

# HOUSE BILL REPORT

## HB 2171

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**As Reported by House Committee On:**  
Commerce & Labor

**Title:** An act relating to crane safety.

**Brief Description:** Regarding crane safety.

**Sponsors:** 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.

**Brief History:**

**Committee Activity:**

Commerce & Labor: 2/20/07, 2/23/07 [DPS].

**Brief Summary of Substitute Bill**

- Requires the Department of Labor and Industries (Department) to establish a crane certification program.
- Requires the Department to establish qualified crane operator requirements.
- Prohibits an employer or contractor from allowing a person who does not meet qualified crane operator requirements to operate a crane without direct supervision.

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### HOUSE COMMITTEE ON COMMERCE & LABOR

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 5 members: Representatives Conway, Chair; Wood, Vice Chair; Green, Moeller and Williams.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

**Minority Report:** Do not pass. Signed by 2 members: Representatives Condotta, Ranking Minority Member and Chandler, Assistant Ranking Minority Member.

**Staff:** Sarah Beznoska (786-7109).

**Background:**

Washington Industrial Safety and Health Act

Generally, workplace safety is governed by the federal Occupational Safety and Health Act (OSHA). The federal Occupational Safety and Health Administration within the federal Department of Labor administers the OSHA. However, Washington is a "state plan state" under the federal OSHA. As a state plan state, Washington is authorized to assume responsibility for occupational safety and health in the state.

The Department of Labor and Industries (Department) administers and enforces the Washington Industrial Safety and Health Act (WISHA). The WISHA directs the Department to adopt rules governing safety and health standards for workplaces covered by the WISHA. To maintain its status as a state plan state, Washington's safety and health standards must be at least as effective as standards adopted or recognized under the OSHA.

State Crane Regulations

Under the WISHA, the Department has adopted rules related to safety standards in construction work. These rules include rules related to cranes. Under Department rule, an employer is required to comply with manufacturer's specifications and limitations applicable to the operation of any and all cranes and derricks. If manufacturer's specifications are not available, limitations assigned to the equipment must be based on determinations of a qualified engineer.

In addition, an employer is required to designate a competent person to inspect all machinery and equipment prior to each use, and periodically during use to make sure it is in safe operating condition. Any deficiencies must be repaired, or defective parts replaced, before continued use. A thorough, annual inspection by a competent person, or by a government or private agency recognized by the Department is also required. The employer must maintain a permanent record of the dates and results of all inspections.

"Competent person" is defined in rule as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective action to eliminate them.

Under the WISHA, the Department also has created a specific program for cranes used in the maritime industry. Under this program, the Department recognizes certain crane certifiers as accredited crane certifiers. Accredited crane certifiers are authorized to conduct certain tests, inspections, and examinations, and to issue corresponding certificates for cranes used in the maritime industry.

## Federal Activity

Negotiated rule-making is a process authorized under the federal Negotiated Rulemaking Act. Under the federal law, a federal agency is authorized to establish a negotiated rule-making committee when the agency determines that a negotiated rule-making committee can adequately represent the interests that will be significantly affected by a proposed rule and that it is feasible and appropriate in the particular rule-making. The federal agency chooses participants on the committee and committee meetings are announced and open to the public. Decisions by a negotiated rule-making committee are made by consensus, which is defined as unanimous concurrence among the interests represented on a negotiated rulemaking committee, unless the committee:

- agrees to define such term to mean a general, but not unanimous concurrence; or
- agrees upon another specified definition.

To adopt rules proposed by a negotiated rule-making committee, a federal agency must engage in the official rulemaking process, including notice of proposed rule-making, opportunity for public comment, and promulgation of a final rule.

In June 2003, the federal Department of Labor established a "Crane and Derrick Negotiated Rulemaking Committee" to participate in a negotiated rule-making process and develop a proposal to use as the basis for a federal rule-making on new safety standards for cranes and derricks.

In 2004, the federal Department of Labor announced that the Crane and Derrick Negotiated Rulemaking Committee had reached a consensus on a proposal for new crane rules. The consensus document contains a variety of general safety standards related to cranes, including crane operator requirements. The consensus document does not address crane certification.

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### **Summary of Substitute Bill:**

The Department of Labor and Industries (Department) is required to establish a crane certification program and qualified crane operator requirements.

#### Crane Certification

The Department must establish, by rule, a crane certification program for cranes used in construction. In establishing rules, the Department must consult nationally recognized crane standards. Minimum requirements for the crane certification program are created. The crane certification program must include:

- certification requirements for crane inspectors;
- 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;

- a requirement 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;
- a requirement that tower cranes and tower crane assembly parts are inspected by a certified crane inspector both prior to assembly and following erection of the tower crane on a new site;
- a requirement that, before installation of a nonstandard tower crane base, the engineering design of the nonstandard base must be reviewed and acknowledged as acceptable by an independent professional engineer;
- notification to the Department if a crane does not meet safety and health standards; and
- a requirement that inspection reports including all information and documentation obtained from a crane inspection be made available or provided to the Department by a certified crane inspector upon request.

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. Certificates of operation issued by the Department under the crane certification program are valid for one year from the effective date of the temporary operating certificate issued by the certified crane inspector.

The crane certification program does not apply to maritime cranes regulated by the Department.

### Crane Operators

Generally, an employer or contractor must not allow a crane operator to operate a crane unless the crane operator is a qualified crane operator, as established by the Department in rule. Procedures are created, however, for allowing an operator who is not a qualified crane operator to operate with supervision.

The qualified crane operator standards established by the Department in rule must include the following minimum requirements:

- 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 and recognized by the Department. The organization must administer written and practical examinations and have procedures for recertification that enable the crane operator to recertify at least every five years;
- the crane operator must have up to 2000 hours of documented crane operation experience, based on the crane type and capacity as determined by the Department; and
- the crane operator must pass a substance abuse test conducted by a recognized laboratory service.

A person who does not meet qualified crane operator requirements may operate a crane when:

- the apprentice operator or trainee has been provided with training prior to operating the crane that enables him or her to operate the crane safely;
- the apprentice operator or trainee performs operating tasks that are within his or her ability, as determined by a supervising qualified crane operator; and
- the apprentice operator or trainee is under the direct and continuous supervision of a qualified crane operator.

The supervising crane operator must:

- be an employee or agent of the employer of the apprentice operator or trainee;
- be familiar with the proper use of the crane's controls;
- perform no tasks that detract from the ability to supervise;
- be in direct line of sight and communicate verbally or by hand signals, for equipment other than tower cranes; and
- be in direct communication, for tower cranes.

The Department may recognize certification from another state or territory of the United States as equivalent to qualified crane operator requirements if the Department determines that the other jurisdiction's credentialing standards are substantially similar to the Department's qualified crane operator requirements.

#### Definition of Crane and Application of Requirements

"Crane" is generally defined as power-operated equipment used in construction that can hoist, lower, and horizontally move a suspended load. "Crane" includes, but is not limited to: articulating 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 and horizontally move a suspended load by means of a winch or hook; industrial cranes, such as carry-deck cranes; dedicated pile drivers; service/mechanic trucks with a hoisting device; a crane on a monorail; tower cranes, such as fixed job, hammerhead boom, luffing boom, and self-erecting; pedestal cranes; portal cranes; overhead and gantry cranes; straddle cranes; side-boom tractors; derricks; and variations of such equipment.

A specific list of exemptions is created. The crane certification requirements and the crane operator requirements do not apply to:

- a crane while it has been converted or adapted for a non-hoisting or non-lifting use including, but not limited to, power shovels, excavators, and concrete pumps;
- power shovels, excavators, wheel loaders, backhoes, loader backhoes, and track loaders when used with or without chains, slings, or other rigging to lift suspended loads;
- automotive wreckers and tow trucks when used to clear wrecks and haul vehicles;
- 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;
- equipment originally designed as vehicle-mounted aerial devices (for lifting personnel) and self-propelled elevating work platforms;
- hydraulic jacking systems, including telescopic/hydraulic gantries;
- stacker cranes;
- powered industrial trucks (forklifts);
- mechanic's truck with a hoisting device when used in activities related to equipment maintenance and repair;
- equipment that hoists by using a come-along or chainfall;
- dedicated drilling rigs;
- gin poles used for the erection of communication towers;
- tree trimming and tree removal work;
- anchor handling with a vessel or barge using an affixed A-frame;
- roustabouts;
- cranes used on-site in manufacturing facilities or powerhouses for occasional or routine maintenance and repair work; and
- crane operators operating cranes on-site in manufacturing facilities or powerhouses for occasional or routine maintenance and repair work.

Construction means all or any part of excavation, construction, erection, alteration, repair, demolition, and dismantling of buildings and other structures and all related operations; the excavation, construction, alteration, and repair of sewers, trenches, caissons, conduits, pipelines, roads, and all related operations; the moving of buildings and other structures, or any other related construction, alteration, repair, or removal work. Construction does not include manufacturing facilities or powerhouses.

**Substitute Bill Compared to Original Bill:**

The substitute bill removes a requirement that crane inspectors be third parties with no financial interest in the project.

The substitute bill adds a requirement that inspection reports, including all information and documentation obtained from a crane inspection, be made available or provided to the Department by a certified crane inspector upon request.

The substitute bill changes the requirement that an independent professional engineer review the design of a nonstandard base so that the crane owner is not the entity that is required to make sure the review occurs and changes the language from a requirement that the plans for a nonstandard base be approved to a requirement that the plans be acknowledged as acceptable.

The substitute bill clarifies that a crane may be operated with a temporary certificate issued by a certified crane inspector and clarifies that final certificates issued by the Department are valid for one year from the date the temporary certificate was first issued by a certified crane inspector.

The substitute bill includes a definition of construction.

The substitute bill creates an exemption for cranes and the operators of cranes used on-site in manufacturing facilities or powerhouses for occasional or routine maintenance and repair work.

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**Appropriation:** None.

**Fiscal Note:** New fiscal note requested on February 26, 2007.

**Effective Date of Substitute Bill:** The bill takes effect on January 1, 2010.

**Staff Summary of Public Testimony:**

(In support) This bill is related to the crane collapse that occurred last fall. When the crane collapsed, it was surprising to learn that the state had no involvement in inspecting cranes. In the aftermath of the event, structural problems were found and corrected in other cranes. Had the accident not happened, those structural problems would not have been found.

When the crane collapsed in the fall, there were many losses, including loss of public confidence and, most significantly, loss of a resident. There is no way to provide 100 percent certainty that there will never be another accident, but this bill goes a long way towards preventing these types of accidents.

There are many industries regulated in the state and some may be over-regulated. This is not one of those areas. Cranes are hundreds of tons of equipment in the air under the control of a single human being. If heavy equipment is appropriately put together, inspected, maintained, and used, it is safe. This is an area that needs regulation.

There has been a lot of work on this bill. It is critical to deal with this issue this year. Construction is growing and it is important for public health, safety, and welfare to deal with this issue now. A number of people have worked on this bill.

This bill does not prohibit anyone from operating a crane. It just requires a person to be certified before operating the crane and it requires the crane to be inspected. Experience is also required for operators. There are concerns about the definition of construction, and that issue is being worked on.

This bill, with the substitute, conforms to federal consensus documents. The substitute provides the appropriate guidance to the Department on what is needed in the rule-making. The bill allows the Department to accomplish the Department's mandates under the Occupational Safety and Health Act. The Department supports making it clear that the bill does not apply to manufacturing.

There were two areas of concern that were worked out. First, the scope of the bill. The scope was copied directly from the Crane and Derrick Negotiated Rule-making Committee federal consensus document and that is coming down the pike and will be here anyway. It makes sense to follow what is coming at the federal level. The second area of concern was crane certification, which goes beyond the consensus document. However, crane certification is

linked to periodic inspections which are already required under rules developed by the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers. The only different element under the bill is that, after the inspection is done, there is certification. This would place some sort of certificate on the crane so that the operator and everyone else can see that it has been inspected.

The bill should clarify who certifying entities are, such as the National Commission for Certifying Agencies. Standards developed by ANSI could be referenced as well.

(In support with amendments) There is support for the concept of this legislation, but the bill itself has shortcomings. There are a number of suggested changes to the bill that would clarify agreements and would more specifically tie rule-making and policy decisions to national documents.

One suggested change deals with the scope of coverage. The bill does not define construction. Rather than trying to define what construction is, a specific exemption could be created to more clearly state what is covered and what is not covered. There is also a question about how much regulation should be done over mobile cranes or boom trucks. A suggested change is to clarify in the bill that any boom truck with a rotating operator platform would be covered, but other boom trucks, with a fixed or stationary platform, would not. Other states take a different approach by limiting coverage by weight of the crane. For example, California uses three tons.

Other changes should specifically allow reciprocity for crane inspectors and operators. Alternative load testing procedures are also needed for large cranes. A requirement should be added for a physical examination for crane operators.

The fiscal note apportions 93 percent of the cost of this program to employers while the benefits are more evenly distributed. Cost should be more evenly distributed.

(With concerns) Some language in the bill needs to be changed so that it does not have detrimental effect on utilities. My group is a maintenance group of about 100 people with about 11 hydraulic cranes and boom trucks. The bill would deal with this equipment. The requirement for up to 2,000 hours of experience would be prohibitive. In addition, we already have an excellent inspection program. We do not operate the same way as construction. Our workforce is qualified to operate, inspect, and take care of our cranes and equipment. Electric utilities should be excluded from this bill or some of the language should be clarified as to how it applies to electric utilities.

(Opposed) There are changes to the bill that are needed. Practices and policies that promote safety in the workplace are supportable and the safety of cranes in construction is supportable. However, the term construction is not defined and this raises concerns for businesses that engage in manufacturing. Manufacturing should be exempt.

**Persons Testifying:** (In support) Representative Eddy, prime sponsor; Steve Cant, Department of Labor and Industries; Thom Sicklesteel, Sicklesteel Cranes, Inc.; Randy Loomans, International Union of Operating Engineers Local 302; Mike Brennan, City of



Bellevue; and Danny Thiemens, National Commission for the Certification of Crane Operators.

(In support with amendments) Rick Slunaker, Associated General Contractors.

(With concerns) Tom Treat, Chelan County Public Utility District.

(Opposed) Grant Nelson, Association of Washington Business.

**Persons Signed In To Testify But Not Testifying:** None.