

DOSH DIRECTIVE

Department of Labor and Industries
Division of Occupational Safety and Health
Keeping WA workers safe.

8.70 Crane Safety Inter-Program Coordination

(Updated) Date: October 20, 2010

I. Purpose

This directive establishes inter-program coordination related to the Crane Safety Program, the protocol regarding how staff members within DOSH interact when they encounter issues related to cranes or rigging and related enforcement and consultation measures.

For the purposes of this directive, “CSHO” refers to both DOSH Inspectors and Consultants.

II. Scope and Application

This directive applies to all DOSH staff and operations statewide. It replaces all previous instructions on this issue, whether formal or informal.

III. References

- RCW 49.17.400 through 440
- Chapter 296-155 WAC, Part L, Cranes, Derricks, Hoists, Elevators, and Conveyors
- Chapter 296-56 WAC, Part E, Cargo Handling Gear and Equipment
- WAC 296-304-140 through 200 in the Shipbuilding, Ship Repairing and Shipbreaking rules

IV. Background

The department has established a Crane Safety Program within DOSH following legislative action in 2007 to adopt RCW 49.17.400 through 440. The program consists of a Crane Safety Manager, Crane Field Safety Supervisor, Crane Technical Safety Specialist, Customer Service Specialists, and specially trained Compliance Safety and Health Officers (CSHOs) located statewide. The CSHOs have construction safety backgrounds with a specialty in crane and rigging safety.

They also are required to successfully pass several written examinations, which are the same examinations that private industry crane certifiers must pass in order to become an accredited crane certifier for the construction industry. These CSHOs have been issued fall protection gear and have been trained in the use of this gear.

The department also has an additional crane certification program, which has existed for many years and applies to Maritime Material Handling Devices, which is independent of the construction industry's requirements. These requirements are found in Chapter 296-56 WAC, Part E, for longshoring operations and WAC 296-304-140 through 200 for shipyards and boatyards. Some of the accredited private industry certifiers evaluate cranes in both the maritime and construction industries. The department has established a database (the Crane Management System) that tracks all of the cranes and certifiers for both industries. All Marine and Dock staff as well as the staff in the Crane Safety Program have access to the Crane Management System (CMS).

V. Operational Guidance

The Crane Safety Program will operate in a manner similar to other specialty areas such as the Maritime Safety Program and the High Voltage Electrical Safety Program. When specialists are available, they should be used within their respective specialized areas of expertise.

A. Crane Safety Program CSHOs.

Crane Safety Program CSHOs will sometimes observe safety issues which are not crane or rigging related at worksites they are visiting which need to be addressed. An example is improper staging or lack of appropriate fall protection. They are expected to address serious safety hazards with the employer while they are at the worksite. If the circumstances encountered are too complex or involve additional potential hazards, the CSHO should make a referral to the regular field compliance program after obtaining guidance from their supervisor, or if not available, from the appropriate regional safety supervisor. Crane Safety Program CSHOs are expected to notify the Regional Compliance Manager or their designated representative when they visit a worksite. This notification should be as soon as practical.

Crane Safety Program CSHOs are not expected to perform comprehensive "wall-to-wall" inspections of work sites. Their inspection activities are generally limited to cranes and rigging, however, they are expected to follow the

procedures for inspections described in the Compliance Manual, and must review the employer's accident prevention program.

B. Non-Crane Safety Program CSHOs.

1. Addressing General Crane Safety Issues.

A properly trained and experienced CSHO who is not assigned to the Crane Safety Program may address all general crane safety issues which are easily correctible and readily documented. For instance, if a CSHO observes an imminent danger situation in which a mobile crane is operating too close to energized power lines, or one in which a crane is clearly not setup properly such as having inappropriate support under outrigger pads, the CSHO is expected to address the issues with the employer at the time of the hazard. The CSHO can also ask to see the required certifications for the crane and the operator.

Normally, only a Crane Safety Program CSHO would perform a complete inspection of a crane or rigging job. In an effort to maintain consistency, it is required that all crane or rigging inspections be reviewed by either the Crane Safety Field Supervisor, the Crane Safety Technical Specialist, or the Crane Safety Manager prior to being issued.

2. Accidents, Complaints or Referral Inspections.

- When an accident, complaint or referral investigation involves a crane or rigging, and it appears that the main focus of the investigation/inspection is going to be the crane or rigging:
 - The Crane Safety Program CSHO assigned to that region should be the one assigned to the investigation, **and** should be designated the lead investigator with the concurrence of the Regional Compliance Manager and the Crane Safety Manager.
- Regional CSHOs are expected to notify the Crane Safety Manager or his/her designated representative when they perform an inspection or investigation that includes a crane in their report. This notification should be as soon as practical.

3. Consultations.

There may be times when the Consultant may need to refer to a crane technical expert, at which time the Consultant and his/her supervisor should contact the Crane Safety Field Supervisor, the Crane Safety Technical Specialist, or the Crane Safety Manager for assistance.

C. Enforcement and Consultation Policy.

CSHOs should use the following guidelines when addressing uncertified cranes or unqualified crane operators that are performing construction activities:

1. Uncertified Cranes.

If a CSHO finds an uncertified crane performing a construction activity, the CSHO must inform the employer that:

- Only certified cranes are allowed to perform a construction activity, **and**
- Continued operations of this crane without that certification could result in a citation with monetary penalties.

2. Unqualified Crane Operators.

In the case of an unqualified crane operator performing a construction activity, CSHOs must inform the employer that:

- Only qualified operators, or trainees who are supervised by qualified operators, can operate cranes that are performing construction activities, **and**
- Continued operation of the crane without a qualified operator could result in a citation with monetary penalties.

Note: DOSH Directive 8.60 also discusses enforcement policy for construction crane operator qualifications.

3. In all of the situations where CSHOs find an uncertified crane or an unqualified crane operator performing a construction activity, the inspectors must issue citations and consultants must issue written reports documenting their findings.

D. Auditing Accredited Crane Certifiers.

DOSH Crane Safety Division has been charged with the accreditation, monitoring, renewal, and revocation of accreditation of crane certifiers pursuant to WAC 296-155-531. Based on this mandate the Crane Safety Division will audit accredited crane certifiers in the following three instances:

- Each accredited crane certifier will be audited by a crane CSHO from the Crane Safety program within one year of their initial accreditation.
- Accredited crane certifiers may be audited based on findings during the review of submitted crane certification worksheets. Should the review find a pattern or clear issues with the performance of the crane certification process an audit may be ordered.

- Accredited crane certifiers may also be audited based on valid complaints or referrals regarding the accredited crane certifier's abilities or performance of crane certifications.

Auditing accredited crane certifiers may include review of submitted crane certification worksheets, physical inspection of cranes certified by the accredited certifier within the last three months, and interviews of the certifier and others having knowledge of the specific crane certification and testing.

The goal of the audit will be to ensure each Washington State accredited crane certifier is performing their duties in accordance with the requirements of chapter 296-155 WAC Part L, Chapter 296-56 WAC, Chapter 296-304 WAC, and in a competent manner. The audit should include a review of at least four (4) cranes on which the crane certifier has performed a certification inspection, if possible, selected from the CMS to establish the certifier's skill level and competence. Should the crane CSHO find issues with the certifier's inspection, the number of cranes in the audit may be expanded accordingly.

1. Procedure for scheduling an audit of a certifier.

The Crane Safety Supervisor will select the certifier(s) to be audited and will assign the audit to a crane CSHO and provide the certifier's completed worksheets for the CSHO's review. From that review, four (4) cranes, if possible, will be selected for a physical inspection by a crane CSHO. The accredited certifier will be notified via mail that an audit is being performed pursuant to WAC 296-155-53112. The crane CSHO will contact the owner of the crane in an attempt to locate the crane and schedule a time when it is convenient to the crane owner to perform the physical inspection. The crane CSHO will make every effort to minimize the impact of our inspection on the company. Should the crane be in the control of another company the crane CSHO will work with the owner of the crane and the employer in control of the crane to accomplish the inspection as soon as feasible while minimizing the impact of our inspection on the controlling employer. The crane supervisor will provide the audited crane certifier with the results of the audit within 15 working days after completion of audit and a copy of this audit will be placed into the crane certifier's file in Central Office.

2. Procedure for physical inspection of a crane.

The crane CSHO should conduct an opening conference with the employer having control of the crane before conducting the physical inspection of the crane. If the crane CSHO opens an inspection with the employer in control of the crane during the physical inspection, an assignment must be made upon returning to the office in LINIIS. An "Other High Hazard" will be selected as the assignment

type. Should the Crane CSHO feel it is necessary, the crane CSHO may also open with the site's controlling employer. If the crane CSHO finds hazards not associated with the audit of the certifier's work but related to the crane or rigging, those hazards will be addressed during the inspection of the employer having physical control of the crane and per Section V.A. of this directive and the DOSH Compliance Manual.

3. Procedure for when deficiencies are found.

- **When minor deficiencies are found** by the crane CSHO that **DO NOT** impact the safety of employees or the public, a list of these minor deficiencies will be given to the crane's controlling employer and the crane owner. The crane CSHO should provide instructions as to what should be accomplished to correct the deficiency and/or temporary alternative measures that can be used until the deficiency can be corrected.
- **When serious deficiencies are found** by the crane CSHO that **DO** impact the safety of employees or the public, a list of needed corrections will be placed on the department's Notice of Deficiencies (NOD) form F416-054-000, and a copy given to the crane's controlling employer and the crane owner. The original will be submitted to the crane safety staff within DOSH for entry into the CMS. Upon receipt, the Crane Desk must re-classify the crane as no longer certified for use. The user of the crane must be notified that the crane certification is no longer valid and that the crane may not be used until the deficiencies are corrected and a new crane certification inspection completed. The crane CSHO will ask the controlling employer to remove the crane from service immediately. If the controlling employer will not voluntarily remove it from service the Crane Safety Program Supervisor will be notified. An "Order and Notice of Immediate Restraint" (OIR) will be issued to the controlling employer and a red tag will be attached to the crane. The owner of the crane, if different than the controlling employer, will be notified that the crane is not to be used until the deficiencies are corrected and the crane is recertified by a Washington State accredited crane certifier.

4. Procedure for revocation or suspension.

Based on the results of an audit, an accredited crane certifier may be suspended or their accreditation revoked per WAC 296-155-53110. This decision will be made by the Crane Safety Program Manager after consultation with the crane CSHO and the Crane Safety Supervisor.

A suspension or revocation order may be appealed to DOSH or Board of Industrial Insurance Appeals (BIIA) within 15 working days after the suspension or revocation order is issued. This notice of appeal should include the accredited certifier's name, address, certifier number, telephone number, reason for appeal, their signature and date. DOSH may reassume jurisdiction over the matter following the timelines set out for appeal in WAC 296-900-17005. Should DOSH reassume jurisdiction over the matter, the process for reassumption outlined in WAC 296-900-17005 must be followed. If the accredited certifier does not agree with the department's redetermination, the accredited certifier may appeal the redetermination to the BIIA. An appeal to the BIIA must be filed within 15 working days of receipt of DOSH's redetermination.

E. Tracking Crane Safety Data.

1. Completion of the Crane Information Worksheet and Routing Instructions.

CSHOs must complete a Crane Information Worksheet (see attached Exhibit A) for each crane when a crane is involved in an accident. The Crane Information Worksheet is required as part of the case file for these inspections.

2. Entering Crane Safety Data in WIN.

CSHOs must enter specific information for each crane in the WISHA Information Network (WIN) System.

3. Inspection Information.

For each inspection at a site where a crane is part of the inspection report, CSHOs must choose the value "Crane" in Special Tracking Information on the Inspection screen in WIN. CSHOs must obtain and record the Crane Sticker ID number (see attached Exhibit B) in WIN if the crane was issued one. In WIN, CSHOs must indicate one of the following choices:

- (a) **Certified** – choose this option if the crane is certified.
- (b) **Not Required** – choose this option if crane certification is not required under the Maritime or Construction crane safety rules.
- (c) **Not Certified** – choose this option if the crane has never been certified under the Maritime or Construction crane rules.
- (d) **Not Current** – choose this option if the crane has a Crane Sticker ID number but the crane is currently not certified.

4. Violation Abatement Information.

If a CSHO cites the crane owner for not certifying the crane, or the employer for using an uncertified operator to operate the crane, the CSHO must record the following on the WIN Violation screen in addition to all other fields required to document the violation:

(a) **For uncertified cranes:**

- Abatement Documents Required = “Yes.”
- Enter “Get Crane Certified” in the Violation Summary Text field.
- Choose “Additional Abatement Documentation Message” in the Citation Message field.
- Add this text to the Message Content field: “Attach a copy of the Crane Certification worksheet supplied to you by an Accredited Crane Certifier when your crane is certified.”

(b) **For unqualified operators:**

- Abatement Documents Required = “Yes.”
- Enter “Operator not certified” in the Violation Summary Text field.
- Choose “Additional Abatement Documentation Message” in the Citation Message field.
- Add this text to the Message Content field: “Attach a copy of the Operator Certification for the operator you intend to operate the crane.”

5. Visit Information.

For each visit at a site where a crane is part of the hazard assessment, Consultants must choose the value “Crane” in Emphasis Information on the Visit screen in WIN. Consultants must obtain and record the Crane Sticker ID number in WIN if the crane was issued one. In WIN, Consultants must also indicate one of the following choices:

- (a) **Certified** – choose this option if the crane is certified.
- (b) **Not Required** – choose this option if crane certification is not required under the Maritime or Construction crane safety rules.
- (c) **Not Certified** – choose this option if the crane has never been certified under the Maritime or Construction crane rules.
- (d) **Not Current** – choose this option if the crane has a Crane Sticker ID# but the crane is currently not certified.

6. Hazard Abatement Information.

If a Consultant issues serious hazards to the crane owner for not certifying the crane, or the employer for using an uncertified operator to operate the crane, the Consultant must request the following in the Written Report in addition to all other fields required to document the hazard:

(a) For uncertified cranes:

- Require the crane owner, when they return their Certification of Hazards Corrected, to attach a copy of the Crane Certification worksheet supplied to them by a qualified Crane Certifier.

(b) For unqualified operators:

- Require the employer, when they return their Certification of Hazards Corrected, to attach a copy of the Operator Certification for the operator the employer intends to operate the crane.

Approved:



Michael Silverstein, MD, Assistant Director
Division of Occupational Safety and Health
Department of Labor and Industries

For further information about this or other DOSH Directives, you may contact the Division of Occupational Safety & Health at P.O. Box 44610, Olympia, WA 98504-4610 – or by telephone at (360) 902-5436. You may also review policy information on the DOSH website (<http://www.lni.wa.gov/Safety>).

Exhibit A

Crane Information Worksheet
(to be filled out by CSHO after accident)

Date of Inspection/Investigation: _____		Employer Name: _____	
Inspection #: _____		Site Address: _____	
Employer's PH #: _____		Contact Name: _____	Title: _____
Manufacturer of Crane: _____		Serial # _____	Model: _____
Max Cap of Main Hook: _____		Max Cap of Aux Hook: _____	
Cap at Config. Used: (gross) _____		Net: (after deductions) _____	
Description of Crane (check all that apply):			
<input type="checkbox"/> Articulating Crane <input type="checkbox"/> Tower Crane <input type="checkbox"/> Gantry Crane			
<input type="checkbox"/> Mobile Crane <input type="checkbox"/> Hammerhead - Fixed <input type="checkbox"/> Cab			
<input type="checkbox"/> Hydraulic <input type="checkbox"/> Hammerhead - Rails <input type="checkbox"/> Pendant/Remote			
<input type="checkbox"/> Lattice Boom <input type="checkbox"/> Luffing Boom - Fixed <input type="checkbox"/> Container Crane			
<input type="checkbox"/> Rough Terrain <input type="checkbox"/> Luffing Boom - Rails <input type="checkbox"/> Portal Crane			
<input type="checkbox"/> On Truck Chassis <input type="checkbox"/> Self-Erecting <input type="checkbox"/> Fixed			
<input type="checkbox"/> On Crawler Chassis <input type="checkbox"/> Overhead/Bridge & Jib <input type="checkbox"/> Rails			
<input type="checkbox"/> Mounted on Barge <input type="checkbox"/> Cab <input type="checkbox"/> Pedestal Crane			
<input type="checkbox"/> Pendant/Remote <input type="checkbox"/> Fixed			
<input type="checkbox"/> Underhung Trolley <input type="checkbox"/> Rails			
<input type="checkbox"/> Derrick Describe: _____			
<input type="checkbox"/> Other (explain in detail): _____			
What was Crane being used for: _____			
What industry is crane being used?			
<input type="checkbox"/> Construction <input type="checkbox"/> Shipbuilding/Ship Repairing <input type="checkbox"/> Longshoring <input type="checkbox"/> General			
<input type="checkbox"/> Other (explain) _____			
Load Radius: _____		Boom Length: _____	Boom Angle: _____
Boom Tip Height: _____		Load Weight: _____	Rigging Weight: _____
Operable LMI: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> If Mobile Crane, was it being used on Rubber <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, was it certified for Rubber use <input type="checkbox"/> Yes <input type="checkbox"/> No, and List Tire Pressure of all Tires: _____			
Was Operator Certified? <input type="checkbox"/> Yes <input type="checkbox"/> No		Was Crane Certified? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, enter Crane Sticker ID: C _____			
What was the nature of the accident? <input type="checkbox"/> Electrical Power Contact, <input type="checkbox"/> Overload, <input type="checkbox"/> Crane not setup per WAC/ASME/Mfg, <input type="checkbox"/> Operator didn't follow mfg's operating procedures, <input type="checkbox"/> Tip over <input type="checkbox"/> Improper Rigging			
<input type="checkbox"/> Other (explain): _____			

Exhibit B

Labor and Industries Crane Certification Program		CRANE/COMPONENT ID# C 0007301
Name of Owner	[Redacted]	
Manufacturer	[Redacted]	
Model #	[Redacted]	
Serial #	[Redacted]	
Owner's Equip ID #	[Redacted]	
Component Name	[Redacted]	
DO NOT REMOVE OR DESTROY THIS LABEL		
F447-026-000 crane id 05-2008		