

## PART 14: CRANES AND HOISTS

### EQUIPMENT OPERATION

#### Operator's duties

#### 14.37.1

The operator of a crane, hoist or boom truck must have full control of the equipment controls whenever the hoisting equipment is in use, and engage in no other duties while operating the equipment.

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#### Explanatory Note:

In June 2005 a worker was fatally injured when struck by the overhaul ball of a mobile crane. The overhaul ball lowered unexpectedly and struck the worker when the brake on the hoist drum for the load line did not properly engage when set by the operator before the operator left the controls to attend to other duties. The BC Coroners Service *Judgement of Inquiry* into this death made several recommendations directed to WorkSafeBC and the *Occupational Health and Safety Regulation* ("OHSR"). This change addresses one of those recommendations, the one related to operator's duties and supervision.

The relevant *Judgement of Inquiry* Recommendation reads as follows:

- 8) *That Part 14: Cranes and Hoists, of the OHSR be amended by requiring that all critical lifts (defined in such a way so as to include all situations in which persons on the ground may be at risk of being struck by a suspended load, or any part of the mobile crane) be made under the direction of a qualified supervisor who is not operating the crane, or otherwise involved in the operation of another piece of lifting equipment.*

WorkSafeBC has considered this recommendation and took the proposed wording for a new section 14.37.1 to consultation in December 2007/January 2008 and to public hearing in May/June 2008.

A number of regulation changes made to Part 14 of the OHSR in 2006 and 2007, such as those related to crane operator certification, critical lift definition, tandem lift and critical lift requirements for preplanning and crew meeting prior to the start of lifting operations, and overall site supervision, are beneficial in addressing some aspects of the *Judgement of Inquiry* Recommendation 8.

The requirement added in 2006 for crane operators to be certified (section 14.34.1 of the OHSR) has resulted in approximately 10,000 people being registered as operators and is expected to improve the overall competency of crane operations.

The 2007 amendments to the OHSR, which became effective February 1, 2008, provide a definition of critical lift, and also requirements for a tandem lift and critical lift. A tandem lift requires a supervisor who is not operating a crane or hoist. A critical lift does not require such a supervisor but does require a written lift plan, a pre-job crew meeting immediately before starting lifting operations, and that effective communications be established and maintained between all people involved in the lift. The 2007 amendments also provide a new section 14.38(6) which will require the employer or prime contractor provide overall supervision and control on the worksite so people not involved in the lifting operation do not need to be supervised by the crane crew.

The definition proposed by the *Judgement of Inquiry* Recommendation for "critical lift" is very broad and would mean that if any person was within the reach of the crane or any possible load path, then a supervisor would be required. Implementing this recommendation would be impracticable, so broadening the OHSR definition of critical lift to reflect the proposal in the Coroner's Inquiry Recommendation 8 did not proceed.

WorkSafeBC has added the above new section restricting the duties that may be assigned to or undertaken by a crane operator similar to section 20.52 of the OHSR which sets out "Operator's duties" for the operator of a concrete pump and placing boom or mast. This section states:

**AMENDMENTS FOR PART 14: CRANES AND HOISTS  
IN THE OCCUPATIONAL HEALTH AND SAFETY REGULATION**

**20.52 Operator's duties**

*The operator of a concrete placing boom or mast must have full control of the pump and placing equipment controls whenever the equipment is operating and engage in no other duties while operating the concrete pump and placing boom or mast.*

A crane operator is responsible for the safe operation of the crane. To ensure safe operation of the crane the operator must understand all parameters of the lift about to be made and the role of each person involved in the lift. A qualified operator does not need a supervisor overseeing every critical lift. A qualified (and certified) operator is expected to have the skills and knowledge to operate the crane without constant or ongoing direct supervision and to ask questions about load weights and rigging points if the operator is not satisfied these have been properly determined and communicated to the operator. A person training to be a crane or hoist operator should be operating under the direct and close supervision of a qualified and certified operator.

In proposed section 14.37.1, "in use" is intended to include equipment set up and take down as well as any time the equipment is being positioned to lift a load or is supporting a load.