

November 17, 2010

Oregon OSHA - Proposed Changes to Cranes and Derricks in Construction

Public Hearings Scheduled for:

<u>Date</u>	<u>Time</u>	<u>Location</u>
January 13, 2011	10:00 am	Oregon OSHA Portland Field Office Fremont Place, Building I 1750 NW Naito Parkway, Suite 212 Portland, OR 97209-2533
January 14, 2011	10:00 am	Oregon Forestry Department Large Conference Room 3150 Main Street Springfield, OR 97478

Oregon OSHA proposes to adopt most of the Federal OSHA changes as they appear in the August 9, 2010 Federal Register. These changes revise the construction industry crane and derrick rules found in new Subpart CC of 29 CFR Part 1926. The Oregon OSHA differences are outlined in this document.

The crane and derrick construction standard was revised to update and specify industry work practices necessary to protect employees. This final standard also addresses advances in the designs of cranes and derricks, related hazards, and the qualifications of employees needed to operate them safely. Under this final rule, employers must determine whether the ground is sufficient to support the anticipated weight and associated loads of hoisting equipment. The employer is also required to assess hazards within the work zone that would affect the safe operation of hoisting equipment, such as power lines and objects or personnel that would be within the work zone or swing radius of the hoisting equipment. Finally, the employer is required to ensure that the equipment is in safe operating condition through required inspections and that employees in the work zone are trained to recognize hazards associated with the use of the equipment and any related duties that they are assigned to perform.

Federal OSHA, in 1926.1427 Operator qualification and certification, paragraph (k), implemented a phase-in period based on a number of comments that Option (1) of the section (operator certification by an accredited testing organization) is the only viable option for many employers. Concern was also expressed about the availability of sufficient accredited testing organizations to meet the demand that this rule would create. Therefore, in the final rule, Federal OSHA has provided a four-year phase-in period for compliance. Oregon OSHA proposes to keep the current Oregon Administrative Rule OAR (437-003-0081 Crane operator safety training requirements) until such time that the 1926.1427(k) phase-in period has expired, November 10, 2014.

Federal OSHA established minimum clearance distances for power line safety up to 350 kV for equipment in accordance with Table A of 1926.1408 Power line safety (up to 350 kV) – equipment operations. Table A is based upon the same formula that was used in subpart N (the 10-foot rule) and is similar to Table 1 in ASME B30.5–2004. Unlike subpart N, which required employers to calculate the minimum clearance distance from a formula, Table A sets specified clearance distances in a readily understood table and requires no calculations. Oregon OSHA’s Crane Advisory Committee (CAC) pointed out that Table A of the proposed rule specified alternating current (AC) and did not address minimum clearance distances for direct current (DC). Therefore, Oregon OSHA is inserting a note clarifying that the clearance distances for power line safety up to 350 kV (AC) for equipment established in Table A, will apply to (DC) electrical distribution and transmission power lines as well. A note will also be placed in section 1926.1411 Power line safety while traveling under or near power lines with no load, to emphasize (DC) voltages.

Section 1926.1423 Fall Protection, of the Federal OSHA rule, contains provisions designed to protect workers on equipment covered by subpart CC from fall hazards. Falls have traditionally been the leading cause of deaths among construction workers. The federal Crane and Derrick Advisory Committee (CDAC) determined that safety would be enhanced by addressing the problem of fall hazards associated with cranes and derricks comprehensively and that putting requirements in subpart CC would make it easier for employers to readily determine the applicable fall protection requirements.

The Oregon OSHA CAC recommended revising portions of the fall protection section in 1926.1423. Specifically, it was decided not to adopt the following sections in 1926.1423:

- (d) Personal Fall Arrest and Fall Restraint Systems
- (e) Fall Protection Requirements for Non-Assembly/ Disassembly Work
- (f) Assembly/Disassembly
- (h) Tower Cranes
- (j) Anchoring to the Load Line
- and portions of (g) Anchorage Criteria, and (k) Training

To maintain consistency throughout the Oregon construction industry, the committee felt that changing paragraphs (d), (e), (f), and (h) to one fall height of ten (10) feet would give clarity to this new rule and parallel Oregon’s current rule regarding general fall protection requirements under OAR 437-003-1501 General Fall Protection.

Proposed new OAR 437-003-1423 Fall Protection will:

- replace 1926.1423(d) with 437-003-1423(1)
- replace 1926.1423(e) and (f) with 437-003-1423(2)
- replace 1926.1423(g)(1) with 437-003-1423(3)
- replace 1926.1423(h) with 437-003-1423(4)
- replace 1926.1423(j) with 437-003-1423(5)
- be added to 1926.1423(k) as 437-003-1423(6)

Federal OSHA also made changes in the following areas in Construction. Oregon OSHA proposes to adopt these changes except where specified:

- Subpart A General, new rule 1926.6 is added which is an incorporation by reference of agencies of the U.S. Government, and other organizations. 1926.31 is removed with the majority of the text included in the new 1926.6. The new 1926.6 will parallel the existing standard 1910.6 in general industry.
- Subpart C General Safety and Health Provisions, 1926.31 was removed and reserved.
- Subpart L Scaffolds, 1926.450, scope, application, and definitions applicable to the subpart was revised to say the section does not apply to crane or derrick suspended personnel platforms and the criteria for aerial lifts are set out exclusively in 1926.453.

- Subpart M Fall Protection, 1926.500 scope, application, and definitions applicable to the subpart, 1926.500 was amended by revising paragraph (a)(2)(ii), adding paragraph (a)(3)(v), and revising paragraph (a)(4).
- New subpart DD, consisting of section 1926.1500 was added to read, Subpart DD—Cranes and Derricks Used in Demolition and Underground Construction, applies only to employers engaged in demolition work covered by sections 1926.856 and 1926.858, and underground construction work covered by section 1926.800. The subpart applies in lieu of 1926 subpart CC.
- The Subpart N heading was revised to read Helicopters, Hoists, Elevators, and Conveyors from the former heading Cranes, Derricks, Hoists, Elevators, and Conveyors. 1926.550 was redesignated as 1926.1501 in new subpart DD. 1926.550 is reserved and 1926.553 was amended by adding paragraph (c) base-mounted drum hoists. Oregon OSHA relocated OAR 437-003-0080 Wind velocity device, and OAR 437-003-0081 Crane Operator Safety Training Requirements, into new subpart CC, 1926.1427.
- Subpart O Motorized Vehicles, Mechanical Equipment, and Marine Operations, 1926.600 was amended by revising paragraph (a)(6). Oregon OSHA is not adopting 1926.600(a)(6)(i), (a)(6)(ii), and (a)(6)(v), but is proposing new rule OAR 437-003-3600 Equipment, to replace Federal OSHA language of “crane” with “equipment” in the three paragraphs.
- Subpart R Steel Erection, 1926.753 was amended by revising paragraphs (a) and (c)(4) to reflect provisions of subpart CC.
- Subpart S Underground Construction, Caissons, Cofferdams, and Compressed Air, 1926.800 was amended by revising paragraph (t), hoisting unique to underground construction.
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- Subparts AA and BB [Reserved].

When does this happen: Adoption will be February 2011

To get a copy: Our web site – www.orosha.org Rules/Compliance, then Proposed Rules
Or call the Oregon OSHA Resource Center at 503-947-7447

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 20, 2011

OR-OSHA contact: Ron Haverkost, Central Office @ 503-947-7421;
or email at ronald.l.haverkost@state.or.us

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

Proposed changes to Division 3, Construction. Federal OSHA changes in Cranes and Derricks.
Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.

January 13, 2011	10:00 am	Oregon OSHA Portland Field Office Fremont Place, Building I 1750 NW Naito Parkway, Suite 112 Portland OR 97209-2533	Sue Joye
January 14, 2011	10:00 am	Oregon Forestry Department Large Conference Room 3150 Main Street Springfield OR 97478	Sue Joye

Hearing Date

Time

Location

Hearings Officer

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

RULEMAKING ACTION

ADOPT: OAR 437-003-1423, 437-003-3600

AMEND: OAR 437-003-0001

ORS 654.025(2) and 656.726(4)

Stat. Auth.

Other Authority

ORS 654.001 through 654.295

Stats. Implemented

RULE SUMMARY

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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.

/s/Michael D. Wood
Signature

January 20, 2011

Last Day for Public Comment
Last day to submit written comments to the Rules Coordinator

Michael D. Wood 11/15/2010
Printed name Date

*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

Secretary of State
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
Agency and Division

OAR 437
Administrative Rules Chapter Number

In the Matter of:

Adopting OAR 437-003-1423, 437-003-3600; and amending OAR 437-003-0001.

Rule Caption: (Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.)

Proposed changes to Division 3, Construction. Federal OSHA changes in Cranes and Derricks.

Statutory Authority: ORS 654.025(2) and 656.726(4)

Stats. Implemented: ORS 654.001 through 654.295

Need for the Rule(s):

Oregon OSHA's standard must be at least as effective as Federal OSHA, therefore we propose to adopt these changes as they appear in the August 9, 2010 Federal Register.

The primary objective of the proposed standard is to provide increased safety for employees performing construction work involving cranes/derricks. This rulemaking provides employers and employees updated and more complete safety standards for construction work involving cranes/derricks. The affected employers and employees will also benefit from the additional clarity and comprehensiveness of the revised standards.

Federal statistics show that the proposed standard addressing construction work involving cranes and derricks is expected to reduce accidents, fatalities, and injuries in the construction industry. They estimated that nationally 53 fatalities and 155 injuries would be avoided annually from compliance with the provisions of this standard. Applying an average monetary value of \$50,000 per prevented injury and a value of \$7.5 million per prevented fatality, the Agency estimates the benefit at about \$406 million annually.

Documents Relied Upon, and where they are available:

Federal Register – October 9, 2008 Cranes and Derricks in Construction Proposed Rule

http://www.osha.gov/FedReg_oshapdf/FED20081009.pdf

Federal Register – August 9, 2010 Cranes and Derricks in Construction Final Rule

http://www.osha.gov/FedReg_oshapdf/FED20100809.pdf

Washington Administrative Code Chapter 296-155 Part L Cranes

<http://apps.leg.wa.gov/wac/default.aspx?cite=296-155>

OAR 437-003 Construction

http://www.orosha.org/standards/div_3.html

Fiscal and Economic Impact, including Statement of Cost of Compliance:

Oregon OSHA's own costs in administering the rules are limited to the rulemaking itself. All state agencies as well as units of local government are affected in the sense that they are employers under the Oregon Safe Employment Act.

Advisory groups were asked about the fiscal and economic impact on Oregon employers. The changes made to the specific portions of the federal rule did not change the meaning or intent of the rule. The changes were necessary for clarity and consistency. Other than the fiscal impact identified in the August 9, 2010 Federal Register, Oregon OSHA's changes did not increase compliance costs, nor did the advisory groups feel the Oregon changes increased fiscal and economic impact on Oregon employers.

Federal OSHA compared the anticipated costs of achieving compliance against revenues and profits of establishments affected by the rule. A screening analysis was used because it measures costs as a percent of pre-tax profits and revenues, but does not predict impacts on pre-tax profits and sales. This screening analysis is used to determine whether the compliance costs potentially associated with the standard would lead to significant impacts on establishments in the affected industries. The actual impact of the standard on the profits and revenues of establishments in a given industry will depend on the price elasticity of demand for the services sold by establishments in that industry.

Price elasticity refers to the relationship between the price charged for a service and the demand for that service; the more elastic the relationship, the less able an establishment is to pass the costs of compliance through to its customers in the form of a price increase, and the more it will have to absorb the costs of compliance in the form of reduced profits. In general, “when an industry is subject to a higher cost, it does not simply swallow it, it raises its price and reduces its output, and in this way shifts a part of the cost to its consumers and a part to its suppliers.”

A common case would be a price elasticity of one. In this situation, if the costs of compliance amount to 1 percent of revenues, then production would decline by 1 percent and prices would rise by 1 percent. The sector would be expected to remain in business and maintain a comparable profit rate as before implementation of the standard, but would produce 1 percent less of its services.

In the Federal Register for Cranes and Derricks, Final Rule, Federal OSHA presented estimates for the number of affected establishments, average establishment revenues and profits, and average establishment costs for each affected industry sector. The Table B-12 in the Federal Register pages 48109 through 48111 show the economic impacts (the two right-most columns) are represented by two ratios: Of average establishment costs to revenues, and of costs to profits.

http://www.osha.gov/FedReg_osha_pdf/FED20100809.pdf

The average (unweighted) cost of the final standard per establishment is about \$560 annually. As is evident from the data and estimates in Table B–12, average establishment costs of compliance for the final standard are not large in relation to the corresponding average establishment revenues and profits in each of the industry sectors. The estimated per establishment cost of compliance represents less than 0.2 percent (or 0.002) of average establishment revenues for all affected sectors. In most sectors it is lower. The average cost as a percentage of revenues across all sectors is 0.05 percent (0.0005).

In the two sectors that are most intensively involved in crane use, Crane Rental with Operators (employers primarily in the crane rental business) and Crane Rental without Operators (bare rentals), estimated costs are about 2 percent of profits. In the Own and Rent Cranes with Operators sectors, costs as a percentage of profits are estimated at about 4 percent. Because these employers both own and use cranes, as well as rent them, the cost model estimates significantly higher average establishment costs for them, even in relation to the sectors involved primarily in crane rentals.

Federal OSHA concluded that the final standard is economically feasible for the affected industries. As described above, a standard is economically feasible if there is a reasonable likelihood that the estimated costs of compliance “will not threaten the existence or competitive structure of an industry. The potential impacts on employer costs associated with achieving compliance with the final standard fall well within the bounds of economic feasibility in each industry sector. Costs of 0.2 percent of revenues and 4 percent of profits will not threaten the existence of the construction industry, affected general industry sectors, or the use of cranes in affected industry sectors. OSHA does not expect compliance with the requirements of the final standard to threaten the viability of employers or the competitive structure of any of the affected industry sectors.

When viewed in the larger context of the construction sector, an increase in costs of \$148.2 million a year is effectively negligible, and will have no noticeable effect on the demand for construction services. Even when viewed as an increase in the costs of using cranes, an increase in the cost of rentals services of 0.2 percent will not cause the construction industry to forego the use of cranes and, thus, put crane leasing firms out of business.

It is unlikely that a price increase of this magnitude would significantly alter the services demanded by the public or any other affected customers or intermediaries. If the compliance costs of the final standard are substantially recouped with an increase in rental prices, there would be little effect on profits. Impacts on all affected general industry sectors are slight, and far below any test of economic feasibility. Given the small incremental increases in prices potentially resulting from compliance with the final standard, and the lack of readily available substitutes for the products and services provided by the covered construction and general industry sectors, demand is expected to enable entities to substantially offset compliance costs through minor price increases without experiencing any significant reduction in revenues or profits.

How were small businesses involved in the development of this rule?

Before proceeding with a proposed rule, Federal OSHA was required to comply with the Small Business Regulatory Enforcement Fairness Act of 1996. This process required OSHA to draft an initial regulatory flexibility analysis that evaluated the potential impact of the rule on small entities and identified the type of small entities that may be affected by the rule. OSHA convened a Small Business Advocacy Review Panel. Individuals who were representative of affected small entities (*i.e.*, Small Entity Representatives, or “SERs”) were identified for the purpose of obtaining advice and recommendations regarding the potential impacts of the proposed rule.

The Agency drafted questions asking for their views on specific aspects of the C–DAC Document that OSHA believed may be of concern to small entities. After reviewing the oral and written comments, the review Panel submitted its report summarizing the requirements of the C–DAC proposal and the comments received from the SERs. In its findings and recommendations, the Panel identified issues that it believed OSHA should address. A table is listed in the August 9, 2010 federal register with OSHA’s responses to these recommendations.

When reviewing the crane and derrick rules, Oregon OSHA established a crane advisory committee and consulted the existing Construction Advisory Committee. Members of both groups are either representatives of small business or are categorized as small employers in Oregon and include but not limited to Associated General Contractors (AGC), Home Builders Association of Marion and Polk Counties, Overton Crane, and REFA.

Administrative Rule Advisory Committee consulted? Yes.

If not, why?

Construction Advisory Committee
Construction Crane Advisory Group
Oregon Utility Safety Committee
Eastern Oregon Utility Safety Committee

/s/Michael D. Wood
Authorized Signer

Michael D. Wood
Printed name

11/15/2010
Date