November 18, 2015

Oregon OSHA – Proposed Changes to
The Fall Protection Standard and Use of Slide Guards in Construction

Public Hearings Scheduled for:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7, 2016</td>
<td>1:30 pm</td>
<td>City of Seaside</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City Hall – Court Chambers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>989 Broadway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seaside, OR 97138</td>
</tr>
<tr>
<td>January 12, 2016</td>
<td>10:00 am</td>
<td>Oregon OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Durham Plaza</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16760 SW Upper Boones Ferry Rd, Suite 200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tigard, OR 97224</td>
</tr>
<tr>
<td>January 13, 2016</td>
<td>10:00 am</td>
<td>Oregon OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1140 Willagillespie Road, Suite 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eugene, OR 97401-6730</td>
</tr>
<tr>
<td>January 14, 2016</td>
<td>10:00 am</td>
<td>City of Medford</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lausmann Annex – Room 151</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 S Ivy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medford OR 97501</td>
</tr>
<tr>
<td>January 20, 2016</td>
<td>10:00 am</td>
<td>Oregon OSHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red Oaks Square</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1230 NE Third Street, Suite A-115</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bend, OR 97701-4374</td>
</tr>
</tbody>
</table>

The Occupational Safety and Health (OSH) Act of 1970, encourages states to develop and operate their own workplace safety and health programs and prevents state enforcement of OSHA standards unless the state has a federal OSHA-approved State Plan that meets the requirements under Section 18 (State Jurisdiction and State Plans) of the OSH Act. Section 18 criterion for initial and continuing State Plan approval includes the promulgation and enforcement of workplace safety and health standards that federal OSHA considers “at least as effective as” their own program standards. The purpose of the Oregon Safe Employment Act includes the statement that one purpose of the state law is to “assure that Oregon assumes fullest responsibility...for the development, administration and enforcement of safety and health laws and standards” in accordance with the OSH Act (ORS 654.003(6)).
Oregon OSHA and federal OSHA have been in conversation about the fall protection issue for some time. During October of 2015, Oregon OSHA received written confirmation from federal OSHA that Oregon OSHA’s fall protection requirements for construction activities cannot be considered at least as effective as the Occupational Safety and Health Administration’s (OSHA) requirements. Federal OSHA identified two specific items of concern that Oregon OSHA must address:

1) **Oregon’s 10-foot general fall protection trigger height for construction activities is inconsistent with federal OSHA’s 6-foot trigger height.** A “trigger height” is a specified minimum height at or above which workers must be protected from fall hazards. Oregon’s 10-foot general trigger height for construction activities applies to any walking/working surface except for those permitted by another standard. “437-003-1500(7) Walking/working surface means any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork, beams, columns, trusses and concrete reinforcing steel but not ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.” Lowering Oregon’s 10-foot general trigger height to a 6-foot general fall protection trigger height for construction activities is needed to comply with the State Plan requirements under Section 18 of the OSH Act.

2) **Oregon’s allowance of slide guards as an acceptable fall protection system for construction activities is inconsistent with federal OSHA’s fall protection requirements.** “437-003-1500(6) Slide guard system means a fall protection system designed to prevent employees from sliding off a sloped roof to a lower level. The system consists of manufactured brackets (roof brackets) used in conjunction with dimensional lumber, or a site built system of similar designed and dimension.” They are currently allowed in Oregon on roofs with slopes of 3:12 to 8:12 and ground-to-eave heights of 25 feet or less. Since federal OSHA does not consider slide guard systems as effective as conventional fall protection systems such as guardrails systems, safety net systems, or personal fall arrest systems, prohibiting their use as a sole or primary fall protection system is needed to comply with the State Plan requirements under Section 18 of the OSH Act.

In the interest of continuing its efforts to better protect Oregon workers under its own State Plan, Oregon OSHA, in collaboration with an ad hoc fall protection subcommittee of the Construction Advisory Committee, is proposing a two-step approach that will address federal OSHA’s concerns and provide affected employers two reasonable time periods to acquire knowledge of, and comply with, these proposed rule changes.

Fall protection trigger height requirements covered under Subdivisions 3/L (Scaffolding), 3/R (Steel Erection), 3/S (Underground Construction), 3/CC (Cranes and Derricks in Construction); Division 2 (General Occupational Safety and Health Rules); Division 4 (Agriculture); and Division 7 (Forest Activities), are unaffected by this rulemaking.

Oregon OSHA proposes to revise the general fall protection requirements covered under Division 3 (Construction Industry), Subdivisions 3/M (Fall Protection) and 3/E (Personal Protective and Life Saving Equipment).

The proposed revisions to Subdivision 3/M, include amending the 10-foot general trigger height for fall protection to 6 feet, and revoking the use of slide guards as a sole or primary fall protection system. Fall protection and falling object protection requirements currently under 437-003-1501(1) through (5) were removed due to redundancy or revised and renumbered for clarification as a result of this rulemaking.

The proposed revisions to Subdivision 3/E, include repealing 437-003-0134(5)(a), which has a 10-foot general fall protection trigger height requirement, due to redundancy, and revises and renumbers 437-003-0134(5)(b) for clarification.
The tentative effective dates of the proposed rule changes are:

1) **January 1, 2017**, for the 6-foot general fall protection trigger height under Subdivision 3/M.

2) **October 1, 2017**, for prohibiting the use of slide guard systems as a sole or primary fall protection system.

**When does this happen:** Adoption tentatively will be February 2016

**To get a copy:**
- Our web site – [www.orosha.org](http://www.orosha.org) Rules, then Proposed Rules
- Or call 503-947-7449

**To comment:**
- Department of Consumer and Business Services/Oregon OSHA
  - 350 Winter Street NE
  - Salem OR 97301-3882
  - E-mail – tech.web@state.or.us
  - Fax – 503-947-7461

**Comment period closes:** January 27, 2016

**Oregon OSHA contact:**
- Jeff Wilson, Central Office @ 503-947-7421
  - or email at [jeffrey.r.wilson@oregon.gov](mailto:jeffrey.r.wilson@oregon.gov)
- Tom Bozicevic, Central Office @ 503-947-7431;
  - or email at [tom.bozicevic@oregon.gov](mailto:tom.bozicevic@oregon.gov)

**Note:** In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats by calling 503-378-3272.
SECRETARY OF STATE
NOTICE OF PROPOSED RULEMAKING HEARING*
A Statement of Need and Fiscal Impact accompanies this form.

Department of Consumer and Business Services/Oregon OSHA
OAR 437
Agency and Division
Administrative Rules Chapter Number
Sue Joye 350 Winter Street NE Salem OR 97301-3882 503-947-7449
Rules Coordinator Address Telephone

RULE CAPTION
Adopt changes to the fall protection standard and slide guard use in construction.

January 7, 2016 1:30 pm City of Seaside
City Hall – Court Chambers
989 Broadway
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Red Oaks Square
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Bend OR 97701-4374

Hearing Date Time Location Hearings Officer

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

ADOPT: OAR 437-003-2501

AMEND: OAR 437-003-0001, 437-003-0134, 437-003-0503, 437-003-1500, 437-003-1501

REPEAL: OAR 437-003-3502

ORS 654.025(2) and 656.726(4)
Stat. Auth. Other Authority
ORS 654.001 through 654.295
Stats. Implemented
The Occupational Safety and Health (OSH) Act of 1970, encourages states to develop and operate their own workplace safety and health programs and prevents state enforcement of OSHA standards unless the state has a federal OSHA-approved State Plan that meets the requirements under Section 18 (State Jurisdiction and State Plans) of the OSH Act. Section 18 criterion for initial and continuing State Plan approval includes the promulgation and enforcement of workplace safety and health standards that federal OSHA considers "at least as effective as" their own program standards. The purpose of the Oregon Safe Employment Act includes the statement that one purpose of the state law is to “assure that Oregon assumes fullest responsibility...for the development, administration and enforcement of safety and health laws and standards” in accordance with the OSH Act (ORS 654.003(6)).

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Please visit our web site [www.orosha.org](http://www.orosha.org) Click ‘Rules’ in the left vertical column and view our proposed, adopted, and final rules.

The Agency requests public comment on whether other options should be considered for achieving the rule’s substantive goals while reducing the negative economic impact of the rule on business.

*The Oregon Bulletin* is published on the 1st of each month and updates the rule text found in the Oregon Administrative Rules Compilation. Notice forms must be submitted to the Administrative Rules Unit, Oregon State Archives, 800 Summer Street NE, Salem, Oregon 97310 by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a Saturday, Sunday or legal holiday when Notice forms are accepted until 5:00pm on the preceding workday.  

ARC 920-2005
STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services / Oregon OSHA

OAR 437

Agency and Division

Administrative Rules Chapter Number

Rule caption:
Adopt changes to the fall protection standard and slide guard use in construction.

In the Matter of:
ADOPT: OAR 437-003-2501
AMEND: OAR 437-003-0001, 437-003-0134, 437-003-0503, 437-003-1500, 437-003-1501
REPEAL: OAR 437-003-3502

Statutory Authority: ORS 654.025(2) and 656.726(4)
Stats. Implemented: ORS 654.001 through 654.295

Need for the Rule(s):
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Documents relied upon, and where they are available:
- Division 3/M, Fall Protection
- Division 3/E, Personal Protective & Life Saving Equipment
- Occupational Safety and Health Act of 1970, Section 18 (State Jurisdiction and State Plans)
- Federal Register / Vol. 75, No 245 / Wednesday, December 22, 2010 / Rules and Regulations (80315)
- Federal OSHA’s letter to Oregon OSHA regarding fall protection standards OAR 437-003-1501 and OAR 437-003-3502, October 2, 2015.

Documents listed above are also available for viewing at the Oregon OSHA Resource Center 8:00 am – 12:00 pm and 1:00 – 5:00 pm, Monday through Friday – closed on state holidays.

O Oregon OSHA Resource Center
Labor and Industries Building
Room 26 (Basement)
350 Winter St NE
Salem, Oregon 97301
(800) 922-2689
osha.resource@state.or.us

Fiscal and Economic Impact:
The estimated cost for affected employers to comply with the proposed rule changes is $0 – $500 per employee; however, most of these employers may incur little cost. The actual cost for each employer will be based on their own administrative and operational needs, and their current level of compliance, as explained below.

The purpose of Division 3 is to prescribe minimum safety and health requirements for employees engaged in construction work. Employer under Oregon OSHA’s jurisdiction who engage in elevated construction activities covered under Subdivision 3/M, may be affected by the proposed rule changes, since the application of Division 3 is primarily activity based and not industry based. Construction work in Oregon is predominately performed by employees in the industries listed in Table 1.
Table 1

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Description</th>
<th>50 or fewer</th>
<th>More than 50</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>236116</td>
<td>New Multifamily Housing Construction</td>
<td>32</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>236118</td>
<td>Residential Remodelers</td>
<td>1165</td>
<td>6</td>
<td>1171</td>
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<tr>
<td>236220</td>
<td>Commercial and Institutional Building</td>
<td>555</td>
<td>25</td>
<td>580</td>
</tr>
<tr>
<td>23813</td>
<td>Framing Contractors</td>
<td>217</td>
<td>4</td>
<td>221</td>
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<tr>
<td>23814</td>
<td>Masonry Contractors</td>
<td>209</td>
<td>3</td>
<td>212</td>
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<tr>
<td>23816</td>
<td>Roofing Contractors</td>
<td>305</td>
<td>10</td>
<td>315</td>
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<tr>
<td>23817</td>
<td>Siding Contractors</td>
<td>168</td>
<td>2</td>
<td>170</td>
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<tr>
<td>23821</td>
<td>Electrical Contractors and Wiring</td>
<td>927</td>
<td>29</td>
<td>956</td>
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<tr>
<td>23822</td>
<td>Plumbing, Heating, Air Conditioning</td>
<td>1126</td>
<td>34</td>
<td>1160</td>
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<tr>
<td>23831</td>
<td>Drywall and Insulation Contractors</td>
<td>322</td>
<td>8</td>
<td>330</td>
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<tr>
<td>23835</td>
<td>Finish Carpentry Contractors</td>
<td>358</td>
<td>3</td>
<td>361</td>
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<tr>
<td>321991</td>
<td>Mobile Home Manufacturing</td>
<td>1</td>
<td>5</td>
<td>6</td>
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<tr>
<td>444190</td>
<td>Other Building Material Dealers</td>
<td>203</td>
<td>10</td>
<td>213</td>
</tr>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>5588</strong></td>
<td><strong>143</strong></td>
<td><strong>5731</strong></td>
</tr>
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</table>

Data provided by DCBS Central Services Division, Information Technology and Research on October 19, 2015 (NAICS: North American Industry Classification System)

Oregon employers represented in Table 1 perform commercial and/or residential construction activities. While the exact number of these employers performing work in states that have a 6-foot general fall protection trigger height is unknown, many currently choose to operate at a 6-foot general trigger height in Oregon (particularly in commercial construction). Of these employers, those who do not use slide guard systems on a weekly basis, will incur little or no cost as a result of the proposed rule changes (Profile 5, Table 2). The vast majority of affected employers in Table 1 using fall protection at the current 10-foot general fall protection trigger height, and do not use slide guards on a weekly basis, are expected to incur only limited costs to comply with the proposed 6-foot general fall protection trigger height (Profile 4, Table 2). The remaining affected employers in Table 1 who use slide guards for fall protection on a weekly basis (Profile 2, Table 2), and the fewer number of employers who primarily perform construction work on single-level (ranch-style) homes that do not expose employees to fall hazards of 10 feet or more (Profile 1, Table 2), will incur the most costs. Employers who do perform construction activities on a weekly basis, such as those in Division 2 and 7, will be the least affected (Profile 6, Table 2).

Table 2

<table>
<thead>
<tr>
<th>Profile</th>
<th>General fall protection trigger height currently followed</th>
<th>Employees are exposed to fall hazards of 10 feet or more on a weekly basis</th>
<th>Employees are exposed to fall hazards of 6 feet or more on a weekly basis</th>
<th>Slide guard systems are used on a weekly basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 feet</td>
<td>No</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>10 feet</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>6 feet</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>4</td>
<td>10 feet</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>6 feet</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6</td>
<td>10 feet</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

These general profiles are for explanatory purposes only, and may not include all affected employers profiles.
The primary result of lowering the current general trigger height will be an increased frequency of conventional fall protection use, while phasing out slide guard systems for this use (particularly in residential construction). Residential construction activities most affected by the proposed rule changes are framing and roof work due to weekly or daily work on unprotected elevated walking/working surfaces. These surfaces include, but are not limited to, beams, columns, trusses, top plates, joists, rafters, and roofs, and are covered under the current general fall protection trigger height of 10 feet. A committee member of Oregon OSHA’s ad hoc Fall Protection for Construction Advisory Committee (FPCAC), representing members of the Associated Roofing Contractors of Oregon and SW Washington, stated that his members did not think that the proposed 6-foot general trigger height would create a significant fiscal impact for them. However, they did have issues with prohibiting slide guards as a primary fall protection system, since they believe that slide guards are sometimes more practical than other fall protection systems. This issue of practicality was taken into consideration; however, since federal OSHA does not accept slide guards as conventional fall protection systems, and Oregon OSHA’s limited discretion under Section 18 of the OSH Act, there was no leeway to retain slide guard systems under certain circumstances. Federal OSHA believes that conventional fall protection systems are available and can be used for almost all residential construction operations. Oregon OSHA does not disagree.

The FPCAC discussed the potential fiscal impacts of the proposed rule changes to Oregon employers. The committee did not anticipate that increasing the frequency of fall protection use will have a significant fiscal impact on most affected employers. The vast majority of affected employers already must use fall protection systems to some extent, so their employees should already have the equipment available and the required training to effectively use it. However, the committee identified employers as those who primarily construct single-level (ranch-style) homes with roof ground-to-eave heights of less than 10 feet, as most likely to have the greatest fiscal impact, since their current and future employees would be required to use fall protection to comply with the proposed rule changes. The exact number of employers only doing this specific construction is unknown, but is likely a small percentage of the 554 Oregon employers represented in Table 1 (NAICS: 236116, 23813, and 23816). Employers who only use slide guards for fall protection will experience a similar fiscal impact. The exact number of these employers is unknown, but is also likely a small percentage of the same 554 employers. In both cases, their employees may not currently have the understanding and skills to effectively transition their work activities to utilize conventional fall protection systems at fall exposures of 6 feet or more above lower levels. These employees must receive training or retraining to recognize fall hazards and follow procedures to minimize them.

As previously indicated, employers who perform residential construction will be particularly affected by the proposed rule changes. The degree to which they will be affected is subject to each employer’s administrative and operational needs, and their current level of compliance. While the exact cost of providing fall protection training to employees is unknown, an FPCAC member representing the Oregon Home Builders Association stated that their average cost for fall protection training is $250 per employee. This cost includes wages, lost productivity, and inspection of equipment. No other average training costs were provided to Oregon OSHA by FPCAC members. Since the normal training cost for employees should not increase by this rulemaking, affected employers needing to train inexperienced employees may incur a similar cost. The vast majority of affected employers who only need to retrain current employees to the 6-foot level may incur a fraction of this cost per employee. This retraining cost may only be incurred from employee wages if provided training is not conducted with employees during monthly safety meetings, which employers are already required to hold and employees must be compensated for. If an affected employer does not have an internal competent person, as required under 437-003-0503(1)(b), to provide fall protection training to employees, the employer can incur a cost of approximately $500 to train an employee to be a competent person by a professional safety training service. This competent person could then provide the necessary training for the other affected employees. Comprehensive fall protection training by a professional safety training service for a crew of 20 employees can cost an affected employer approximately $1,800.

Table 3 lists typical occupations that may be directly affected by the proposed rule changes, and provides Oregon’s average hourly wage rates for each, according to Oregon Employment Department occupational profile reports for 2015. The estimated cost of compliance is dependent on each employer’s operational needs. Using the average wage rates in Table 3 as an example, if an affected employer’s roofing crew of six employees received one hour of internal retraining at $18.85/hr. per employee, by their crew leader at $29.34/hr., the employer will incur an operational training cost of $142.44.
Table 3

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>Oregon’s statewide average hourly wage in dollars ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>472181</td>
<td>Roofers</td>
<td>18.85</td>
</tr>
<tr>
<td>473016</td>
<td>Roofer – Helpers</td>
<td>19.73</td>
</tr>
<tr>
<td>472031</td>
<td>Carpenters</td>
<td>20.77</td>
</tr>
<tr>
<td>473012</td>
<td>Carpenter – Helpers</td>
<td>12.28</td>
</tr>
<tr>
<td>472141</td>
<td>Painters</td>
<td>17.08</td>
</tr>
<tr>
<td>473014</td>
<td>Painter – Helpers</td>
<td>13.74</td>
</tr>
<tr>
<td>499021</td>
<td>HVAC Installers</td>
<td>22.60</td>
</tr>
<tr>
<td>472111</td>
<td>Electricians</td>
<td>33.02</td>
</tr>
<tr>
<td>473013</td>
<td>Electricians – Helpers</td>
<td>15.45</td>
</tr>
<tr>
<td>472231</td>
<td>Solar Photovoltaic Installers</td>
<td>18.92</td>
</tr>
<tr>
<td>472061</td>
<td>Construction Laborers</td>
<td>17.43</td>
</tr>
<tr>
<td>473019</td>
<td>Helpers, Construction Trades, All Other</td>
<td>16.89</td>
</tr>
<tr>
<td>471011</td>
<td>First-Line Supervisors of Construction Trades</td>
<td>29.34</td>
</tr>
<tr>
<td>119021</td>
<td>Construction Managers</td>
<td>43.19</td>
</tr>
</tbody>
</table>

Data provided by the Oregon Employment Department occupational profile reports for 2015. (SOC: Standard Occupational Classification)

Affected employers may incur costs associated with the increased frequency of fall protection use, for previously unregulated fall hazards of 6-feet to less than 10 feet. This cost will be based on site-specific operational needs. Due to this site-specific nature, there is not sufficient data for Oregon OSHA to accurately determine the additional time to comply with the proposed rule changes. The FPCAC discussed this additional time; however, they did not anticipate that the increased frequency of fall protection use will have a significant fiscal impact on the vast majority of affected employers. Conventional fall protection systems must currently be used for fall hazards 6-foot or more from wall openings, established floors, mezzanines, balconies, and walkways.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):
   The proposed rule changes may have a fiscal impact on state agencies and general public employers who engage in construction activities that might expose employees to fall hazards of 6 feet or more to a lower level, in terms of training and equipment costs associated with going from the current 10-foot general fall protection trigger height to the proposed 6 feet, as discussed above.

   Oregon OSHA’s own costs in administering the rules are limited to the rulemaking process and outreach efforts to notify potentially affected employers of the proposed rule change.

2. Cost of compliance effect on small business (ORS 183.336):
   a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:
      Typical types of small businesses that could incur costs to comply with the proposed rule changes are listed in Table 1. Of those, an estimated 5,588 (approximately 98 percent) qualify as “small businesses” having 50 or fewer employees. However, general fall protection trigger height rules are activity based and not industry based. As a result, any small business under Oregon OSHA’s jurisdiction could be affected by the proposed rule changes if they have employees engaged in elevated construction activities covered by Subdivision 3/M.
b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:
Employers who perform construction activities where employees are potentially exposed to fall hazards are currently required to provide and document fall protection training to employees. This rulemaking does not change this requirement; however, additional training may be needed to ensure that affected employees understand the change to the lower fall protection trigger height of 6 feet, and know how to install and use new or existing fall protection systems to effectively protect them from fall hazards of 6 feet or more. While Oregon OSHA does not require employers to develop and maintain a written fall protection policy, employers may incur cost in doing so, or time associated with communicating a verbal fall protection policy. Updating existing or developing newly needed fall protection policies, training materials and certifications by one or more employees similar to those represented in Table 3 may be needed. Direct and indirect costs associated with these types of administrative tasks may include wages, lost productivity, travel expenses, and general office supplies. The estimated cost of compliance for administrative activities is subject to each employer’s wage rates and administrative needs. Using the average wage rates in Table 4 as an example, if an affected employer’s Health and Safety Engineer spends four hours at $38.61/hr. to revise fall protection policies and training materials, the employer will incur an administrative cost of $154.44. As another example, if an office clerk spends an hour at $15.73/hr. to file employee training certifications; their employer will incur an administrative cost of approximately $15.73.

Table 4

<table>
<thead>
<tr>
<th>SOC Code</th>
<th>Description</th>
<th>Oregon’s statewide average hourly wage in dollars ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>439061</td>
<td>Office Clerks, General</td>
<td>15.73</td>
</tr>
<tr>
<td>431011</td>
<td>First-Line Supervisor of Office and Admin. Support Workers</td>
<td>24.33</td>
</tr>
<tr>
<td>131151</td>
<td>Training and Development Specialist</td>
<td>28.18</td>
</tr>
<tr>
<td>471011</td>
<td>First-Line Supervisors of Construction Trades</td>
<td>29.34</td>
</tr>
<tr>
<td>172111</td>
<td>Health and Safety Engineers</td>
<td>38.61</td>
</tr>
<tr>
<td>119021</td>
<td>Construction Managers</td>
<td>43.19</td>
</tr>
</tbody>
</table>

Data provided by the Oregon Employment Department occupational profile reports for 2015. (SOC: Standard Occupational Classification)

c. Equipment, supplies, labor and increased administration required for compliance:
While the proposed rule changes are unlikely to increase an employer’s need for additional labor and administration, cost may incur for affected employers needing to purchase fall protection system such as guardrails systems, safety net systems, personal fall arrest systems, or personal fall restraint systems to comply with the proposed rule change. If currently used fall protection systems are only effective for fall hazards of 10 feet or more to a lower level, then affected employers will need to purchase fall protection systems or compatible components for existing fall protection systems that will provide effective employee protection from fall hazards of 6 feet or more.

Affected employers who do not currently own or use conventional fall protections systems that are effective at 6 feet or more will incur costs for purchasing compliant systems. While there are many of these systems available on the market, costs for compliant systems start at $100 – $200 per employee, that can be used for an extended period when following the manufacturer’s specifications and recommendations.

How were small businesses involved in the development of this rule?
Representatives from the Oregon Home Builders Association and the Associated Roofing Contractors of Oregon and SW Washington were involved in the development of this rule. Both associations have members from “small businesses” with 50 or fewer employees.

Administrative Rule Advisory Committee consulted?
Yes. Oregon OSHA’s Fall Protection for Construction Advisory Committee was formed that includes stakeholders in commercial and residential construction, along with associations that represent the industry.
HOUSING COST IMPACT STATEMENT

FOR ESTIMATING THE EFFECT OF A PROPOSED RULE OR ORDINANCE ON THE COST OF DEVELOPING A TYPICAL 1,200 SQ FT DETACHED SINGLE FAMILY DWELLING ON A 6,000 SQ FT PARCEL OF LAND.

(ORS 183.534)

FOR ADMINISTRATIVE RULES

AGENCY NAME: DCBS/Oregon OSHA
ADDRESS: 350 Winter Street NE
CITY/STATE: Salem OR 97301-3882
PHONE: 503-947-7449

PERMANENT: XX
TEMPORARY: EFFECTIVE DATE: 2017

BELOW PLEASE PROVIDE A DESCRIPTION OF THE ESTIMATED SAVINGS OR ADDITIONAL COSTS THAT WILL RESULT FROM THIS PROPOSED CHANGE.

PROVIDE A BRIEF EXPLANATION OF HOW THE COST OR SAVINGS ESTIMATE WAS DETERMINED.

IDENTIFY HOW CHANGE IMPACTS COSTS IN CATEGORIES SPECIFIED

Description of proposed change: (Please attach any draft or permanent rule or ordinance)
Please see attached Notice of Proposed Rulemaking Hearing.

Description of the need for, and objectives of the rule:
Please see attached Notice of Proposed Rulemaking Hearing.

List of rules adopted or amended:
ADOPT: OAR 437-003-2501

AMEND: OAR 437-003-0001, 437-003-0134, 437-003-0503, 437-003-1500, 437-003-1501

REPEAL: OAR 437-003-3502

Materials and labor costs increase or savings:
Adoption of the proposed rule changes may result in a slight increase in the cost of constructing a typical 1,200 square foot single family dwelling. Residential construction activities mostly affected by the proposed rule changes are framing and roof work. Both of these activities often expose workers to fall hazards from elevated walking/working surfaces. These surfaces include, but not limited to, beams, columns, trusses, top plates, joists, rafters, and roofs, and are covered under the current general fall protection trigger height of 10 feet. Lowering the current 10-foot trigger height to 6 feet will significantly increase the requirement for fall protection during the framing and roofing stages of constructing single story dwellings, specifically those roofs with ground-to-eave heights of less than 10 feet.

Affected employers who construct single story dwellings and do not currently own or use conventional fall protection systems that are effective at 6 feet or more will incur costs for purchasing compliant systems. While there are many of these systems available on the market, costs for compliant systems start at $100 – $200 per employee, that can be used for extended periods when following the manufacturer’s specifications and recommendations. These employers will also incur fall protection training costs to ensure employees recognize fall hazards and follow procedures to minimize them. While the exact cost of providing fall protection training to employees is unknown, Oregon OSHA estimates the average cost for fall protection training is $250 per employee. This estimate is based on comments received from Oregon OSHA’s ad hoc Fall Protection for Construction Advisory Committee.

The total average estimated cost for affected employers, who primarily construct single story dwellings, to comply with the proposed rule changes is $400 – $500 per employee; however, employers who currently use conventional fall protection systems may have a total estimated cost of $50, as explained below. As an example, if an affected employer with a 4 person roofing crew needed to purchase fall protection equipment at $200/employee and provide training at $250/employee they will have incurred a cost of $1,800. This cost would be spread out over multiple constructing projects. While there is insufficient data to determine the actual increased cost to constructing a single family dwelling, Oregon OSHA estimates it to be $150.
Estimated administrative construction or other costs increase or savings:
While Oregon OSHA does not require employers to develop a written fall protection policy, employers may incur administrative cost in doing so. All training and retrained conducted with affected employees to comply with the proposed rule changes will result in costs to the employer for preparing written certification of training for each employee trained and document retention. Oregon OSHA estimates the total administrative cost to affected employers is $50.

Land costs increase or savings:
Adopting the proposed rule will not affect land costs for housing.

Other costs increase or savings:
None anticipated.

*Typical-Single story 3 bedrooms, 1 1/2 bathrooms, attached garage (calculated separately) on land with good soil conditions with no unusual geological hazards.

PREPARERS NAME: Tom Bozicevic
EMAIL ADDRESS: tom.bozicevic@oregon.gov