

Level Up, Own Your Lift *Self-Planned Inspections*

Provisional Operator Supervisor

Questions

BC Crane Safety is providing these self-planned inspection questions to educate crane stakeholders for a better understanding of their health and safety responsibilities to comply with WorkSafeBC's Occupational Health and Safety Regulation and relevant CSA standards.

This set of questions have been developed in conjunction with WorkSafeBC's Crane/Mobile Equipment Team. It is recommended that crane employers and owners refer to these questions to improve their company or site safety management systems.

What is the "Level Up; Own Your Lift" self-planned inspection process?

The "Level Up; Own Your Lift" inspection program is a self-planned inspection process for worksites that use cranes (mobile, self-erect and tower) to measure your responsible persons' / parties' compliance with crane safety.

BC Crane Safety is constructing crane-process-specific self-planned inspection questions and support materials for:

- Prime contractors
- Crane employers
- Crane owners
- Crane supervisors
- Crane operators

Plan — Responsibilities Questions

Questions: Who is the Supervisor?	Validation
1. Has the employer identified or designated a qualified supervisor for their crane operators or does the employer rely on other employer to provide this supervision?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Has the employer developed a plan for evaluating, training, and monitoring their provisional crane operators? Can you describe the plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Can the crane supervisor describe their responsibilities and experience providing direct / indirect supervision to provisional crane operators?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Who is the on-site supervisor for the crane operator?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Do — Site Operations Questions

Questions — OHS Knowledge	Validation
5. Demonstrate knowledge of regulatory requirements pertaining to cranes? WCA 21, OHSR 14	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

What is the planned inspection about?

The self-planned inspection uses these questions to conduct a consistent and responsibility-driven inspection of the crane-related parties on the worksite.

PLAN, DO, CHECK, & ACT

BC Crane Safety's Level Up Self-Planned Inspections are education and awareness materials for crane stakeholders to use an informed approach to inspections as part of a safety management system focusing on worksite monitoring and continuous improvement.

Do — Site Operations Questions, continued

6. Demonstrate knowledge of a tower crane operator's duties and responsibilities. OHSR 14.35	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
7. Demonstrate knowledge of pre-operational and start of shift requirements in crane operations, including logbook entries. WCA 21, OHSR 14.34	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
8. Demonstrate and understanding of rated capacity and load charts. OHSR 14.5	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
9. Demonstrate an understanding of site-specific hazards and controls related to crane operations? WCA 21, OHSR 14.34	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
10. Describe procedures for informing operators of overhead high voltage power line hazards and steps to control this risk. OHSR 19.24	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

Check — Maintenance/Documentation Questions

Questions — Maintenance/Documentation	Validation
11. Describe the process for reviewing and maintaining an up-to-date collection of site-specific documents important to operating the tower crane (examples include are not limited to): <ul style="list-style-type: none"> • Crane manufacturer's manual • Crane operator's logbook • WorkSafeBC tower crane erector's report • Site plan showing limits of approach for overhead power lines • Maintenance records for all work carried out on the crane at the work site • Relevant site-specific safe work procedures • Rigging and lifting equipment inspection records 	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
12. Describe the process for ensuring repairs and maintenance are recorded in the operator's crane logbook. OHSR 14.12	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

How many types of self-planned inspections are there?

The self-planned inspection uses these questions to conduct a consistent and responsibility-driven inspection of the crane-related parties on the worksite.

There are five types of inspections, including:

- Crane Employer/Site Inspections
- Provisional Operator Supervisor Checks
- Crane Assembly Supervisor Checks
- Preventive Maintenance Inspections
- Crane Operator Qualification Checks

Inspection/Check Questions are available for download on the BC Crane Safety website.

Check — Maintenance/Documentation Questions, continued

Questions — Maintenance/Documentation	Validation
13. Demonstrate knowledge of daily, weekly, and monthly inspections for tower cranes. OHSR 14.13, 14.35	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
14. Demonstrate knowledge of annual and special inspection requirements for tower cranes. OHSR 14.13, 14.77	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
15. Describe how to inspect, maintain, and store rigging slings, connecting hardware, and below the hook lifting equipment such as concrete buckets and garbage boxes. OHSR 15.2	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

Check — Crane Operations Questions

Questions — Operations	Validation
16. Demonstrate knowledge of protocols for safe operation of tower cranes on a multi-crane site. OHSR 14.84, 14.85	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
17. Demonstrate knowledge of crane fall protection. OHSR 11.2(6)	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

Check — Emergency Preparedness Questions

Questions — Emergency Preparedness	Validation
18. Describe your involvement in the planning for known hazards, high voltage LOA, crane overlap, rescue of injured workers and tower crane operator. OHSR 4.13, 14.84, 19.24	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
19. Describe the process for emergency evacuation of the crane operator (THAARP/OFA requirements)? OHSR 4.13	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete
20. Describe Site evacuation/rescue of worker using a DEP? Have drills been completed? OHSR 13.29(3)	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete

Act — Post Inspection Discussion

Continuous Improvement Next Steps

During the post inspection discussion, please encourage the worksite representatives to act on the key learnings or areas of improvement.

If unsure, help them to identify 1-2 measures that need/must be corrected, changed, eliminated, or modified to improve worker and worksite safety.

The Act stage of the Plan-Do-Check-Act process is where the worksite representative/superintendent implements an improved baseline of operations and re-measures implementation to ensure improvements/corrections. By measuring implementation, i.e., identifying a lower level of risk, reducing hazard severity/frequency, the worksite is taking positive action towards improved health and safety.

Workers Compensation OHSR – Excerpts

WCB OHSR EXCERPTS

Included are some of the relevant parts of the Occupational Health and Safety Regulation (OHSR) on crane employer and site responsibilities.

Safe workplace – OHSR 4.1

A workplace must be planned, constructed, used and maintained to protect from danger any person working at the workplace.

Inspection, maintenance and repair – OHSR 14.13

- (1) Each crane and hoist must be inspected and maintained at a frequency and to the extent required to ensure that every component is capable of carrying out its original design function with an adequate margin of safety.
- (2) A crane or hoist must not be used until any condition that could endanger workers is remedied.

Operator qualifications – OHSR 14.34

- (1) A crane or hoist must only be operated by a qualified person who has been instructed to operate the equipment.
- (2) A person must demonstrate competency, including familiarity with the operating instructions for the crane or hoist and the code of signals for hoisting operations authorized by the Board before operating the equipment.

Pre-use inspection – OHSR 14.35

- (1) Before an operator uses a crane or hoist, the operator must ensure that
 - a) the crane or hoist was inspected for that work shift, and
 - b) the control and safety devices were tested for that work shift.
- (2) Any defects found during inspection or use of a crane or hoist must be recorded in the inspection and maintenance record system and be reported immediately to the supervisor, who must determine the course of action to be taken.
- (3) If a defect affects the safe operation of the crane or hoist, the equipment must not be used until the defect has been remedied.

Operator's duties – OHSR 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.

Workers Compensation OHSR — Excerpts, continued

Safe lifting – OHSR 14.38

- (1) The rated capacity of a crane or hoist must not be exceeded.
- (2) The operator of a crane or hoist must not move a load unless the operator is satisfied that the load can be handled safely.
- (3) A load must be secured during a lift to ensure that all or any part of the load cannot be dislodged.
- (4) A load line on a crane or hoist must not contact anything other than the load block or hook and the sheaves and hoist drum.
- (5) Tag lines or other effective means must be used when necessary to control hazardous movement of a load or to assist with positioning a load.
- (6) If a crane or hoist is being operated at the same time and in the same location as other work activity, the employer or the prime contractor must organize and control the work of any persons who are not involved in that operation to ensure that the operation can be carried out safely.

Limit devices – OHSR 14.81

- (1) A tower crane must have automatic travel limit switches and automatic overload prevention devices that prevent overloading at any trolley position, the load block from travelling beyond the highest allowable position specified by the manufacturer and the trolley from travelling beyond the allowable limit specified by the manufacturer.

Qualified riggers – OHSR 15.2

Rigging and slinging work must be done by or under the direct supervision of qualified workers familiar with the rigging to be used and with the code of signals authorized by the Board for controlling hoisting operations.

FOR MORE INFORMATION

For more crane safety related information, including operator certification, contact BC Association for Crane Safety (BC Crane Safety)

Where can I find out more information about crane safety?

Check BC Crane Safety's websites at:

www.bccranesafety.ca