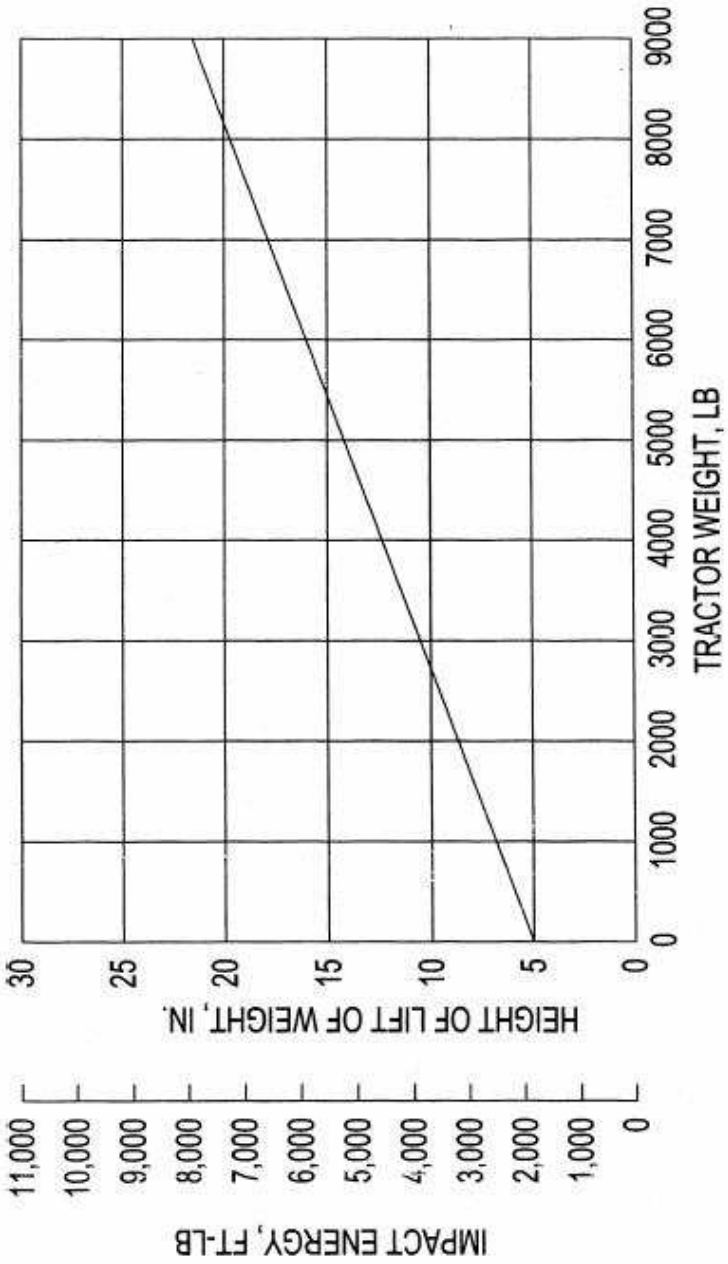


FIGURE W-23 - METHOD OF IMPACT FROM SIDE.



NOTATION OF FORMULAE
H=4.92+0.00190W or H'=125+0.107W'
W=tractor weight specified by 29 CFR 1926.1002(e)(1) and (e)(3) in lbs (W' in kg).

FIGURE W-24 - IMPACT ENERGY AND CORRESPONDING LIFT HEIGHT OF 4,410 lb (2,000 kg) WEIGHT.

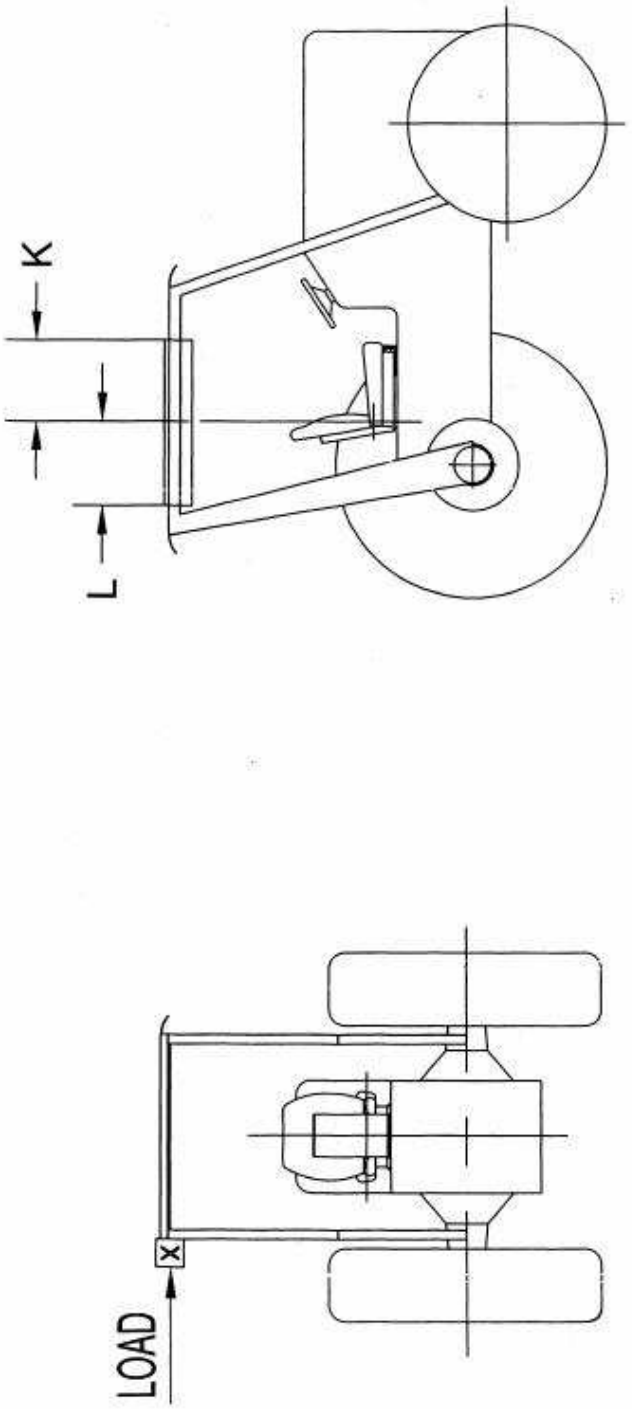


FIGURE W-25 - LOCATION OF SIDE LOAD.

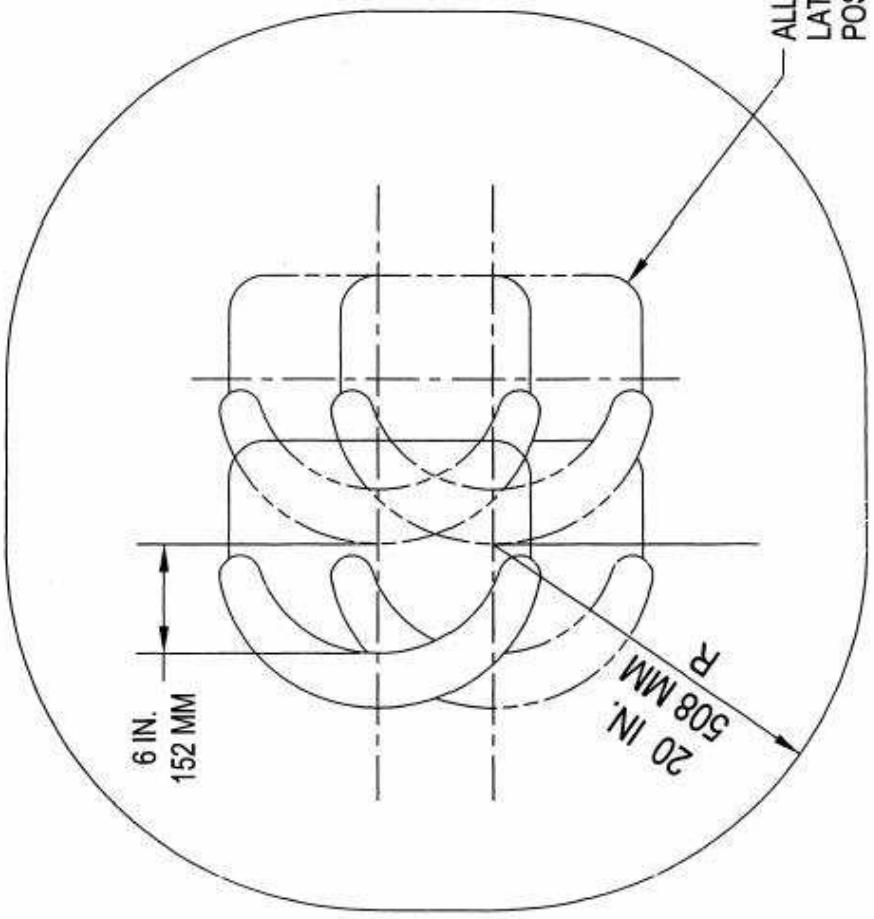


FIGURE W-26 - ZONE OF PROTECTION FOR DROP TEST.

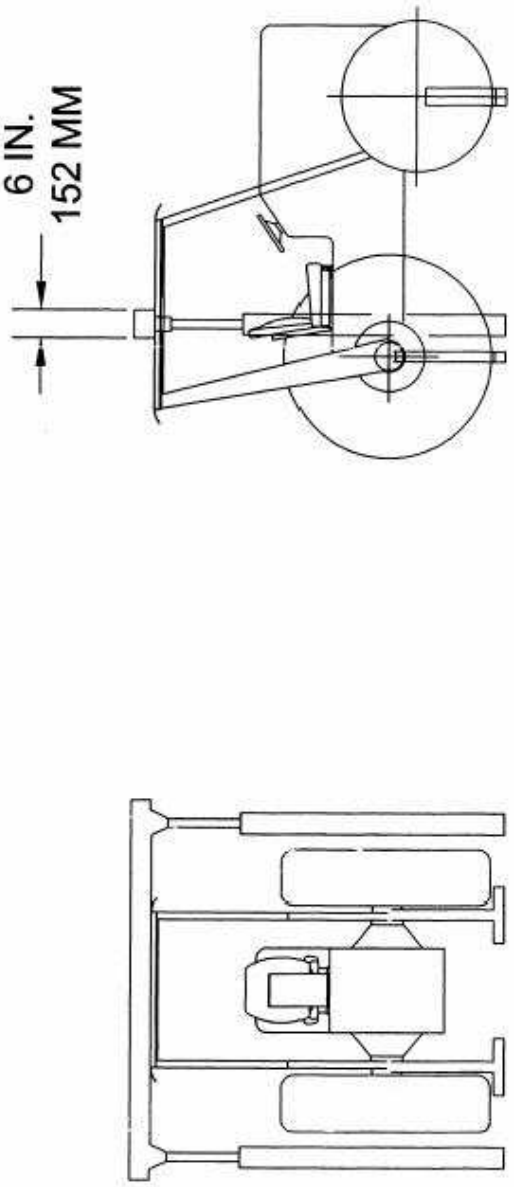


FIGURE W-27 - METHOD OF LOAD APPLICATION FOR CRUSH TEST.

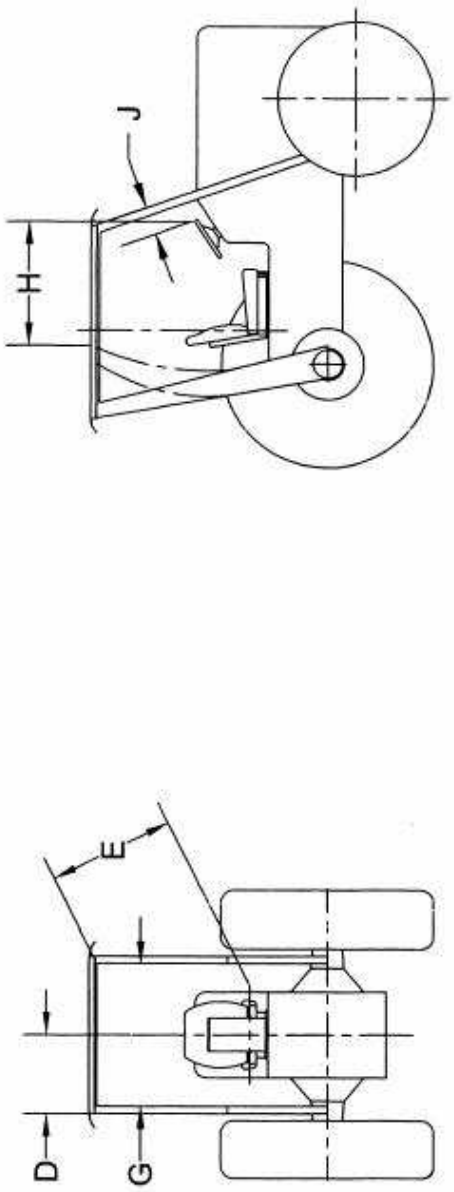


FIGURE W-28 - PROTECTED ZONE DURING CRUSH AND DROP TEST.

BILLING CODE 4510–26–C

Authority: Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); and Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (65 FR 50017) or 5–2002 (67 FR 65008) as applicable; and 29 CFR part 1911.

Section 1928.21 also issued under Section 29, Hazardous Materials Transportation Uniform Safety Act of 1990 (Pub. L. 101–615, 104 Stat. 3244 (49 U.S.C. 1801–1819 and 5 U.S.C. 553)).

■ 5. Revise paragraph (d)(2)(ii) of § 1928.53 to read as follows:

§ 1928.53 Protective enclosures for wheel-type agricultural tractors—test procedures and performance requirements.

* * * * *

(d) * * *

(2) * * *

(ii) The following definitions shall apply:

W = Tractor weight (see 29 CFR 1926.51(a)) in lb (W' in kg);
E_{is} = Energy input to be absorbed during side loading in ft-lb (E'_{is} in J [joules]);
$E_{is} = 723 + 0.4\ W$ ($E'_{is} = 100 + 0.12\ W'$);
E_{ir} = Energy input to be absorbed during rear loading in ft-lb (E'_{ir} in J);
$E_{ir} = 0.47\ W$ ($E'_{ir} = 0.14\ W'$);
L = Static load, lbf [pounds force], (N) [newtons];
D = Deflection under L, in. (mm);
L–D = Static load-deflection diagram;
L_{max} = Maximum observed static load;
Load Limit = Point on a continuous L–D curve where the observed static load is 0.8 L_{max} on the down slope of the curve (see Figure C–5);
E_w = Strain energy absorbed by the protective enclosure in ft-lbs (J); area under the L–D curve;
FER = Factor of energy ratio;
$FER_{is} = E_w/E_{is}$; and
$FER_{ir} = E_w/E_{ir}$.

* * * * *

■ 6. In Appendix B to subpart C, remove existing Figures C–1 through C–16 and add in their place new Figures C–1 through C–16.

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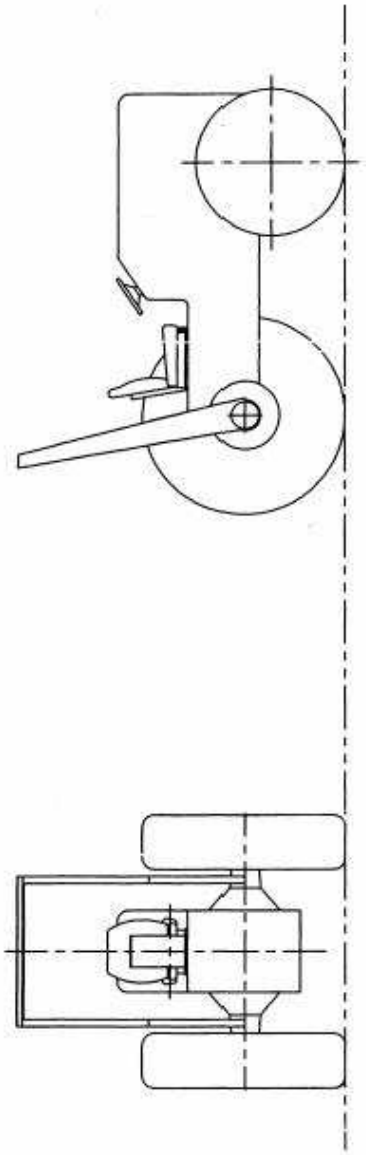


FIGURE C-1 - TRACTOR WITH TYPICAL PROTECTIVE FRAME.

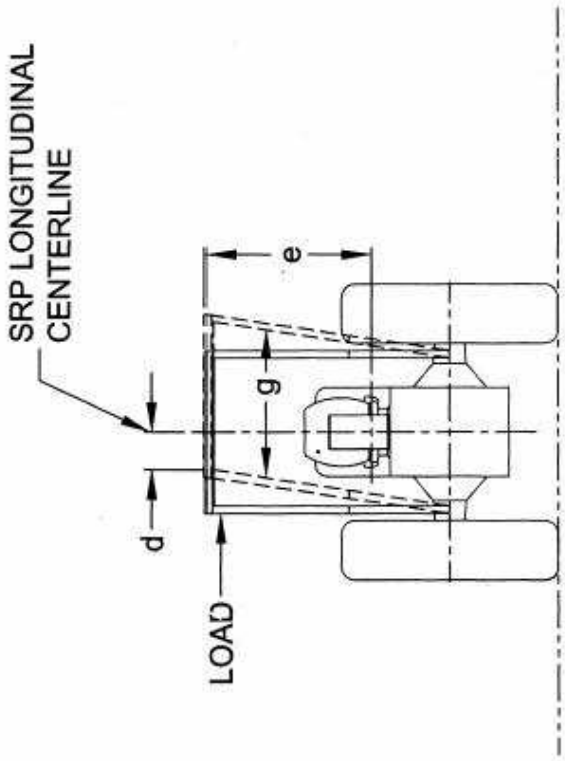


FIGURE C-2 - SIDE LOAD APPLICATION.

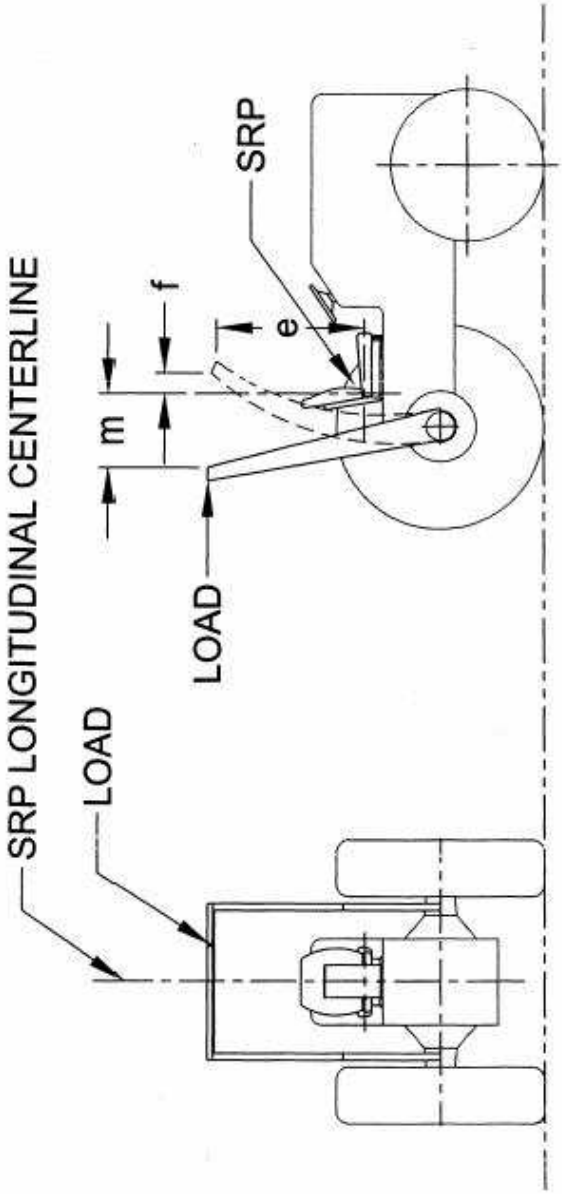


FIGURE C-3 - REAR LOAD APPLICATION.

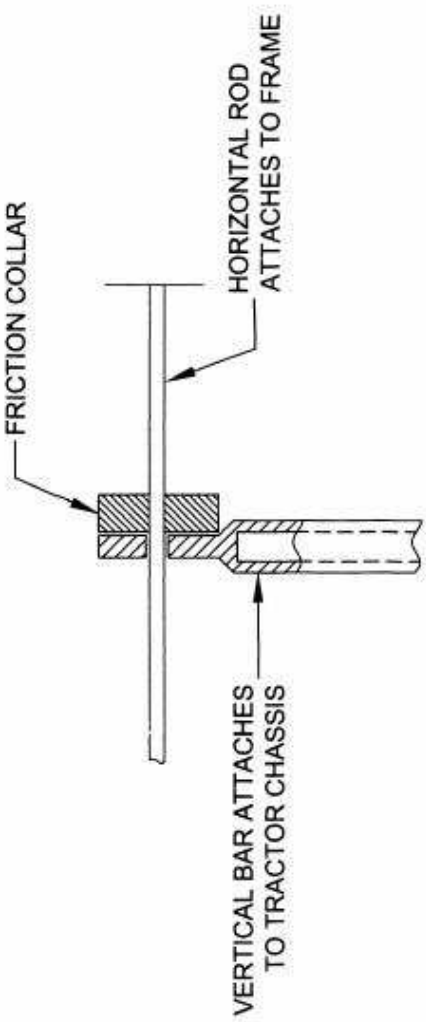


FIGURE C-4 - METHOD OF MEASURING INSTANTANEOUS DEFLECTION.

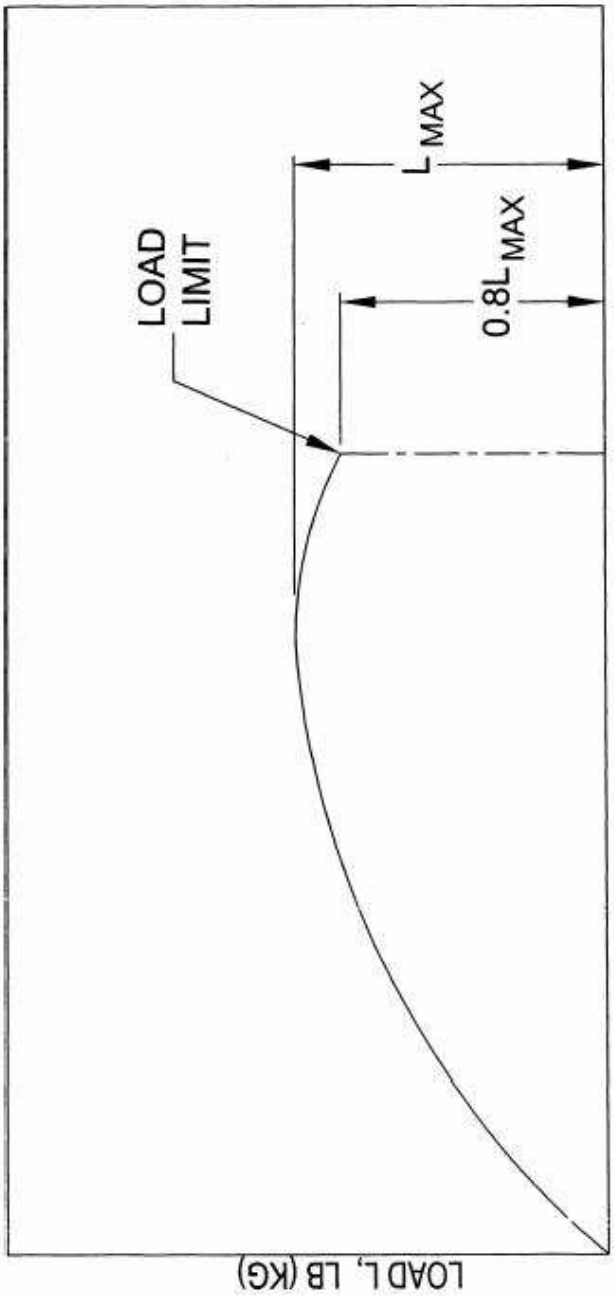


FIGURE C-5 - TYPICAL L-D DIAGRAM.

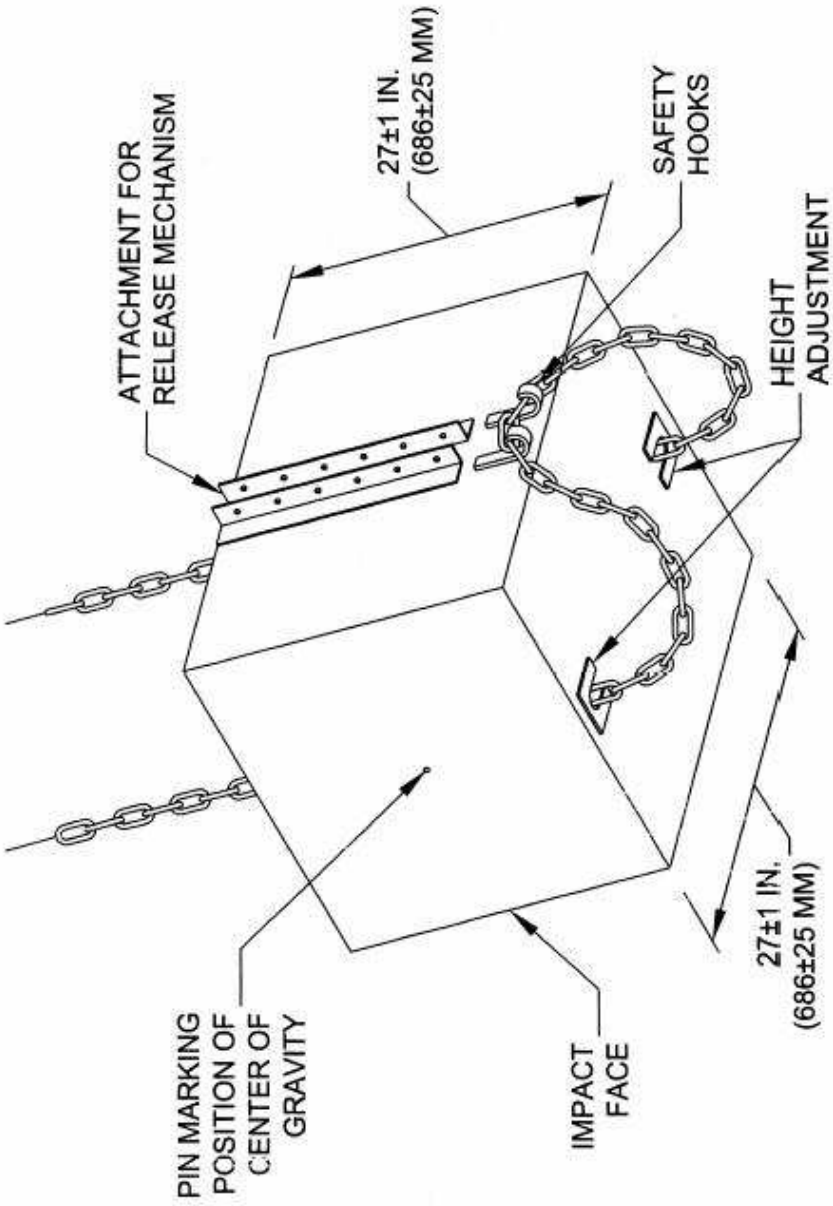
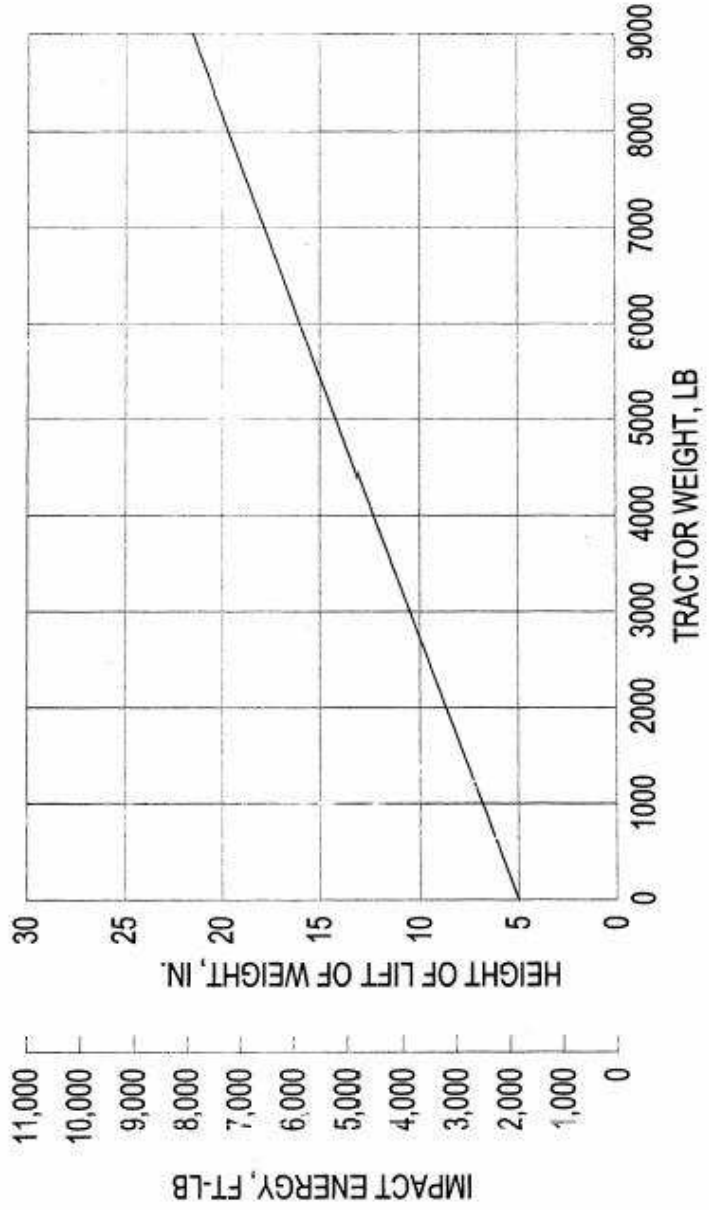


FIGURE C-6 - PENDULUM.



NOTATION OF FORMULAE
H=4.92+0.00190W or H'=125+0.107W'
W=tractor weight specified by 29 CFR 1928.51(a) in lbs (W' in kg).

FIGURE C-7 - IMPACT ENERGY AND CORRESPONDING LIFT HEIGHT OF 4,410 LB (2,000 kg) WEIGHT.

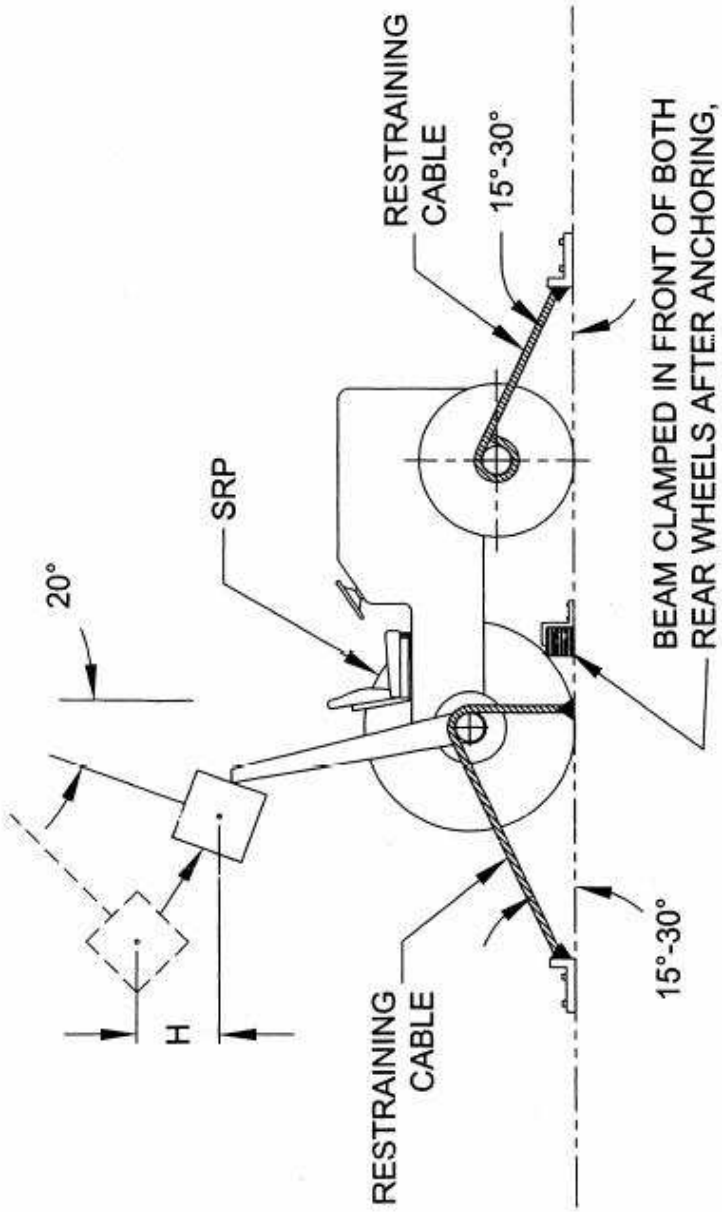


FIGURE C-8 - REAR IMPACT APPLICATION.

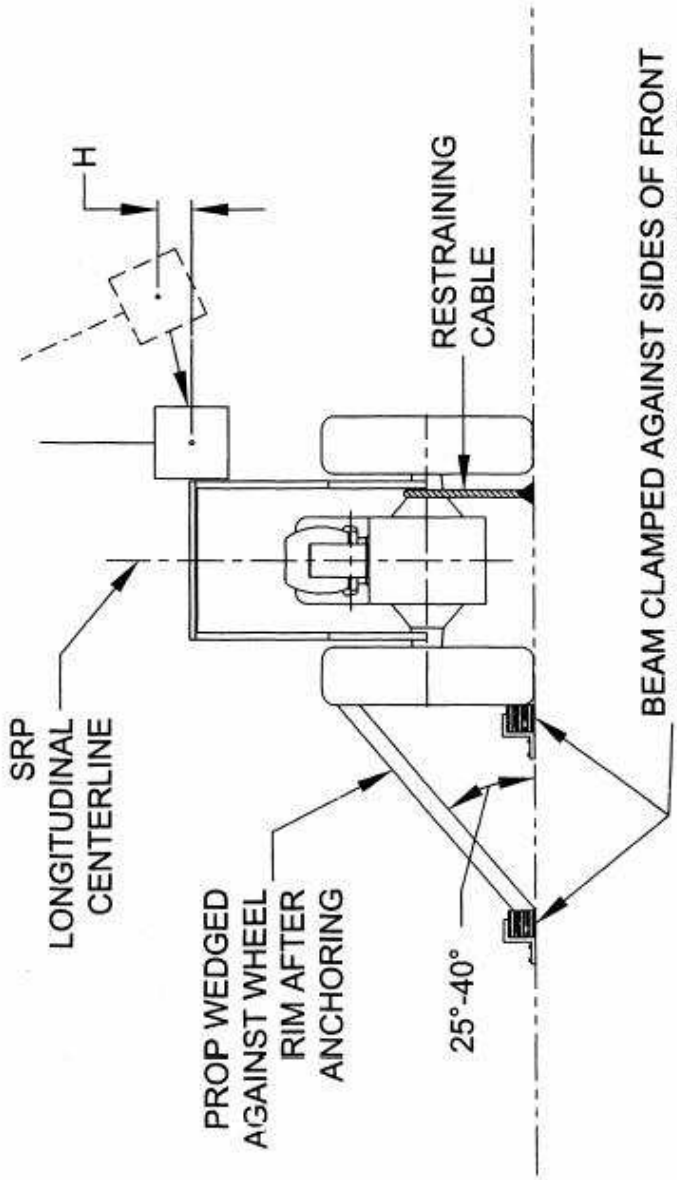


FIGURE C-9 - SIDE IMPACT APPLICATION.

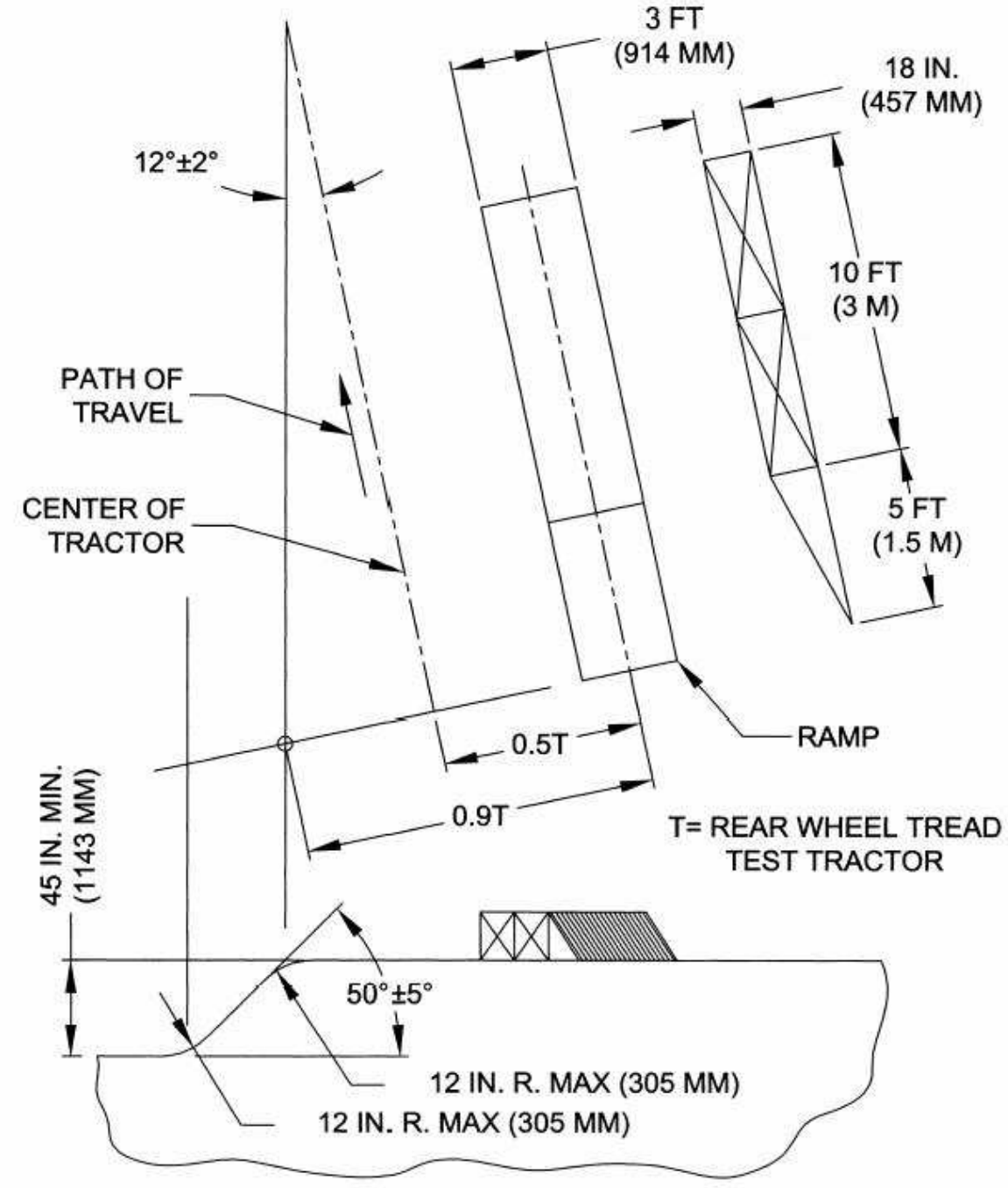


FIGURE C-10 - SIDE OVERTURN BANK AND RAMP.

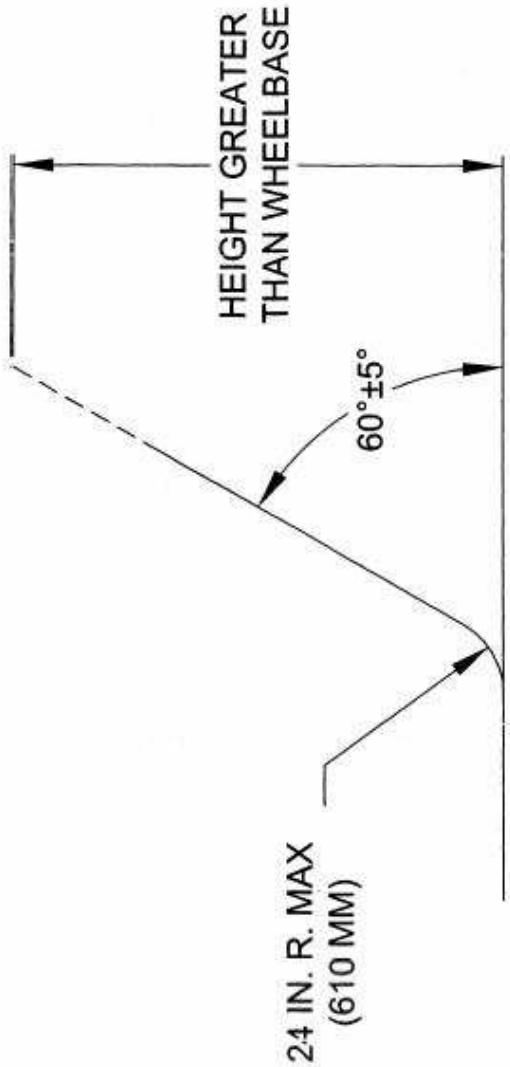


FIGURE C-11 - TYPICAL REAR OVERTURN BANK.

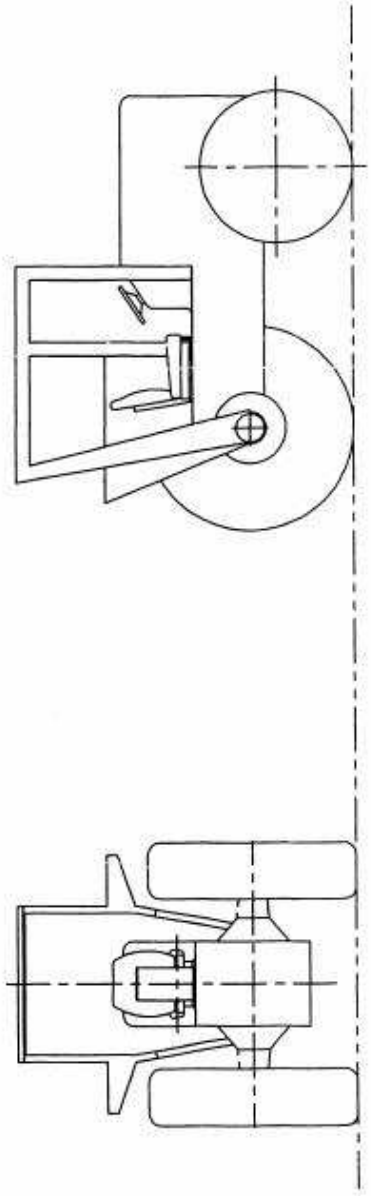


FIGURE C-12 - TRACTOR WITH TYPICAL PROTECTIVE ENCLOSURE.

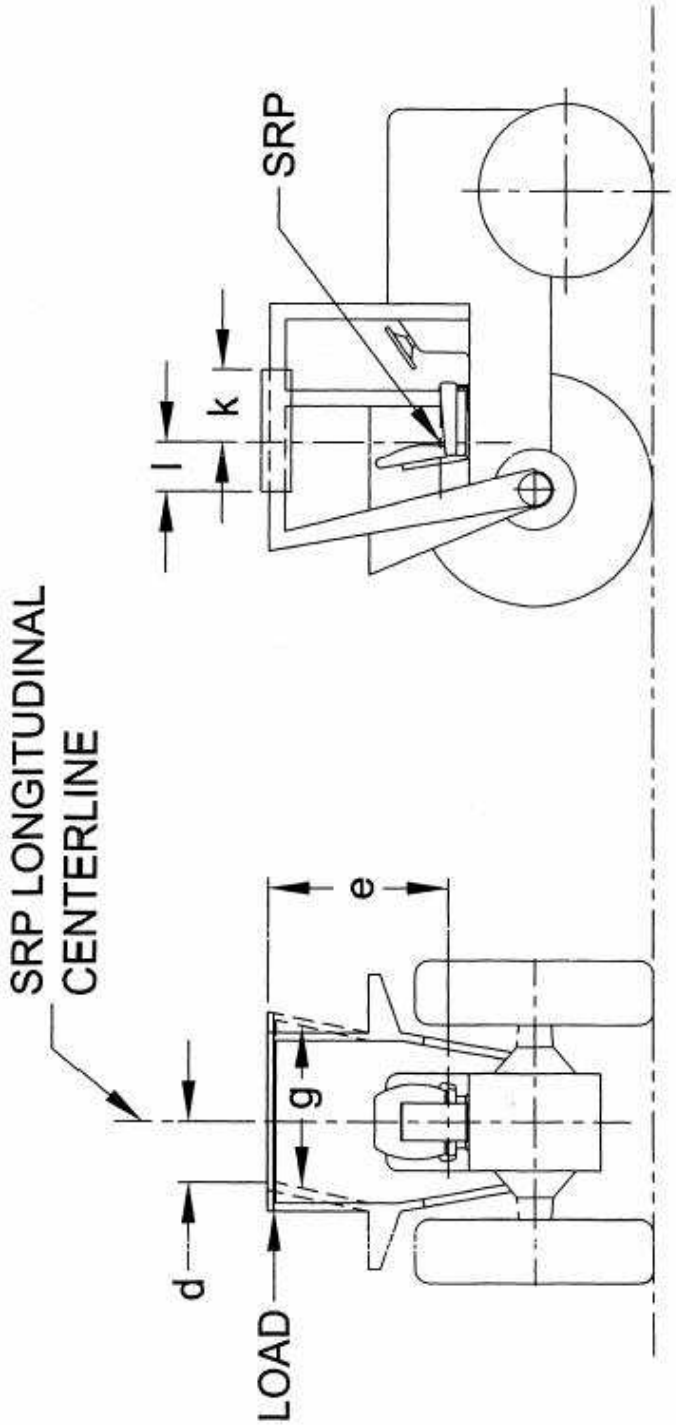


FIGURE C-13 - SIDE LOAD APPLICATION.

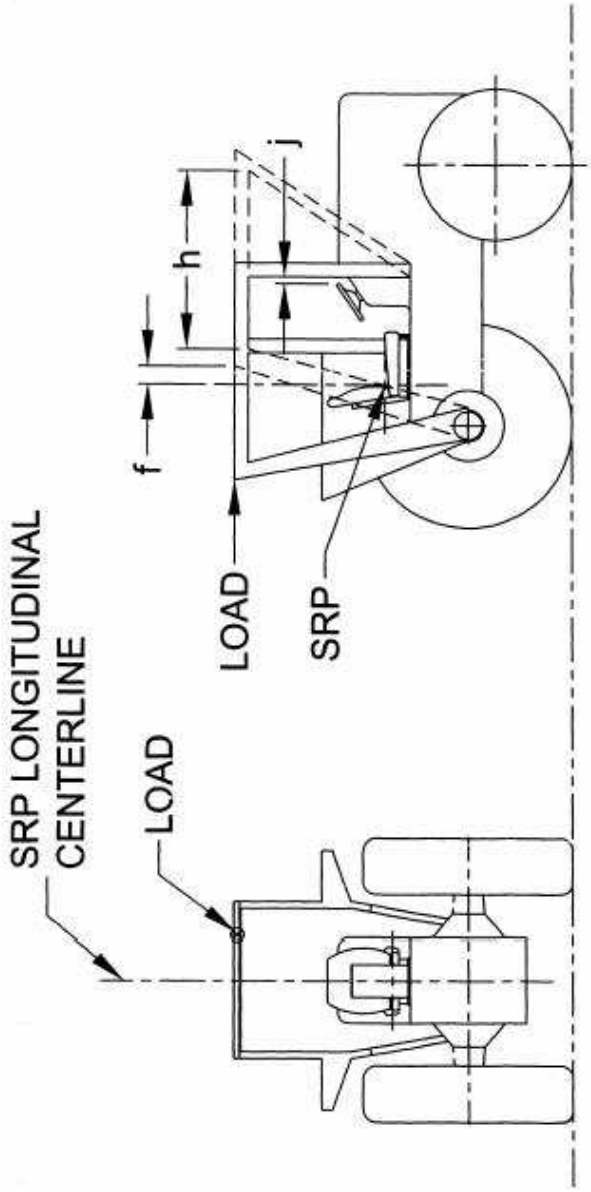


FIGURE C-14 - REAR LOAD APPLICATION.

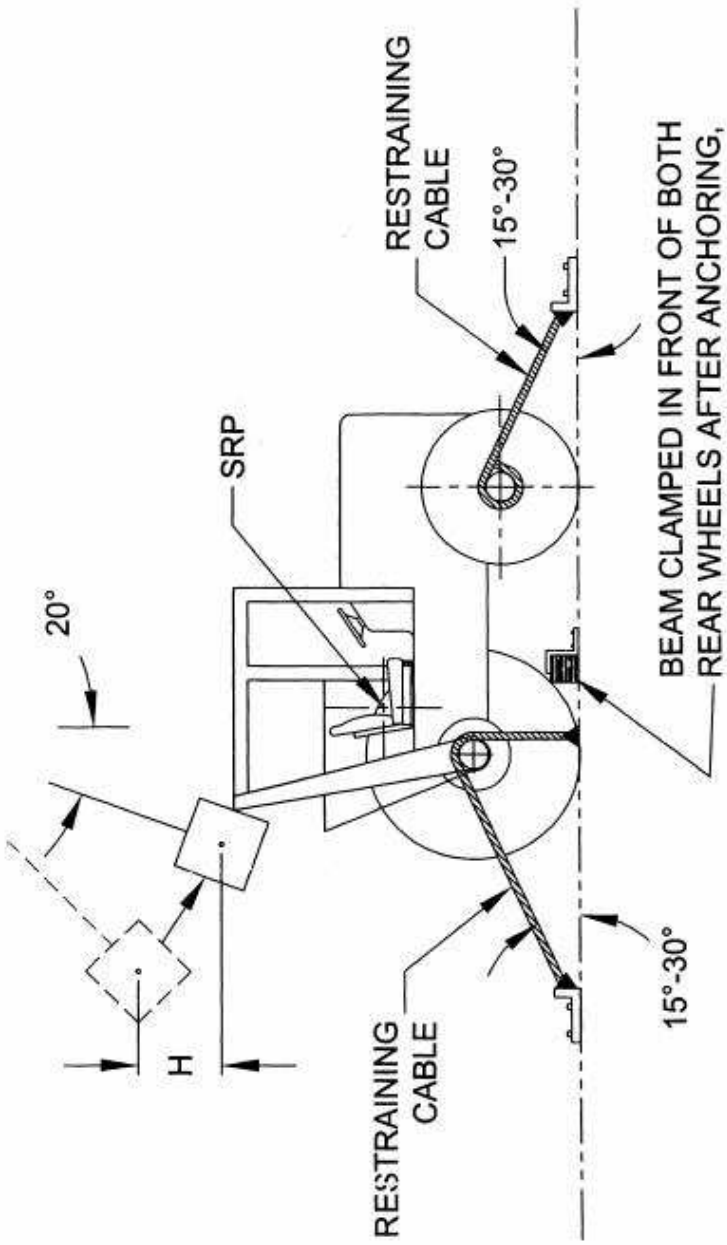


FIGURE C-15 - REAR IMPACT APPLICATION.

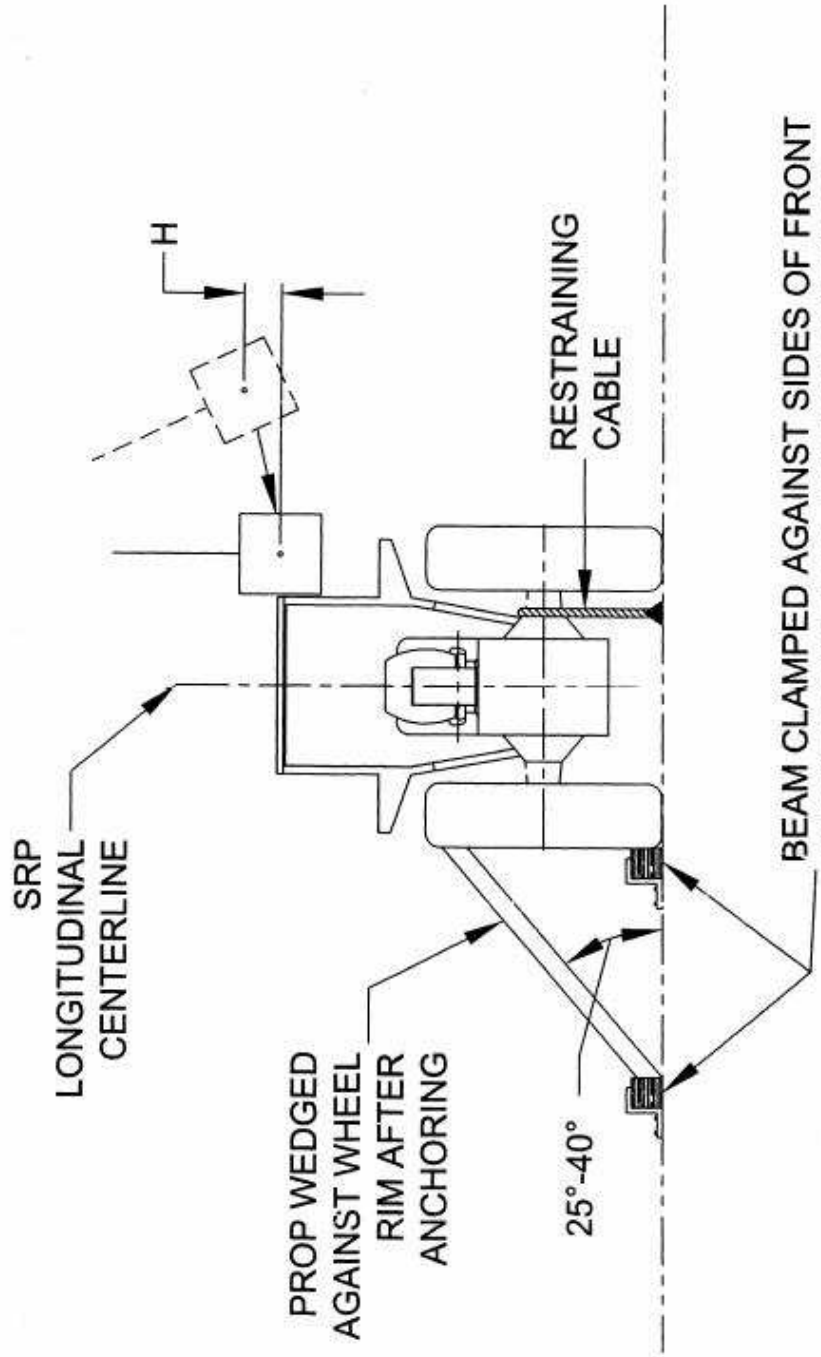


FIGURE C-16 - SIDE IMPACT APPLICATION.

* * * * *

[FR Doc. 06–6327 Filed 7–19–06; 8:45 am]
BILLING CODE 4510–26–C

COMMONWEALTH of VIRGINIA

DEPARTMENT OF LABOR AND INDUSTRY

C. RAY DAVENPORT

COMMISSIONER

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VIRGINIA SAFETY AND HEALTH CODES BOARD

BRIEFING PACKAGE

FOR DECEMBER 6, 2006

Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment, §§1915.5, 1915.505 and 1915.507; Direct Final Rule

I. Action Requested.

The Virginia Occupational Safety and Health (VOSH) Program requests the Safety and Health Codes Board to consider for adoption federal OSHA's direct final rule, Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment, as published in 71 FR 60843 on October 17, 2006.

The proposed effective date is for March 15, 2007.

II. Summary of the Direct Final Rule.

On September 15, 2004, federal OSHA promulgated a new fire protection rule for shipyard employment that incorporated by reference 19 National Fire Protection Association (NFPA) standards. Ten of those NFPA standards had been updated by NFPA since the fire protection rule was proposed and an additional NFPA standard has been updated since the final

rule was published.

In this direct final rule, federal OSHA has replaced the references to those eleven NFPA standards by adding 10 of the most recent versions. There are only10 NFPA standards replacing eleven NFPA standards because the NFPA combined two of its standards, NFPA 11-1998 and NFPA 11A-1999, into the NFPA 11-2002 standard covering foam fire extinguishing systems.

The sections amended by this direct final rule include the following: §§1915.5, Incorporation by reference; 1915.505 (e)(3)(v), Fire response; and 1915.507 (b)(1), (b)(2), (c)(6), (d)(1), (d)(2), (d)(3) and (d)(5), Land-side fire protection system.

The changes to the NFPA standards include:

- Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services – NFPA 1981-- 2002. This was revised to add requirements for heads-up displays (HUD) that provide the user of a self-contained breathing apparatus (SCBA) with information regarding breathing air supply status, alert the user when the breathing air supply is at 50 percent of full, and where the HUD is powered by battery power source, warn the user when the HUD only has 2 more hours of battery power. The updated standard also includes new requirements for a Rapid Intervention Company/Crew (RIC) Universal Air connection (UAC) (or RIC UAC) on all new SCBA.

- Standard for Low-, Medium-, and High-Expansion Foam – BFOA 11-2005 was revised to combine the older NFPA 11 low-expansion foam system requirements with the older NFPA 11A medium- and high-expansion foam provisions.

- Standard for Portable Fire Extinguishers – NFPA 10-2002 was revised to prohibit “extended wand-type” discharge devices on Class K—Fire extinguishers manufactured after 01/01/2002. (Class “K” extinguishers are used for “combustible cooking media” fire hazards in commercial kitchens.) The new version of NFPA 10 allows the use of electronic equipment to monitor the status of portable fire extinguishers an alternative that may be more effective and efficient than manual monitoring.

- National Fire Alarm Code – NFPA 72-2002 was updated to revise fire alarm power supply requirements, to improve the survivability

of fire alarms from attack by fire, and to improve the "supervising stations" used in larger fire alarm systems.

- Standard for the Installation of Sprinkler Systems – NFPA 13-2002 was updated to add the sprinkler installation requirements found in other NFPA standards, to include criteria for solid shelf storage areas, and to make the standard easier for users to reference.

The remaining NFPA standards have been updated to make minor technical and editorial changes and to improve readability by formatting them into a standard layout.

III. Basis, Purpose and Impact of the Standard/Amendment.

A. Basis.

Federal OSHA determined that updating the national consensus standards for fire protection in shipyard employment was suitable for direct final rulemaking since it will enhance OSHA's fire protection in shipyard standard by adding the most current NFPA consensus standards to the OSHA standard.

In this direct final rulemaking, federal OSHA published a final rule in the *Federal Register* with a statement that the rule will go into effect unless a significant adverse comment is received within a specified period of time. An identical proposed rule was published at the same time (see 71 FR 60932). If no significant adverse comments are submitted, the rule goes into effect. If any significant adverse comments are received, federal OSHA withdraws the direct final rule and treats the comments as responses to the proposed rule.

Direct final rulemaking is used where an agency anticipates that a rule will not be controversial, e.g., minor substantive changes to regulations updating incorporated references to the latest edition of national consensus standards, and direct incorporations of mandates from new legislation. (71 FR 60844)

For purposes of this direct final rulemaking, a significant adverse comment is one that explains why the rule would be inappropriate, including challenges to the rules' underlying premise or approach. In determining whether a comment necessitates withdrawal of the direct final rule, OSHA will consider whether the comment raises

an issue serious enough to warrant a substantive response in a notice-and-comment process. (Id.)

A comment recommending additional changes will not be considered a significant adverse comment unless the comment states why the direct final rule would be ineffective without the addition. If a timely significant adverse comment is received, federal OSHA will publish a notice of significant adverse comment in the *Federal Register* withdrawing this direct final rule no later than January 16, 2007.

B. Purpose.

The purpose of this direct final rule is to add ten recently updated NFPA standards to the standard for fire protection in shipyard employment to enhance the standard.

C. Impact on Employers.

Federal OSHA concluded that incorporating the new versions of the NFPA standards will not impose any additional costs on any private or public sector entity. Since the rule imposes no additional costs on employers, OSHA certifies that it would not have a significant impact on a substantial number of small entities.

D. Impact on Employees.

Federal OSHA believes that this direct final rule may enhance the employee protections currently in place through incorporated references to NFPA consensus standards. (71 FR 60845)

Federal OSHA's changes will benefit the safety of employees by requiring employers to comply with the newer standards which it views as more protective than the older standards.

E. Impact on the Department of Labor and Industry.

No impact is anticipated on the Department.

Federal regulations 29 CFR 1953.23(a) and (b) require that Virginia, within six months of the occurrence of a federal program change, to adopt identical changes or promulgate equivalent changes which are at least as effective as the federal change. The Virginia Code reiterates this requirement in § 40.1-22(5). Adopting these revisions will allow Virginia to conform to the federal program change.

F. Technology Feasibility

Federal OSHA determined that the latest versions of the NFPA standards are as protective on the whole, and in certain way more protective, than the earlier versions of the same NFPA standards. The latest versions are also more comprehensive than the earlier versions and reflect recent developments in safety technology, equipment, and testing. (71 FR 60845)

Contact Person:

Mr. Glenn Cox
Director, VOSH Programs
804.786.2391
Glenn.Cox@doli.virginia.gov

RECOMMENDED ACTION

Staff of the Department of Labor and Industry recommends that the Safety and Health Codes Board adopt the direct final rule, Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment, as authorized by Virginia Code §§ 40.1-22(5) and 2.2-4006.A.4(c), with an effective date of March 15, 2007.

The Department also recommends that the Board state in any motion it may make to amend this regulation that it will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this or any other regulation which has been adopted in accordance with the above-cited subsection A.4(c) of the Administrative Process Act.

Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment; Direct Final Rule

As Adopted by the

Safety and Health Codes Board

Date: _____

VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: _____

16 VAC 25-100-1915.5, Incorporation by Reference
16 VAC 25-100-1915.505, Fire Response
16 VAC 25-100-1915.507, Land-side Fire Protection System

When the regulations, as set forth in the direct final rule for Updating National Consensus Standards in OSHA's Standard for Fire Protection in Shipyard Employment, 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
January 16, 2007	March 15, 2007

Amendments To Standards

■ OSHA amends Part 1915 of Title 29 of the Code of Federal Regulations as set forth below:

■ 1. The authority citation for Part 1915 continues to read as follows:

Authority: Sec. 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), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (65 FR 50017), or 5–2002 (67 FR 65008) as applicable; 29 CFR Part 1911.

■ 2. Amend § 1915.5 to revise paragraphs (d)(4)(i), (vi) through (x), and (xiii) through (xviii) and by removing paragaraph (d)(4)(xix) to read as follows:

§ 1915.5 Incorporation by reference.

* * * * *

(d) * * *

(4) * * *

(i) NFPA 1981–2002 Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services, IBR approved for 1915.505(e)(3)(v).

* * * * *

(vi) NFPA 10–2002 Standard for Portable Fire Extinguishers, IBR approved for §§ 1915.507(b)(1) and (b)(2).

(vii) NFPA 14–2003 Standard for the Installation of Standpipe and Hose Systems, IBR approved for §§ 1915.507(b)(2) and (d)(1).

(viii) NFPA 72–2002 National Fire Alarm Code, IBR approved for § 1915.507(c)(6).

(ix) NFPA 13–2002 Standard for the Installation of Sprinkler Systems, IBR approved for § 1915.507(d)(2).

(x) NFPA 750–2003 Standard on Water Mist Fire Protection Systems, IBR approved for § 1915.507(d)(2).

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(xiii) NFPA 11–2005 Standard for Low-, Medium-, and High-Expansion

Foam, IBR approved for § 1915.507(d)(3).

(xiv) NFPA 17–2002, Standard for Dry Chemical Extinguishing Systems, IBR approved for § 1915.507(d)(4).

(xv) NFPA 12–2005, Standard on Carbon Dioxide Extinguishing Systems, IBR approved for § 1915.507(d)(5).

(xvi) NFPA 12A–2004, Standard on Halon 1301 Fire Extinguishing Systems, IBR approved for § 1915.507(d)(5).

(xvii) NFPA 2001–2004, Standard on Clean Agent Fire Extinguishing Systems, IBR approved for § 1915.507(d)(5).

(xviii) NFPA 1403–2002, Standard on Live Fire Training Evolutions, IBR approved for § 1915.508(d)(8).

■ 3. Amend § 1915.505 to revise paragraph (e)(3)(v) to read as follows:

§ 1915.505 Fire response.

* * * * *

(e) * * *

(3) * * *

(v) Provide only SCBA that meet the requirements of NFPA 1981–2002 Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services (incorporated by reference, see § 1915.5); and

* * * * *

■ 4. Amend § 1915.507 to revise paragraphs (b)(1), (b)(2), (c)(6), (d)(1), (d)(2), (d)(3), and (d)(5) to read as follows:

§ 1915.507 Land-side fire protection system.

* * * * *

(b) * * *

(1) The employer must select, install, inspect, maintain, and test all portable fire extinguishers according to NFPA 10–2002 Standard for Portable Fire Extinguishers (incorporated by reference, see § 1915.5).

(2) The employer is permitted to use Class II or Class III hose systems, in accordance with NFPA 10–2002 (incorporated by reference, see § 1915.5), as portable fire extinguishers if the employer selects, installs, inspects, maintains, and tests those systems according to the specific recommendations in NFPA 14–2003 Standard for the Installation of Standpipe and Hose Systems (incorporated by reference, see § 1915.5).

(c) * * *

(6) Select, install, inspect, maintain, and test all automatic fire detection systems and emergency alarms according to NFPA 72–2002 National Fire Alarm Code (incorporated by reference, see § 1915.5)

(d) * * *

(1) Standpipe and hose systems according to NFPA 14–2003 Standard for the Installation of Standpipe and Hose Systems (incorporated by reference, see § 1915.5);

(2) Automatic sprinkler systems according to NFPA 25–2002 Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems, (incorporated by reference, see § 1915.5), and either (i) NFPA 13–2002 Standard for the Installation of Sprinkler Systems (incorporated by reference, see § 1915.5), or (ii) NFPA 750–2003 Standard on Water Mist Fire Protection Systems (incorporated by reference, see § 1915.5);

(3) Fixed extinguishing systems that use water or foam as the extinguishing agent according to NFPA 15–2001 Standard for Water Spray Fixed Systems for Fire Protection (incorporated by reference, see § 1915.5) and NFPA 11–2005 Standard for Low-, Medium-, and High-Expansion Foam (incorporated by reference, see § 1915.5);

* * * * *

(5) Fixed extinguishing systems using gas as the extinguishing agent according to NFPA 12–2005 Standard on Carbon Dioxide Extinguishing Systems (incorporated by reference, see § 1915.5); NFPA 12A–2004 Standard on Halon 1301 Fire Extinguishing Systems (incorporated by reference, see § 1915.5); and NFPA 2001–2004 Standard on Clean Agent Fire Extinguishing Systems (incorporated by reference, see § 1915.5).

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