
ENGROSSED SUBSTITUTE HOUSE BILL 2171

State of Washington

60th Legislature

2007 Regular Session

By House Committee on Commerce & Labor (originally sponsored by Representatives Eddy, Conway, Campbell, Hankins, Sells, Ormsby, Moeller, Ericks, Roberts, Darneille, Hunt, Blake, Kessler, Rolfes, Flannigan, O'Brien, Hurst, Buri, Williams, Grant, Chandler, Hasegawa, Simpson, Santos, Barlow, Morrell, Fromhold, Priest, Lantz, Strow, B. Sullivan, Cody, Hinkle, Eickmeyer, Haigh, Anderson, Appleton, Kenney, Chase, McCoy, Walsh, Haler, Kelley, Springer, Newhouse, Dunshee, Linville, McIntire, Lovick, Sump, Kirby, Schual-Berke, Kagi, Quall, Ahern, Pettigrew, VanDeWege, Condotta, Green, Seaquist, Dickerson, P. Sullivan and Sommers)

READ FIRST TIME 02/28/07.

1 AN ACT Relating to crane safety; adding new sections to chapter
2 49.17 RCW; creating a new section; and providing an effective date.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 NEW SECTION. **Sec. 1.** The legislature intends to promote the safe
5 condition and operation of cranes used in construction work by
6 establishing certification requirements for construction cranes and
7 qualifications for construction crane operators. The legislature
8 intends that standards for safety of construction cranes and for
9 certification of personnel operating cranes in construction work be
10 established.

11 NEW SECTION. **Sec. 2.** A new section is added to chapter 49.17 RCW
12 to read as follows:

13 The definitions in this section apply throughout sections 2 through
14 5 of this act unless the context clearly requires otherwise.

15 (1) "Apprentice operator or trainee" means a crane operator who has
16 not met requirements established by the department under section 5 of
17 this act.

1 (2) "Attachments" includes, but is not limited to, crane-attached
2 or suspended hooks, magnets, grapples, clamshell buckets, orange peel
3 buckets, concrete buckets, drag lines, personnel platforms, augers, or
4 drills and pile-driving equipment.

5 (3) "Certified crane inspector" means a crane inspector who has
6 been certified by the department.

7 (4) "Construction" means all or any part of excavation,
8 construction, erection, alteration, repair, demolition, and dismantling
9 of buildings and other structures and all related operations; the
10 excavation, construction, alteration, and repair of sewers, trenches,
11 caissons, conduits, pipelines, roads, and all related operations; the
12 moving of buildings and other structures, and the construction,
13 alteration, repair, or removal of wharfs, docks, bridges, culverts,
14 trestles, piers, abutments, or any other related construction,
15 alteration, repair, or removal work. "Construction" does not include
16 manufacturing facilities or powerhouses.

17 (5) "Crane" means power-operated equipment used in construction
18 that can hoist, lower, and horizontally move a suspended load. "Crane"
19 includes, but is not limited to: Articulating cranes, such as knuckle-
20 boom cranes; crawler cranes; floating cranes; cranes on barges;
21 locomotive cranes; mobile cranes, such as wheel-mounted, rough-terrain,
22 all-terrain, commercial truck mounted, and boom truck cranes;
23 multipurpose machines when configured to hoist and lower by means of a
24 winch or hook and horizontally move a suspended load; industrial
25 cranes, such as carry-deck cranes; dedicated pile drivers;
26 service/mechanic trucks with a hoisting device; a crane on a monorail;
27 tower cranes, such as fixed jib, hammerhead boom, luffing boom, and
28 self-erecting; pedestal cranes; portal cranes; overhead and gantry
29 cranes; straddle cranes; side-boom tractors; derricks; and variations
30 of such equipment.

31 (6) "Crane operator" means an individual engaged in the operation
32 of a crane.

33 (7) "Professional engineer" means a professional engineer as
34 defined in RCW 18.43.020.

35 (8) "Qualified crane operator" means a crane operator who meets the
36 requirements established by the department under section 5 of this act.

37 (9) "Safety or health standard" means a standard adopted under this
38 chapter.

1 NEW SECTION. **Sec. 3.** A new section is added to chapter 49.17 RCW
2 to read as follows:

3 (1) Sections 2 through 5 of this act apply to cranes used with or
4 without attachments.

5 (2) Sections 2 through 5 of this act do not apply to:

6 (a) A crane while it has been converted or adapted for a
7 nonhoisting or nonlifting use including, but not limited to, power
8 shovels, excavators, and concrete pumps;

9 (b) Power shovels, excavators, wheel loaders, backhoes, loader
10 backhoes, and track loaders when used with or without chains, slings,
11 or other rigging to lift suspended loads;

12 (c) Automotive wreckers and tow trucks when used to clear wrecks
13 and haul vehicles;

14 (d) Service trucks with mobile lifting devices designed
15 specifically for use in the power line and electric service industries,
16 such as digger derricks (radial boom derricks), when used in the power
17 line and electric service industries for auguring holes to set power
18 and utility poles, or handling associated materials to be installed or
19 removed from utility poles;

20 (e) Equipment originally designed as vehicle-mounted aerial devices
21 (for lifting personnel) and self-propelled elevating work platforms;

22 (f) Hydraulic jacking systems, including telescopic/hydraulic
23 gantries;

24 (g) Stacker cranes;

25 (h) Powered industrial trucks (forklifts);

26 (i) Mechanic's truck with a hoisting device when used in activities
27 related to equipment maintenance and repair;

28 (j) Equipment that hoists by using a come-along or chainfall;

29 (k) Dedicated drilling rigs;

30 (l) Gin poles used for the erection of communication towers;

31 (m) Tree trimming and tree removal work;

32 (n) Anchor handling with a vessel or barge using an affixed A-
33 frame;

34 (o) Roustabouts;

35 (p) Cranes used on-site in manufacturing facilities or powerhouses
36 for occasional or routine maintenance and repair work; and

37 (q) Crane operators operating cranes on-site in manufacturing

1 facilities or powerhouses for occasional or routine maintenance and
2 repair work.

3 NEW SECTION. **Sec. 4.** A new section is added to chapter 49.17 RCW
4 to read as follows:

5 (1) The department shall establish, by rule, a crane certification
6 program for cranes used in construction. In establishing rules, the
7 department shall consult nationally recognized crane standards.

8 (2) The crane certification program must include, at a minimum, the
9 following:

10 (a) The department shall establish certification requirements for
11 crane inspectors, including an experience requirement, an education
12 requirement, a training requirement, and other necessary requirements
13 determined by the director;

14 (b) The department shall establish a process for certified crane
15 inspectors to issue temporary certificates of operation for a crane and
16 the department to issue a final certificate of operation for a crane
17 after a certified crane inspector determines that the crane meets
18 safety or health standards, including meeting or exceeding national
19 periodic inspection requirements recognized by the department;

20 (c) Crane owners must ensure that cranes are inspected and load
21 proof tested by a certified crane inspector at least annually and after
22 any significant modification or significant repairs of structural
23 parts. If the use of weights for a unit proof load test is not
24 possible or reasonable, other recording test equipment may be used. In
25 adopting rules implementing this requirement, the department may
26 consider similar standards and practices used by the federal
27 government;

28 (d) Tower cranes and tower crane assembly parts must be inspected
29 by a certified crane inspector both prior to assembly and following
30 erection of a tower crane;

31 (e) Before installation of a nonstandard tower crane base, the
32 engineering design of the nonstandard base shall be reviewed and
33 acknowledged as acceptable by an independent professional engineer;

34 (f) A certified crane inspector must notify the department and the
35 crane owner if, after inspection, the certified crane inspector finds
36 that the crane does not meet safety or health standards. A certified

1 crane inspector shall not attest that a crane meets safety or health
2 standards until any deficiencies are corrected and the correction is
3 verified by the certified crane inspector; and

4 (g) Inspection reports including all information and documentation
5 obtained from a crane inspection shall be made available or provided to
6 the department by a certified crane inspector upon request.

7 (3) Except as provided in section 3(2) of this act, any crane
8 operated in the state must have a valid temporary or final certificate
9 of operation issued by the certified crane inspector or department
10 posted in the operator's cab or station.

11 (4) Certificates of operation issued by the department under the
12 crane certification program established in this section are valid for
13 one year from the effective date of the temporary operating certificate
14 issued by the certified crane inspector.

15 (5) This section does not apply to maritime cranes regulated by the
16 department.

17 NEW SECTION. **Sec. 5.** A new section is added to chapter 49.17 RCW
18 to read as follows:

19 (1) Except for training purposes as provided in subsection (3) of
20 this section, an employer or contractor shall not permit a crane
21 operator to operate a crane unless the crane operator is a qualified
22 crane operator.

23 (2) The department shall establish, by rule, requirements that must
24 be met to be considered a qualified crane operator. In establishing
25 rules, the department shall consult nationally recognized crane
26 standards for crane operator certification. The rules must include, at
27 a minimum, the following:

28 (a) The crane operator must have a valid crane operator
29 certificate, for the type of crane to be operated, issued by a crane
30 operator testing organization accredited by a nationally recognized
31 accrediting agency which administers written and practical
32 examinations, has procedures for recertification that enable the crane
33 operator to recertify at least every five years, and is recognized by
34 the department;

35 (b) The crane operator must have up to two thousand hours of
36 documented crane operator experience, which meets experience levels

1 established by the department for crane types and capacities by rule;
2 and

3 (c) The crane operator must pass a substance abuse test conducted
4 by a recognized laboratory service.

5 (3) An apprentice operator or trainee may operate a crane when:

6 (a) The apprentice operator or trainee has been provided with
7 training prior to operating the crane that enables the apprentice
8 operator or trainee to operate the crane safely;

9 (b) The apprentice operator or trainee performs operating tasks
10 that are within his or her ability, as determined by the supervising
11 qualified crane operator; and

12 (c) The apprentice operator or trainee is under the direct and
13 continuous supervision of a qualified crane operator who meets the
14 following requirements:

15 (i) The qualified crane operator is an employee or agent of the
16 employer of the apprentice operator or trainee;

17 (ii) The qualified crane operator is familiar with the proper use
18 of the crane's controls;

19 (iii) While supervising the apprentice operator or trainee, the
20 qualified crane operator performs no tasks that detract from the
21 qualified crane operator's ability to supervise the apprentice operator
22 or trainee;

23 (iv) For equipment other than tower cranes, the qualified crane
24 operator and the apprentice operator or trainee must be in direct line
25 of sight of each other and shall communicate verbally or by hand
26 signals; and

27 (v) For tower cranes, the qualified crane operator and the
28 apprentice operator or trainee must be in direct communication with
29 each other.

30 (4) The department may recognize crane operator certification from
31 another state or territory of the United States as equivalent to
32 qualified crane operator requirements if the department determines that
33 the other jurisdiction's credentialing standards are substantially
34 similar to the qualified crane operator requirements.

35 NEW SECTION. **Sec. 6.** A new section is added to chapter 49.17 RCW
36 to read as follows:

1 The department of labor and industries shall adopt rules necessary
2 to implement sections 2 through 5 of this act.

3 NEW SECTION. **Sec. 7.** This act takes effect January 1, 2010.

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