

**CONCISE EXPLANATORY STATEMENT**

**Cranes, Rigging and Personnel Lifting**

Public Hearings: November 8<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup>, 2012

Adoption: December 31, 2012

Effective Date: February 1, 2013

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## **I. Purpose of Rulemaking**

The department filed expedited proposed rules under WSR 12-12-062 addressing the following issues: extending the date by which the requirement relating to written and practical testing requirements for qualified riggers is effective; the addition of language to be at least as effective as the federal rule; and clarification of the scope of the rule to include the following existing requirements: rigging for all construction activities (WAC 296-155-556); and personnel lifting with attached or suspended platforms using cranes or derricks (WAC 296-155-547). The department received five written objections to the expedited rule process.

In consideration of the objections received and other feedback from stakeholders, this rule moves the rigging requirements for material handling equipment to a separate part under WAC 296-155 Part F-1. The rigger qualification requirements for material handling was changed to be more consistent with the previous rigger qualifications for material handling equipment, eliminating the requirement for written and practical testing for riggers to be considered qualified when conducting rigging on material handling equipment. This rule language also includes changes in the expedited rules filed for which no objections were received: extending the date by which the requirement relating to written and practical testing requirements for qualified riggers is effective under WAC 296-155 Part L; the addition of language to be at least as effective as the federal rule; and clarification of the scope of the rule to include personnel lifting with attached or suspended platforms using cranes or derricks (WAC 296-155-547).

## **II. Changes to the Rules (Proposed rule versus rule adopted):**

As a result of written and oral comments received or for clarification purposes, the following sections are being changed as indicated below:

### **WAC 296-155-33805 Wire rope slings.**

- Subsection (8)(e): Added a parenthesis after the words “Figure 8”. It now reads, “Decrease the rated load of the sling when D/d ratios (Figure 8) smaller than twenty-five to one. Consult the sling manufacturer for specific data or refer to the Wire Rope Sling User’s manual (wire rope technical board).”

### **WAC 296-155-33815 Synthetic rope slings.**

- Subsection (5)(e): In Figure 13, corrected a reference to another figure. It now reads, “The symbols below represent load or support in contact with the rope sling. The contact surface diameter divided by the rope diameter is designated D/d ratio as described in Figure 8.”

### **WAC 296-155-52900 Scope.**

- Subsection (1)(a): Added the word “/bridge” after the word overhead”. It now reads, “Power-operated cranes and derricks used in construction that can hoist, lower and horizontally move a suspended load (with or without attachments). Such equipment includes, but is not limited to: Articulating boom cranes (such as knuckle-boom cranes); crawler cranes; floating cranes; cranes on barges; locomotive cranes;

mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes); multipurpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load; industrial cranes (such as carry-deck cranes); cranes being used as dedicated pile drivers; service/mechanic trucks with a hoisting device; a crane on a monorail; tower cranes (such as fixed jib (“hammerhead boom”), luffing boom and self-erecting); pedestal cranes; portal cranes; overhead/bridge and gantry cranes; straddle cranes; side-boom tractors; derricks; and variations of such equipment; and....”

- Subsection (3)(d): Deleted subdivision (d) to be at least as effective as OSHA which stated, “ Overhead/bridge, gantry cranes, semi-gantry, cantilever gantry, wall cranes, storage bridge cranes, launching gantry cranes, and similar equipment having the same fundamental characteristics, irrespective of whether it travels on tracks, wheels, or other means, when performing construction activities and not permanently installed”.

**WAC 296-155-53402 Assembly/disassembly.**

- Subsection (18)(e): Corrected a reference. It now reads, “Meet the requirements in subsection (10)(b) and (c) of this section.”

**WAC 296-155-55600 General requirements.**

- Subsection (1)(b): Added the words “of this part” at the end of the note. It now reads, “Note: See qualified rigger requirements located in WAC 296-155-53306 of this part.”

**WAC 296-155-56400 Mobile crane hand signal chart.**

- Added an updated mobile crane hand signal chart. Deleted the language referencing ASME B-30.5-2011.

**WAC 296-155-704 Hoisting and rigging.**

- Subsection (1): Added clarifying language. It now reads, “All the applicable provisions of Part L of this chapter apply to hoisting and rigging while using a crane/derrick. All applicable provisions of Part F-1 of this chapter apply to material handling hoisting equipment when a crane/derrick is not being used”.
- Subsection (3): Modified the language. It now reads, “A qualified rigger (a rigger who is also a qualified person) must inspect the rigging prior to each shift”.

### III. Summary of Comments Received and Department Response

The department has analyzed all the comments received on the proposed rule and responses to these comments are listed below. At the public hearings, there were some requests for clarification on existing rule requirements that were not changed or proposed to be changed in this rulemaking. These requests for clarifications are not included on the list below and the department will contact those individuals directly and provide a response.

General Comments	Department Response
<p>The removal of the rigging requirements from Part L, I agree with and think it was a good idea. I looked through the new sections in Part F-1, it is a very good standard and it is pretty thorough.</p>	<p>The department appreciates this comment.</p>
<p>The L&amp;I-DOSH rational for not providing either a small business economic statement or cost benefit analysis is misleading, incorrect and insufficient. The actual impact and cost burden associated with the proposed rules are not fully justified by the requirement to adopt federal OSHA regulatory requirements and the federal OSHA mandate that state plan regulations be “as effective as” OSHA standards. In fact, the proposed changes create substantial impact beyond the OSHA requirements in that Chapter 296-155 WAC affects considerably more activities, businesses and workers than the federal requirements referenced in WSR 12-20-054 as found in 29 CFR 1926. L&amp;I-DOSH should have evaluated the impact of the current rulemaking on the additional segments of industry and associated work activities over and above that directly affected by federal OSHA in their regulatory requirements.</p>	<p>The department appreciates this comment.</p> <p>As stated in the CR 102, the preparation of a small business economic statement and cost benefit analysis was not necessary based on several exemptions, one of which was changes explicitly and specifically dictated by federal statute (OSHA). RCW 19.85.025, referencing RCW 34.05.310(4)(e); RCW 34.05.328(5)(b)(v). Other exemptions included changes to correct typographical errors or clarify language without changing its effect; or are adopted from national consensus codes. RCW 19.85.025, referencing RCW 34.05.310(4)(c)-(d); RCW 34.05.328(5)(b)(iii)-(iv). No new costs are imposed by this rule.</p>
<p>I seriously doubt that the review by the companies affected, of the changes were taken into consideration on the impact to small business. The review and changing our safety manuals to comply cost more than anyone can believe.</p>	<p>The department appreciates this comment.</p> <p>As stated in the CR 102, the preparation of a small business economic statement and cost benefit analysis was not necessary based on several exemptions, one of which was changes explicitly and specifically dictated by federal statute (OSHA). RCW 19.85.025, referencing RCW 34.05.310(4)(e);</p>

	<p>RCW 34.05.328(5)(b)(v). Other exemptions included changes to correct typographical errors or clarify language without changing its effect; or are adopted from national consensus codes. RCW 19.85.025, referencing RCW 34.05.310(4)(c)-(d); RCW 34.05.328(5)(b)(iii)-(iv). No new costs are imposed by this rule.</p>
<p>I want start with complimenting the department. I want to start with phase 1, phase 2, and the rigging, and I have been part of the stakeholder group through this whole process, and under the leadership of department staff, we have got to this point. And, for the record, I would hope the department adopts this process we have gone through with the crane regulations for developing all regulations, because I believe having the stakeholders, both labor and management and the department, at the table, and, you know, not always agreeing on all the issues, but at least when the process comes out, all the parties understand where everybody is coming from and I think there is a better adoption or a better buy-in on the industry into the regulations.</p>	<p>The department appreciates this comment.</p>
<p>It is highly recommended that in the future, L&amp;I-DOSH refrain from attempting to use “expedited rule making” without public hearings for such complicated and extensive rule making as the cranes/rigging proposal. Rather than by-pass the public hearing process, we believe the department should embrace and promote the opportunity for public participation.</p>	<p>The department appreciates this comment.</p> <p>This rulemaking met the criteria for an expedited rulemaking, this process allows for objections. In consideration of the objections received and other feedback from stakeholders, this rule moves the rigging requirements for material handling equipment to a separate part under WAC 296-155 Part F-1. The rigger qualification requirements for material handling was changed to be more consistent with the previous rigger qualifications for material handling equipment, eliminating the requirement for written and practical testing for riggers to be considered qualified when conducting rigging on material handling equipment. This rule language also includes changes in the expedited rules filed for which no objections were received:</p>

	<p>extending the date by which the requirement relating to written and practical testing requirements for qualified riggers is effective under WAC 296-155 Part L; the addition of language to be at least as effective as the federal rule; and clarification of the scope of the rule to include personnel lifting with attached or suspended platforms using cranes or derricks (WAC 296-155-547).</p>
<p><b>WAC 296-155-52900 Scope</b></p>	
<p>While no change is proposed by the department, we wish to strongly support maintaining the exemption language regarding digger derricks found in new subsection (4) of reformatted section WAC 296-155-52900 which provides exemptions from Part L. Specifically, the language exempts digger derricks when used for work covered by Chapter 296-45 WAC.</p>	<p>The department appreciates this comment.</p>
<p><b>WAC 296-155-33700 Rigger qualifications</b></p>	
<p>The clearer these safety regulations are, I think the safer they are. One thing that concerns me, under the crane rules we know how to identify a qualified rigger. In Part F-1, we say “qualified,” but there is no written exam; there is no identification of how do we identify. If I claim that somebody is qualified and there is a mistake, how do I establish to the department that the individual was qualified and I as the employer did everything possible to make sure it was safe and this just happened? I think that is something the department needs to look at.</p>	<p>The department appreciates this comment.</p> <p>Rigger minimum qualifications identified in WAC 296-155 Part F-1 require the riggers be a qualified person, defined as “person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.” Specifically, the qualified person must be knowledgeable in the requirements of WAC 296-155 Part F-1 as applicable to the tasks assigned including but not limited to specific elements listed under WAC 296-155-33700. In addition, the qualified person must also be a competent person as defined under WAC 296-155 Part F-1 in that they must also have authorization or authority by the nature of their position to take prompt corrective measures to eliminate them. The definition of qualified person and competent person in WAC</p>

	296-155 Part F-1 are consistent with the definitions and use of these terms throughout all DOSH rules and also the industry consensus standards. It is up to the employer to determine if the individual meets the requirements.
<b>WAC 296-155-33705 General requirements</b>	
<p>Subsection (7)(a) – states that “Repair of hooks must be approved by the manufacturer or qualified person and as follows:  (a) Cracks, nicks and gouges may be repaired by a competent person, all other repairs are done by the manufacturer or a qualified person.”  Nicks and gouges I can accept as far as being repaired by a competent person, but I really do question the wisdom of including cracks in with this. Nicks and gouges come from some sort of external bang against the wall or whatever the case may be. Removing those is, I don’t think, very critical. But a crack shows – is a clear indication of either overstressing the hardware, exceeding the capacity of it, or it could be an internal metal failure. My suggestion on this would be to, at least on this particular paragraph here, remove it. Table 1, which is Rigging hardware Inspection/Removal Criteria, the third section down it says, “Load bearing components that are bent, twisted, distorted, elongated, cracked, or broken.” It can stay in the table but I just think it should be removed from subsection (7)(a).</p>	<p>The department appreciates this comment.</p> <p>Crane and rigging hooks must be maintained per the manufacturer and applicable safety standards. As far as addressing hook cracks, nicks or gouges, the hook manufacturer or a qualified person would first agree if the hook could be repaired and prescribe how it would be repaired. Then if it is allowed, the work must be conducted by a “competent person”.</p>
<b>WAC 296-155-55600 General requirements</b>	
<p>Subsection (1) – We are talking about employers must use at least one qualified rigger. I think maybe a little bit of clarification on the areas, not so much the initial rigging process, but the removal of the associated rigging, the conditions under which it has to be a qualified rigger versus maybe someone who is not qualified. So I’m not saying that this is wrong or incorrect, I think it is very unclear the way it is written and perhaps a little bit more clarification and definition would be in place.</p>	<p>The department appreciates this comment.</p> <p>With the change in WAC 296-155-55600, we have clarified that employers must use at least one qualified rigger when engaged in hooking and unhooking activities, when certain rigging activities take place.</p>