

# **DOSH DIRECTIVE**

**Division of Occupational Safety and Health**  
**Department of Labor and Industries**  
*Keeping Washington safe and working*

## **8.80**

# **Auditing Accredited Crane Certifiers**

**Date: August 15, 2012**

### **I. Purpose**

This Directive establishes auditing procedures and enforcement policies related to auditing of Accredited Crane Certifiers within the state of Washington.

For the purposes of this Directive, “CSHO” refers to DOSH Crane Program Safety Specialists (Compliance Safety and Health Officer).

### **II. Scope and Application**

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

### **III. References**

- Chapter 296-24 WAC, Part A-1, WAC 296-24-003 through 296-24-012; Part D, WAC 296-24-215-through 296-24-29431
- Chapter 296-56 WAC, Part E
- WAC 296-155-526 through 296-155-564
- ASME B30.2 Overhead/Gantry cranes
- ASME B30.3 Construction Tower Cranes
- ASME B30.5 Mobile and Locomotive Cranes
- ASME B30.6 Derricks
- ASME B30.11 Monorail and Underhung Cranes
- ASME B30.16 Overhead Hoists
- ASME B30.22 Articulating Boom Cranes
- 29 CFR 1926 Subpart CC – Cranes and Derricks in Construction
- All DOSH Directives Associated with Cranes
- DOSH Compliance Manual

### **IV. Background**

DOSH has been charged with the accreditation, monitoring, renewal, and revocation of Crane Certifier accreditation, pursuant to WAC 296-155-531. Based on this mandate, a

Crane CSHO from Region 8 Compliance will audit Accredited Crane Certifiers in the following three instances:

1. Each Accredited Crane Certifier will be audited by a Crane CSHO within one year of their initial accreditation, and within 36 months of their initial audit.
2. Accredited Crane Certifiers may be audited based on findings during the review of submitted crane certification worksheets. If the review findings reveal a pattern or clear issues with the performance of the crane certification process, an audit may be ordered.
3. Accredited Crane Certifiers may also be audited based on valid complaints or referrals regarding the 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 as outlined in Section V.1., below, **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, Part E; WAC 296-304-200; and, in a competent manner. The audit should include a review of at least four cranes on which the Crane Certifier has performed a certification inspection, if possible, selected from the Conveyance Management System (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, with approval of the Crane Safety Supervisor or the Region 8 Compliance Manager.

## **V. Audit Policies and Procedures**

### **1. Scheduling an Audit of a Certifier.**

Technical Services will randomly select the Certifier to be audited and a referral will be sent to the Crane Safety Supervisor to assign the audit to a Crane CSHO, and provide the Certifier's completed worksheets for the CSHO's review. Accredited Crane Certifiers will also be audited within their first year as a Certifier, and at least once during each 36 months period. From that review, four cranes in the state of Washington, if possible, will be selected for a physical inspection by a Crane CSHO. If four cranes cannot be found, an audit will be commenced with as many cranes as available within the state of Washington.

It will be acceptable for a Washington State Crane Safety Specialist to cross the border into Idaho or Oregon if:

- The crane owner is amenable,
- There aren't four cranes available within Washington, **and**
- The crane is less than a one hour drive from Washington State.

The Accredited Crane Certifier will be notified by 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 the inspection on the crane owning/leasing company. If the crane is under control of another company, the Crane CSHO will work with the crane owner and the employer in control of the crane to accomplish the inspection as soon as feasible, while minimizing the impact of the inspection on the controlling employer.

*NOTE: The four cranes initially selected for a routine audit should contain as many different types of cranes as the Certifier has credentials for, as indicated in the CMS.*

## **2. 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 in LINIIS, upon returning to the office. The CSHO must select “Other High Hazard” as the assignment type.

If the Crane CSHO feels it is necessary, the Crane CSHO may also open the inspection 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 guidance in DOSH Directive 8.70, (Crane Safety Inter-Program Coordination), and the DOSH Compliance Manual.

*NOTE: Crane CSHOs must adhere to L&I’s Internal Safety and Health Fall Protection Policy 8.16, during physical crane inspections.*

## **3. Deficiencies.**

When minor deficiencies are found by the Crane CSHO that **do not** impact the safety of employees or the public, the CSHO will document these deficiencies in writing and with photographs, when possible, to ensure abatement. 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. Appendix A has examples of minor deficiencies.

*NOTE: CSHOs shall use the DOSH Compliance Manual for guidance regarding citing deficiencies as general or serious.*

#### 4. Retraining without Suspension or Revocation.

- A. When a Certifier is found to have overlooked deficiencies, or does not show a level of competency for the crane type in question, **and** to have missed multiple deficiencies of general and serious nature that do not impact the safety of employees or the general public, then Technical Services, based on input from the Region 8 Compliance Manager, may:
- Order a Certifier to complete a minimum of a 32-hour crane inspection class specific to the type of crane or competence level needed for that type of crane that is agreed upon by Technical Services. This will be in addition to the 40-hour requirement associated with maintaining a current certification as outlined in WAC 296-155-53108.
  - Order another audit within 6 months.

*NOTE: Competency will be evaluated and reviewed by the Region 8 Compliance Manager and the auditing CSHO, and recommendations will be made to Technical Services regarding revocation.*

- B. When serious deficiencies are found by the Crane CSHO that **do** impact the safety of employees or the general public, the CSHO will document these deficiencies in writing, and with photographs when possible, to ensure abatement. 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. As outlined in the NOD, the material handling device cannot be used until the noted safety deficiencies have been corrected and verified by an Accredited Crane Certifier. The original NOD will be submitted to Technical Services for entry into the CMS. Upon receipt, Technical Services must re-classify the crane as no longer certified for use.

The following are examples of major deficiencies:

- Any allegations of WAC violations whether repeat, general, or serious, that involve the safety of employees that rise above a DOSH Compliance Manual guideline for severity of (3) and probability assessment of (2) or greater.
- Any deficiency on a load sustaining member and/or repairs or modifications not approved by the manufacturer.

*NOTE: See Appendix A, in this Directive, for a list of minor and major deficiencies.*

The Crane Safety Supervisor or CSHO that inspected the crane must notify the user of the crane that the crane certification is no longer valid, and that the crane may not be used until the safety deficiencies are corrected and a new crane certification inspection is completed by an Accredited Crane Certifier. The Crane CSHO or Crane Safety Supervisor 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 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 in accordance with the guidance in the DOSH Compliance Manual.

The owner of the crane, if different than the controlling employer, will be notified that the crane is not to be used until the safety deficiencies are corrected and the crane is recertified by a Washington State Accredited Crane Certifier.

## **5. Revocation or Suspension.**

- A. Based on the results of an audit, an Accredited Crane Certifier may be suspended for up to 6 months, or their accreditation revoked per WAC 296-155-53110. This decision will be made after the Certifier has had the opportunity to respond in person to the findings of the audit. This will typically take place in a location that is convenient to the Certifier, along with the CSHO that completed the audit, and staff from Technical Services.

Once the information from the audit and the interview has been gathered, and after consultation with the Statewide Compliance Manager and Region 8 Compliance Manager, Technical Services will recommend the level of action that may be taken concerning the Certifier's accreditation. The DOSH Assistant Director will determine whether to revoke or suspend the Certifier's accreditation.

The Crane Safety Supervisor will provide the audited Crane Certifier with the results of the audit within 30 working days after completion of the audit, and a copy of this audit will be placed into the Certifier's file in Central Office. A revocation or suspension letter must include the reasons for this action per WAC 296-155-53110(2). A list of reasons is outlined in WAC 296-155-53110 (1) (a) through (l). This letter must also include any specific action the Certifier must take prior to reapplying or reinstatement. Each letter of revocation or suspension must include an enclosure detailing each crane inspected, and every item that was found deficient with each crane and the associated paperwork, including photographs.

It is understood that any findings by the Crane CSHO does not necessarily mean the deficiency was present during the inspection by the Crane Certifier. This will have to be determined through employee/employer statements, machinery history, employer inspection/maintenance records, etc.

- B. A suspension or revocation order may be appealed to DOSH or the 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 Crane 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. If DOSH reassumes jurisdiction over the matter, the process for reassumption outlined in WAC 296-900-17005 must be followed. If the Accredited Crane Certifier does not agree with the department's redetermination, the 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.

Suspension of an Accredited Crane Certifier will occur as the result of conditions outlined in WAC 155-53110(1)(a) through (l). The period of suspension for a first offense will generally result in a 6-month suspension. Examples of suspension criteria are audit results identifying multiple cranes with:

- Documented items missing from the crane certification worksheet of a general nature that rise to a serious hazard for employees.
- Serious deficiencies of a load sustaining member not documented on the NOD Form during the certification of the crane, but are determined through the audit to have existed at the time of inspection by the Crane Certifier.
- Instances of not physically and visually inspecting all items associated with a certification of a crane or component of a crane, yet documenting that it was accomplished.
- Overloading a crane/derrick in excess of the specific allowances as outlined in the applicable ASME B30 Series during a load test.

If there is a repeat of any instances as listed in this section, found during a follow-up audit, then the result could be an additional suspension or revocation.

Technical Services, the Statewide Compliance Manager, or DOSH Assistant Director may skip the guidance in this section in cases where there is significant evidence of disregard for employee and or public safety.

*NOTE: The CSHO shall use the DOSH Compliance Manual for determining levels of willfulness.*

## **6. Re-accreditation.**

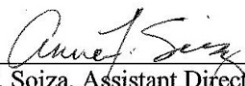
- A. Suspended Certifiers may apply for re-accreditation after completion of requirements specified in the suspension decision letter. Suspension decisions may include:
  - Additional training requirements as outlined in Section V.4, above,
  - An interview with the DOSH Crane Safety Supervisor, Technical Services, and the Region 8 Compliance Manager, **and**,
  - A monitored audit period.
- B. Technical Services, the Crane Safety Supervisor and the Region 8 Compliance Manager will interview the re-accreditation applicant and evaluate crane certification requirements, then make a recommendation to the DOSH Assistant Director for final decision.

- C. Upon re-accreditation, the Certifier must schedule monitored audits to allow a Crane CSHO to evaluate crane certification. The monitored audits will be limited to no more than two in each crane classification. If monitored auditing indicates continued deficiencies, the Certifier will be suspended immediately, following the process outlined in Section V.5, above.

**7. Results of an Audit.**

The Crane Safety Supervisor will provide the audited Crane Certifier with the results of the audit within 30 working days after completion of audit and a copy of this audit will be placed in the Certifier's file in Central Office. The letter will include the cranes inspected during the audit and any issues found during the audit. The issues include minor and major defects, paperwork accuracy and completeness, and compliance with the required crane certification process.

Approved: \_\_\_\_\_

  
Anne F. Soiza, Assistant Director  
Division of Occupational Safety and Health  
Department of Labor and Industries

[APPENDIX A is attached to this Directive]

For more information about this or other DOSH directives, contact the Division of Occupational Safety and Health at P.O. Box 44610, Olympia, WA 98504-4610, or call (360) 902-5436. To review policy information on the DOSH website, go to: <http://www.lni.wa.gov/Safety-health>.



## APPENDIX A DEFICIENCIES LIST

*Note: This list is not to be considered as all inclusive.*

Minor Deficiencies	Major Deficiencies
<ul style="list-style-type: none"> <li>• All general violations associated with a CSHO inspection of uncertified or certified cranes.</li> <li>• Daily inspection</li> <li>• Missing documentation</li> <li>• Missing operators manual</li> <li>• Alterations that aren't structural</li> <li>• Wrong size fire extinguisher</li> <li>• Missing fire extinguisher</li> <li>• Faded warning decals</li> <li>• Protective coating or lack of softeners on electric, air, and hydraulic lines</li> <li>• Cracked glass, missing glass</li> <li>• Lack of lubrication intervals</li> <li>• Lack of maintenance of wire rope or other types of live rope</li> <li>• Minor dents in lacings or similar load sustaining members that do not meet manufacturer repair or replacement criteria</li> <li>• Air leaks that do not effect safe operation of controls</li> <li>• Minor leaks of fluid that do not effect safe operation of crane</li> <li>• Hyd. Oil level low</li> <li>• No audible warning device-horn (unless used for signaling)</li> <li>• No weight tag on load block or ball (unless other information provided states load weight and capacity)</li> <li>• Any replacement parts such as bolts or pins for hook</li> <li>• Annual certificate of Operation not in cab or operator's station</li> <li>• Load charts not in the operator's cab or station</li> </ul>	<ul style="list-style-type: none"> <li>• No load charts or illegible load charts</li> <li>• Damaged rope</li> <li>• Dents in the boom structure beyond allowable limits</li> <li>• Missing wear pads in booms and out riggers</li> <li>• Worn hooks and shackles</li> <li>• Improper boom section sequence for lattice booms</li> <li>• Wrong size rope or rope design</li> <li>• Counter weights not recommended for the Machine being used</li> <li>• Controls sticking</li> <li>• Oil leaks that allow the piston to drift in any cylinder</li> <li>• Rope incorrectly reeved in fall blocks</li> <li>• To short of rope on a crane</li> <li>• Structural cracks</li> <li>• Broken springs in the under carriage</li> <li>• Anti two block not working</li> <li>• Spider web cracked glass that impairs the vision of the operator</li> <li>• Unacceptable welding repairs</li> <li>• Broken or missing or loose rotation bolts</li> <li>• Missing bolts on wear pads</li> <li>• Loose or missing mainframe to cab chassis bolts</li> <li>• Oil leaking from outrigger cylinders</li> <li>• Rear stabilizers out of alignment on flat bed mount</li> <li>• Cranes rear stabilizers bolts loose</li> <li>• Front Stabilizer bolts loose or missing</li> <li>• No latch on hook</li> <li>• Cable sheave bearing-bushings bad</li> <li>• Cable sheaves cracked or broken</li> <li>• LMI set incorrectly</li> <li>• Boom- jib dents damage</li> <li>• Lacing –cords dented or damaged</li> <li>• Overload on crane inoperable</li> <li>• Mismatched or improper counterweight</li> <li>• Missing pins or pin keepers in structural components</li> <li>• Unguarded draw works/bull gear (friction rigs)</li> <li>• Cracks on any structural weld (outriggers, boom etc.)</li> <li>• Bent or deformed sheaves</li> <li>• Missing hand holds or steps for operator access to cab</li> <li>• Components not inspected by a qualified person.</li> </ul>