## SHB 2171 - H AMD 64 By Representative Eddy

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## ADOPTED 03/07/2007

- 1 Strike everything after the enacting clause and insert the 2 following:
- "NEW SECTION. Sec. 1. The legislature intends to promote the safe condition and operation of cranes used in construction work by establishing certification requirements for construction cranes and qualifications for construction crane operators. The legislature intends that standards for safety of construction cranes and for certification of personnel operating cranes in construction work be established.
- 10 <u>NEW SECTION.</u> **Sec. 2.** A new section is added to chapter 49.17 RCW 11 to read as follows:
- The definitions in this section apply throughout sections 2 through 3 of this act unless the context clearly requires otherwise.
- 14 (1) "Apprentice operator or trainee" means a crane operator who has 15 not met requirements established by the department under section 5 of 16 this act.
  - (2) "Attachments" includes, but is not limited to, crane-attached or suspended hooks, magnets, grapples, clamshell buckets, orange peel buckets, concrete buckets, drag lines, personnel platforms, augers, or drills and pile-driving equipment.
- 21 (3) "Certified crane inspector" means a crane inspector who has 22 been certified by the department.
- 23 (4) "Construction" means all or any part of excavation, construction, erection, alteration, repair, demolition, and dismantling 24 of buildings and other structures and all related operations; the 25 26 excavation, construction, alteration, and repair of sewers, trenches, 27 caissons, conduits, pipelines, roads, and all related operations; the 28 moving of buildings and other structures, and the construction, alteration, repair, or removal of wharfs, docks, bridges, culverts, 29

- trestles, piers, abutments, or any other related construction, alteration, repair, or removal work. "Construction" does not include manufacturing facilities or powerhouses.
- (5) "Crane" means power-operated equipment used in construction 4 5 that can hoist, lower, and horizontally move a suspended load. "Crane" includes, but is not limited to: Articulating cranes, such as knuckle-6 boom cranes; crawler cranes; floating cranes; cranes on barges; 7 locomotive cranes; mobile cranes, such as wheel-mounted, rough-terrain, 8 all-terrain, commercial truck mounted, and boom truck cranes; 9 multipurpose machines when configured to hoist and lower by means of a 10 winch or hook and horizontally move a suspended load; industrial 11 cranes, such carry-deck cranes; dedicated pile drivers; 12 as service/mechanic trucks with a hoisting device; a crane on a monorail; 13 tower cranes, such as fixed jib, hammerhead boom, luffing boom, and 14 self-erecting; pedestal cranes; portal cranes; overhead and gantry 15 cranes; straddle cranes; side-boom tractors; derricks; and variations 16 17 of such equipment.
- 18 (6) "Crane operator" means an individual engaged in the operation of a crane.
- 20 (7) "Professional engineer" means a professional engineer as 21 defined in RCW 18.43.020.
- 22 (8) "Qualified crane operator" means a crane operator who meets the 23 requirements established by the department under section 5 of this act.
- 24 (9) "Safety or health standard" means a standard adopted under this chapter.
- NEW SECTION. Sec. 3. A new section is added to chapter 49.17 RCW to read as follows:
- 28 (1) Sections 2 through 5 of this act apply to cranes used with or 29 without attachments.
  - (2) Sections 2 through 5 of this act do not apply to:

- 31 (a) A crane while it has been converted or adapted for a 32 nonhoisting or nonlifting use including, but not limited to, power 33 shovels, excavators, and concrete pumps;
- 34 (b) Power shovels, excavators, wheel loaders, backhoes, loader 35 backhoes, and track loaders when used with or without chains, slings, 36 or other rigging to lift suspended loads;

- 1 (c) Automotive wreckers and tow trucks when used to clear wrecks 2 and haul vehicles;
  - (d) Service trucks with mobile lifting devices designed specifically for use in the power line and electric service industries, such as digger derricks (radial boom derricks), when used in the power line and electric service industries for auguring holes to set power and utility poles, or handling associated materials to be installed or removed from utility poles;
- 9 (e) Equipment originally designed as vehicle-mounted aerial devices 10 (for lifting personnel) and self-propelled elevating work platforms;
- 11 (f) Hydraulic jacking systems, including telescopic/hydraulic 12 gantries;
  - (g) Stacker cranes;

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- (h) Powered industrial trucks (forklifts);
- 15 (i) Mechanic's truck with a hoisting device when used in activities 16 related to equipment maintenance and repair;
  - (j) Equipment that hoists by using a come-along or chainfall;
- 18 (k) Dedicated drilling rigs;
- 19 (1) Gin poles used for the erection of communication towers;
- 20 (m) Tree trimming and tree removal work;
- 21 (n) Anchor handling with a vessel or barge using an affixed A-22 frame;
- 23 (o) Roustabouts;
- (p) Cranes used on-site in manufacturing facilities or powerhouses for occasional or routine maintenance and repair work; and
- (q) Crane operators operating cranes on-site in manufacturing facilities or powerhouses for occasional or routine maintenance and repair work.
- NEW SECTION. Sec. 4. A new section is added to chapter 49.17 RCW to read as follows:
- 31 (1) The department shall establish, by rule, a crane certification 32 program for cranes used in construction. In establishing rules, the 33 department shall consult nationally recognized crane standards.
- 34 (2) The crane certification program must include, at a minimum, the following:
- 36 (a) The department shall establish certification requirements for

crane inspectors, including an experience requirement, an education requirement, a training requirement, and other necessary requirements determined by the director;

- (b) The department shall establish a process for certified crane inspectors to issue temporary certificates of operation for a crane and the department to issue a final certificate of operation for a crane after a certified crane inspector determines that the crane meets safety or health standards, including meeting or exceeding national periodic inspection requirements recognized by the department;
- (c) Crane owners must ensure that cranes are inspected and load proof tested by a certified crane inspector at least annually and after any significant modification or significant repairs of structural parts. If the use of weights for a unit proof load test is not possible or reasonable, other recording test equipment may be used. In adopting rules implementing this requirement, the department may consider similar standards and practices used by the federal government;
- (d) Tower cranes and tower crane assembly parts must be inspected by a certified crane inspector both prior to assembly and following erection of a tower crane;
- (e) Before installation of a nonstandard tower crane base, the engineering design of the nonstandard base shall be reviewed and acknowledged as acceptable by an independent professional engineer;
- (f) A certified crane inspector must notify the department and the crane owner if, after inspection, the certified crane inspector finds that the crane does not meet safety or health standards. A certified crane inspector shall not attest that a crane meets safety or health standards until any deficiencies are corrected and the correction is verified by the certified crane inspector; and
- (g) Inspection reports including all information and documentation obtained from a crane inspection shall be made available or provided to the department by a certified crane inspector upon request.
- (3) Except as provided in section 3(2) of this act, any crane operated in the state must have a valid temporary or final certificate of operation issued by the certified crane inspector or department posted in the operator's cab or station.
  - (4) Certificates of operation issued by the department under the

- crane certification program established in this section are valid for one year from the effective date of the temporary operating certificate
- 3 issued by the certified crane inspector.

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- 4 (5) This section does not apply to maritime cranes regulated by the department.
- 6 <u>NEW SECTION.</u> **Sec. 5.** A new section is added to chapter 49.17 RCW 7 to read as follows:
- 8 (1) Except for training purposes as provided in subsection (3) of 9 this section, an employer or contractor shall not permit a crane 10 operator to operate a crane unless the crane operator is a qualified 11 crane operator.
  - (2) The department shall establish, by rule, requirements that must be met to be considered a qualified crane operator. In establishing rules, the department shall consult nationally recognized crane standards for crane operator certification. The rules must include, at a minimum, the following:
  - (a) The crane operator must have a valid crane operator certificate, for the type of crane to be operated, issued by a crane operator testing organization accredited by a nationally recognized accrediting agency which administers written and practical examinations, has procedures for recertification that enable the crane operator to recertify at least every five years, and is recognized by the department;
  - (b) The crane operator must have up to two thousand hours of documented crane operator experience, which meets experience levels established by the department for crane types and capacities by rule; and
- 28 (c) The crane operator must pass a substance abuse test conducted 29 by a recognized laboratory service.
  - (3) An apprentice operator or trainee may operate a crane when:
  - (a) The apprentice operator or trainee has been provided with training prior to operating the crane that enables the apprentice operator or trainee to operate the crane safely;
- 34 (b) The apprentice operator or trainee performs operating tasks 35 that are within his or her ability, as determined by the supervising 36 qualified crane operator; and

- 1 (c) The apprentice operator or trainee is under the direct and 2 continuous supervision of a qualified crane operator who meets the 3 following requirements:
- 4 (i) The qualified crane operator is an employee or agent of the 5 employer of the apprentice operator or trainee;
- 6 (ii) The qualified crane operator is familiar with the proper use 7 of the crane's controls;
- 8 (iii) While supervising the apprentice operator or trainee, the 9 qualified crane operator performs no tasks that detract from the 10 qualified crane operator's ability to supervise the apprentice operator 11 or trainee;
- (iv) For equipment other than tower cranes, the qualified crane operator and the apprentice operator or trainee must be in direct line of sight of each other and shall communicate verbally or by hand signals; and
- 16 (v) For tower cranes, the qualified crane operator and the 17 apprentice operator or trainee must be in direct communication with 18 each other.
- 19 (4) The department may recognize crane operator certification from 20 another state or territory of the United States as equivalent to 21 qualified crane operator requirements if the department determines that 22 the other jurisdiction's credentialing standards are substantially 23 similar to the qualified crane operator requirements.
- NEW SECTION. Sec. 6. A new section is added to chapter 49.17 RCW to read as follows:
- The department of labor and industries shall adopt rules necessary to implement sections 2 through 5 of this act.
- NEW SECTION. Sec. 7. This act takes effect January 1, 2010."
- 29 Correct the title.
  - EFFECT: (1) Adds an intent section. (2) Clarifies that, in adopting rules implementing the crane inspection and load proof testing requirement, the Department of Labor and Industries may consider

similar standards and practices used by the federal government. (3) Clarifies that, in establishing qualified crane operator rules, the Department of Labor and Industries must consult nationally recognized crane standards for crane operator certification. (4) Clarifies that, with respect to an apprentice operator or trainee performing operating tasks that are within his or her ability, the determination is to be made by the supervising qualified crane operator instead of a supervising qualified crane operator.

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