

## Department of Consumer and Business Services

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August 27, 2012

Barry Moreland Safety Director 16021 NE Airport Way Portland, OR 97230

Re: Cranes and Derricks in Construction

Dear Mr. Moreland,

You asked specific questions regarding the new "Cranes and Derricks in Construction" rules. The following is our response to those questions.

1. What does the equipment's maximum working radius in the work zone mean? When an employer has identified their work zone and that work will only require the boom to be extended to a 30 foot radius – even though the cranes maximum radius is 50 feet – which radius is applicable for the purposes of complying with 1926.1408(a)(2)?

**Answer:** The maximum radius reference in 1926.1408(a)(2) is for the **actual** work in the work zone that the employer has established or in this case 30 feet.

2. An employer has identified the line voltage, determined the minimum approach distance and established a working radius of 30 feet. The crane is capable of working at a maximum radius of 50 feet. Must employers use the 50 feet or the 30 feet to determine the radius in the work zone for the purpose of Option 3?

Answer: Once the employer determines the maximum working radius that will be used in the work zone (30 feet), that is the radius they will use to determine whether the crane can get closer than the minimum approach distance permitted in Table A.

3. What constitutes a non-conductive tag line

**Answer**: A tag line is defined as a "rope (usually fiber) attached to a lifted load for purposes of controlling load spinning and pendular motions or used to stabilize a bucket or magnet during material handling operations." Non-conductive means it is not able to conduct heat or electricity. Therefore a non conductive tag line is a rope that is not able to conduct electricity used for the purpose of controlling a lifted load.

4. When installing street or traffic lights under a power line why must an employer use the maximum extension or articulation of the crane capabilities for the purposes of compliance?

**Answer:** When a crane operates below a power line, the likelihood of breaching the minimum clearance distance is enhanced by several factors, including the greater difficulty of judging the distance to the power line when it is above the equipment and the fact that in most situations the operator has to purposely look up to see the line (and therefore is more likely to forget its location or that it is there).

The rule in 1926.1408(d)(1) addresses this problem by prohibiting any part of a crane, load or load line (including rigging and lifting accessories) from being below a power line unless the employer has confirmed with the utility owner/operator that the power line is deenergized and visibly grounded at the worksite or unless the employer can demonstrate that it meets one of the four exceptions.

I hope this answers your questions. If you need further assistance please feel free to call me.

Sincerely,

Ron Haverkost

Technical Specialist

Oregon OSHA 503-947-7421

cc: Marilyn Schuster, Deputy Administrator

Longla L Haverkot

Peggy Munsell, Technical and Appeals Manager