



A BERRY Company

P. O. Box 9908  
1414 Corn Products Road  
Corpus Christi, Texas  
78469-9908

Bus: (361) 693-2100  
Page 1 of 2

Docket S030  
Ex. 69-8

July 15 2004

Ms Elaine L. Chao  
Secretary of Labor  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

OSHA  
DOCKET OFFICER  
DATE JUL 22 2004  
TIME

Dear Ms. Chao,

The Crane and Derrick Negotiated Rule making Advisory Committee (C-DAC) at their final meeting on July 8, 2004 has come to agreement on what we feel is a critical issue, Crane Operator Qualifications. The committee chose an employer operator certification program using the written and practical tests developed by an accredited crane/derrick testing organization or an accredited educational institution or program and we do support their decision as like us some of the members on the committee are crane users who realize that a third party certifier could not effectively certify our/their crane operators for all of the different sizes and types of cranes in our/their fleet.

By way of brief background, Bay Ltd is a heavy industrial/construction company with several different divisions such as refinery construction/maintenance, highway construction, mining division utilizing a fleet of one hundred and thirty nine mobile cranes ranging from six ton thru eight hundred ton capacity we also lease cranes thru one thousand five hundred ton capacity, we work mostly in the southern U.S.

Bay Lad's involvement in the crane and derrick rule making began in 1993 when I answered questions relating to Docket No.S-400 Advance Notice of Proposed Rule Making concerning revisions to 29 CFR 1926.550 subpart N Cranes and Derricks (see attachment). From there I was invited to be a member of an advisory committee for construction safety and health (ACCSH). Beginning on January 27, 1999 we met every six to eight weeks thru January 10, 2003, we had some thirty plus members who worked diligently to formulate a revised/updated 29 CFR 1926.550 subpart N. At no time did we include a provision for a third party crane operator certification program, instead we proposed an employer crane operator certification program using the language found in ASME B30.5 2000, Qualifications for Crane Operators. I was very disappointed with the special interest group who attempted and is still attempting to force their third party Crane Operator Certification program on the crane industry. We are associated with one group, Special Carriers & Rigging Association (SC&RA) and do not support their position. I was also associated with the National Commission for the Certification of Crane Operators (NCCCO) and am currently an item writer for the NCCCO unfortunately the NCCCO program is



P. O. Box 9908  
1414 Corn Products Road  
Corpus Christi, Texas  
78469-9908

Bus: (361) 693-2100  
Page 2 of 2

not crane size/type specific and I have told the NCCCO this for years. (See public comments).

In closing, I have always and will continue to support only an employer crane operator certification program complete with the stronger language and requirements found in the current ASME B30.5 2000. I do not feel the crane industry wants nor needs an outside entity to audits its Crane Operator Certification programs. Further more, who is going to audit the auditors?

Sincerely,

**Michael J. Eggenberger**  
Crane Safety Manager  
Bay Ltd. A Berry Company

Attachment



**A BERRY Company**

**Michael J. Eggenberger**  
CRANE SAFETY MANAGER

*Accredited by the U.S. Department of Labor  
Occupational Safety and Health Administration.*

**BAY Ltd.**

P.O. Box 9908  
1414 Corn Products Road  
Corpus Christi, Texas  
78469-9908

**Bus: (361) 693-2141**

**Fax: (361) 693-2808**

**Cell: (361) 438-9675**

**E-Mail:**

**eggenbergerm@bayltd.com**

February 2, 1993

Occupational Safety and Health Administration  
Docket Officer  
Docket #S-400  
Room N2634  
U. S. Department of Labor  
200 Constitution Avenue  
Washington, D.C. 20210

RE: 29 CFR Parts 1910 and 1926  
Crane Safety for General Industry and Construction;  
Advance Notice of Proposed Rulemaking

Dear Sirs:

In answering your request for comments and information regarding crane safety in general and crane operator qualifications in particular, the information that I am forwarding to you is currently being applied to the safe crane operation and operator's certification required by Bay, Inc.

I will begin by answering the request for information on page 47747, paragraph 1.

1. Insofar as training is concerned, we employ hands-on training for the specific type of equipment. The trainee is gradually elevated throughout the company. All training is completed in-house without the use of outside instructors, etc. Regarding the question of how long the training should last, I believe training should last throughout the employees term of employment. I believe on-the-job training is an acceptable alternative to formal training; however, we are leaning toward formal training as the industry requires.
2. I believe on-the-job training is a very feasible approach, as we currently incorporate this type of training; however, we still require crane operators' certification.
3. In answering how frequently should training be required: our employees are trained on the equipment as per manufacturer specifications on a weekly basis through meetings. These meetings are documented as training.
4. In answering the question of whether the content of training and re-training courses be tailored to the experience of the operator -ABSOLUTELY! - as there are many different models of cranes.

5. I believe the employer should be directly responsible for the cost of the training and limited medical evaluations.
6. In my opinion, a crane operator should be medically evaluated at least once every five years. Obviously we would not want a crane operator that is prone to heart failure, black-outs, dizziness, hearing impairment, sight impairment or nervous system disfunction.

In answer to paragraph II concerning Operator Certifications, I submit the following:

I believe all crane operators operating small cranes of a 5 ton capacity upwards to the largest cranes available should be certified for that particular crane whether they are on a construction site or in general industry.

#### A. SCOPE

1. I do not believe ANY crane should be exempted from a requirement for operator's certification.
2. Yes - OSHA should require separate certification for each type of crane operated. Certifications should be as per model of crane.
3. Yes - a certified crane operator should be certified to operate a particular model crane with minimum or maximum boom with minimum to maximum lift capacities and, of course, separate certifications for different types of cranes.
4. Yes - the agency should phase in a requirement for crane operator certification. The certification would be the responsibility of the employer using guidelines set out by OSHA. I would say a three-year phase-in period should be incorporated with a possible six-month moratorium, if needed.

#### B. FORMAT

1. Operators should be required to be re-certified every two years with the new requirements for re-certification depending upon whether or not the operator wanted to advance to larger models or different models of crane.

2. We are currently grandfathering our long-term operators into our formal training/operator testing program. Eventually all of our operators will be required to be re-certified every two years. Grandfathering should not take longer than two years. The criteria OSHA should use for grandfathering would be that once operator certification requirements are written into the standard, all operators will required to be certified by their employer.
3. Yes - certification programs should have provisions for revocations, as ours currently does, if the operator demonstrates carelessness, unsafe practices (such as using the crane for purposes other than specified by the manufacturer), or substance and/or alcohol abuse. I do not believe a D.W.I. conviction should warrant revocation unless he was convicted while driving during working hours.
4. Yes - I do believe temporary revocation should be mandatory when a certified crane operator is involved in an accident causing serious injury or death only.
5. I do not believe that once an operator's license is revoked, assuming that he was totally at fault for the revocation, that an appeals process would be appropriate.
6. Yes - an operator should be able to be re-tested for the requirements of certification, depending upon his further training in the field, as is our process here at Bay, Inc. We currently allow re-testing after a three-month period of further training. I do not believe that the operator-in-training should be prohibited from operating a crane under supervision of an certified experienced operator while waiting for re-examination.
7. Yes - OSHA should require that the operator carry his/her certificate at all times when operating his/her equipment, as is the policy of Bay, Inc.

C. GENERAL

1. 18-years of age minimum requirement
2. OSHA should require that an operator receive a minimum two-years training before being certified as a crane operator.

3. Yes - OSHA should require that employers insure through a check-out demonstration that a certified operator has a minimum level of proficiency on the particular crane to be operated.
4. Yes - history files MUST be kept on each operator in the company personnel files.
5. Yes - we currently have a "bad actor" list that we use to track operators with unsafe operating histories.

In response to paragraph III, I feel the following would apply:

A. ACCREDITED CERTIFIERS

I do not believe in third-party operator certification programs, of which I have attended. They are not tailored to the specific requirements of the various models and/or types of cranes. I believe that the employer should be totally responsible with crane operator certification in accordance with guidelines set forth by OSHA. If OSHA pursues a third-party certification program, the certifier MUST be experienced in the total operation of the crane for which the operator is to be certified to operate. My experience with the current maritime accreditation programs has demonstrated that they do NOT have the experience in the total operation of ANY cranes - whether used for maritime, construction or general industry. However, I do believe that certifier should have technical experience and administrative structure to administer and implement the program on a credible basis. Such experience would be the interpretation and implementation of all applicable standards, i.e. CFR 29 Parts 1926.550 Subpart N, CFR 29 Parts 1910.180 and ANSI B30 standards.

1. The criteria to be used to evaluate potential accredited certifiers would be: a) extensive experience in crane operation (minimum five years); b) extensive experience on the equipment for which the employer intends to certify the crane operators; c) extensive formal training under ALL OSHA standards in general industry and construction or wherever the cranes are to be used; d) should be certified by OSHA as an instructor or trainer.
2. An accredited certifier must prove to be a disinterested third party.

3. I believe that re-accreditation should be minimum every three years.
4. Circumstances which would warrant revocation of the accreditation would be: a) no longer practicing; b) failure to properly certify crane operators.
5. I believe OSHA should re-test their certifiers every three years.
6. I believe OSHA should limit accreditation to ONLY one who is employed by the company who owns the cranes, as the employer will be held totally responsible for the cranes' safe operation.

B. POSSIBLE ELEMENTS OF A CERTIFICATION PROGRAM

1. No - I do not believe a comprehensive assessment by a licensed physician is necessary. Physicians would not necessarily know the physical or medical requirements needed to operate a crane. I do believe that an operator should have a full physical every three to five years.

Knowledge testing shall include written AND oral examinations, which will measure the operator's knowledge of a specific type crane for which certification is being sought. Extensive load chart testing and usage for a particular type crane is required under our crane certification program. Extensive training on crane set-up, inspection, controls, wire rope and safety features of all cranes are also a requirement in our crane operator certification program.

Our operators are required to present extensive past experience before their application is accepted.

*Practical testing* - if a potential applicant does not possess extensive previous experience, he/she is required to perform a practical operating test on a same or similar crane to which he/she has applied for certification. He/she would be required to demonstrate a pre-determined set of skills which are required for the safe operation of the particular crane. The three major elements, such as medical, knowledge and practical testing are currently incorporated into our crane operator certification program at Bay, Inc.

I believe the effectiveness of ALL of these tests, as they would certainly prove that an operator would meet or exceed the demands required to safely operate a particular crane. Current ANSI B30.5 requirements for medical evaluation of an operator are sufficient. Knowledge and practical testing should be incorporated by standard into current OSHA requirements.

2. Yes - OSHA should specify minimum physical, sensory and emotional requirements for operator certification. These requirements would be required by the employer. Any operator who cannot meet these minimum requirements should be denied certification.
3. If OSHA requires medical testing as one of the components of certification testing, then such testing should be required for all operators.
4. Yes - substance abuse should be and is part of our medical examination at Bay, Inc.
5. Yes - OSHA should require a knowledge test for operator certification, as it is part of our written test here at Bay, Inc. I also believe that operators should possess a minimum level of reading skills, as reading is required to interpret a load capacity chart and an operator's manual.
6. I do not believe oral testing is sufficient. I do not see how one can document or track operators through oral testing.
7. OSHA should require that all operators speak and understand English while operating in the United States of America and its territories.
8. A minimum passing score for a written and/or practical test is dependent upon particular parts of the written and/or practical test, depending upon how well a potential operator has scored. Test scoring would be at the discretion of the certifier.
9. At Bay, Inc., if an operator is disqualified prior to first-time certification he/she must wait three months before re-examination where he/she is required to gain more operating or knowledge before re-testing.

10. A person knowledgeable in the field of crane operation, knowledge of all applicable standards, and certified by OSHA as an instructor should develop the testing criteria.
11. A person knowledgeable in the field of crane operation, knowledge of all applicable standards, and certified by OSHA as an instructor should develop the testing criteria.
12. OSHA should designate qualified examiners.
13. A person knowledgeable in the field of crane operation, knowledge of all applicable standards, and certified by OSHA as an instructor should develop the testing criteria.
14. No.

In answer to Other Relevant Crane Safety Issues, paragraph IV:

A. CRANE CERTIFICATION

1. I believe that OSHA should require cranes working under CFR 29 1926.550 and CFR 29 1910.180 to be certified. I believe the cranes should be certified similar to the effect in the maritime industry; however, not necessarily certified by the current maritime standards or certifiers. I believe OSHA should develop a separate program for the certification of cranes in the general industry and construction.
2. No - OSHA should not use the same criteria as used in the maritime certification program; however, they should use the current inspection and testing requirements set forth in the ANSI B30.5 standard.
3. Increased crane-related accidents, published by OSHA, support a need for stricter enforcement of the maintenance, operation, inspection and testing requirements set forth in the ANSI B30.5 standard.
4. No - OSHA does not need to provide more inspection requirements; however, stricter enforcement is needed to ensure safe operation of cranes.

B. RIGGERS/SIGNALING

1. Bay, Inc. requires that a rigger and all signalmen be knowledgeable in their field through training requirements set forth by Bay, Inc. No, I do not believe OSHA should have to certify riggers and/or signalmen. The responsibility should lie with the employer.
2. I do not have any fatality data or accident data, as we are fortunate that we have not had accidents or fatalities related to rigger/signalmen.

C. REVISIONS OF SUBPART N 29 CFR PART 1910 AND SUBPART N 29 CFR PART 1926

No, I do not believe that OSHA should revise the existing crane safety regulations in 29 CFR Part 1910 and 29 CFR Part 1926.

1. Yes - the existing standards are adequate but should include operator qualifications as set forth in ANSI B30.5.
2. I believe that all safety equipment, such as two-blocking devices, be mandatory on all cranes at all times. I believe OSHA should incorporate all safety requirements into their standard as found in ANSI B30.5

D. GENERAL INDUSTRY VS. CONSTRUCTION

1. No - the requirement for crane operator training or certification should not differ between general industry and construction.
2. No - an accreditation program for crane operator certifiers should not differ between general industry and construction.
3. No - a training program for riggers/signalmen should not differ between general industry and construction.
4. No - I do not believe the requirement for crane certification should differ between general industry and construction, as we work both areas and find little difference in the safe operation of cranes.

In response to paragraph V, Survey of Existing Programs, the following is submitted:

A. TRAINING

1. 100% of our crane operators at Bay, Inc. are currently receiving training through our company training program.
2. The nature of our training is crane specific as per manufacturer. Our crane operators meet weekly as a group for one hour for formal training. Individual training is on a one-on-one basis, as needed. Our formal training is performed in a classroom, weekly. All of our operators and riggers/signalmen are trained specifically in their fields and are also trained in a wide spectrum of other OSHA standards, such as a 30-Hour Construction Outreach.

B. CERTIFICATION

1. Our operator certification and training requirements were established by Bay, Inc. management.
2. Our competency is measured through performance.
3. The requirements for certification of our operators are as follows:
  - A. Should have some prior experience in the operation of cranes in general;
  - B. Must pass substance abuse testing;
  - C. Must pass written crane operator awareness test;
  - D. Must pass practical operating test.
4. Yes - different qualifications are required at Bay, Inc. to operate different types of cranes but not necessarily in different situations.

C. RETRAINING/CERTIFICATION

1. Operator certification and retraining requirements are established by management.
2. Re-training or re-certification is required when an operator desires to operate larger or different models of cranes at any interval.

Occupational Safety and Health Adm.  
29 CFR Parts 1910 and 1926  
Michael J. Eggenberger  
Page 10

3. The content of re-training or re-certification of our operators is dependent upon the manufacturer's operating requirements of a particular crane. Our training programs are sponsored by Bay, Inc.

#### D. COSTS

1. No prime contractors are utilized. Bay, Inc. performs all crane operator work.
2. Bay, Inc. pays for all initial training and certification. Bay, Inc. also pays for re-training and re-certification of all operators.
3. The cost for training material, training space, continuing education of certifier/trainer.
4. \$50,000.00 annually. Training 50 employees full-time. Cost of operating test equipment is approximately \$1,000,000.00.

#### E. BENEFITS

Bay, Inc. is highly regarded in the crane industry of South Texas in the field of crane operation, testing, maintenance and inspection. Our safety program, which as stated includes crane operator certification and crane inspection. I believe the comments and input that I have included in this document should be included in the decision-making process should the requirements of 29 CFR 1910.180 and 29 CFR 1926.550 be changed or revised.

Sincerely Yours,

Michael J. Eggenberger  
Safety Coordinator  
Equipment Department  
Bay, Inc.

- P. S. - Please note that a current application for maritime cargo gear accreditation/shore-based material handling devices has been placed in your inactive files at the office of Joe Nolan, Chief Division of Maritime Compliance Assistance, U. S. Department of Labor, Room N3610, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

*MIKE O'CONNOR*

Monday  
October 19, 1992

Flash TCR NewsFlash TCR N

# Federal Register

---

Part V

Department of Labor

---

Occupational Safety and Health  
Administration

---

29 CFR Parts 1910 and 1926  
Crane Safety for General Industry and  
Construction; Advance Notice of  
Proposed Rulemaking

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910 and 1926

[Docket No. S-400]

Crane Safety

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Advance Notice of Proposed Rulemaking.

SUMMARY: The Occupational Safety and Health Administration (OSHA) is considering a multi-phased revision of the crane safety provisions of 29 CFR part 1926, subpart N (Cranes, Derricks, Hoists, Elevators and Conveyors) and of 29 CFR part 1910, subpart N, (Materials Handling and Storage). One of the primary areas of concern to the Agency is the limited criteria for crane operator qualifications incorporated by reference into the existing regulations. Other areas OSHA would explore and evaluate include: The need to update parts of the standard dealing with the use, inspection, and maintenance of cranes; the need for a requirement for certification of cranes used on construction sites and general industry sites; and the need for a requirement for certification of riggers and signal persons.

OSHA is soliciting quantitative and qualitative data, expert opinions, comments and information regarding crane safety in general, and crane operator qualifications in particular. This information will allow the Agency to evaluate the need for stricter crane operator qualifications criteria, and aid in the development of any other revisions to the existing crane standards may be appropriate.

DATES: Written comments on the advance notice of proposed rulemaking must be postmarked by February 12, 1993.

ADDRESS: Comments and information should be submitted in quadruplicate to the Docket Officer, Docket No. S-400 Occupational Safety and Health Administration, room N2634, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210, Telephone: (202) 523-7894.

FOR FURTHER INFORMATION CONTACT: Mr. James Foster, Occupational Safety and Health Administration, U.S. Department of Labor, room N3637, 200 Constitution Avenue, NW., Washington, DC 20210, Telephone: (202) 523-8151.

SUPPLEMENTARY INFORMATION:

Background

As a result of a continuing number of accidents involving cranes on many worksites and the heightened public awareness of this problem generated by the tower crane collapse in downtown San Francisco, California, in November 1989, OSHA began evaluating the need to update its existing regulations for cranes with a preliminary review of accident data from OSHA files, U.S. Department of the Army files, and other sources.

In particular, OSHA reviewed some 900 crane accident investigations in its files covering the period January, 1985 through December 1989. Of over 400 incidents in general industry and the construction industry the Agency found 354 fatalities and 182 injuries, an average of about 71 fatalities and 36 injuries per year. This analysis also identified the causes of these crane accidents. The major ones included:

Causes	Number of Incidents
• Boom or crane contact with energized power lines.	178
• Overturned crane .....	69
• Load dropped .....	48
• Boom collapse (due to overloading or inappropriate dismantling procedures).	43
• Two blocking .....	17

Other causes of these accidents included crushing by the counterweight, non use or insufficient use of outriggers, falls, and rigging failure.

An analysis of recent Bureau of Labor Statistics fatality data covering the period of January 1, 1991 through June 30, 1991, supports OSHA's findings. While the data include only 25 States and the city of New York (excluded large States are New York, Pennsylvania, Ohio, Illinois, Michigan, and Missouri) it showed that 26 fatalities had resulted from the following crane related accidents:

Causes	Number of Fatalities
• Boom or crane contact with energized power lines.	8
• Boom collapse due to overloading, boom cable failure or inappropriate dismantling procedures.	3

Causes	Number of Fatalities
• Falls .....	3
• Load dropped .....	3
• Overturned crane .....	2
• Crushing .....	2
• Struck by load .....	1
• Brake failure .....	1

This partial list indicated that a high percentage of these accidents were related to human error, at least to some degree. The Agency notes that the data reviewed represent only a very small percentage of crane accidents, but believes that a definite trend is indicated by the record reviewed. The Agency also recognizes that the crane operator qualifications required in the existing regulations may not provide adequate guidance to employers as to who is, in fact, qualified to operate a crane. For these reasons the Agency has determined to evaluate this issue first.

At the same time, OSHA intends to collect and evaluate data on the need for a general revision of the existing crane standards for both construction and general industry; the need for a requirement for certification of construction and general industry cranes; and the possible need for a requirement for the certification of riggers and signal persons. In addition, the Agency requests information on crane accidents such as the nature and degree of hazards, causes of accidents, and trends in accident data that is industry or crane-type specific. Based on the input received on these issues, the Agency will make a determination as to the need for further rulemaking in these areas.

OSHA is considering whether some topics in this notice could lend themselves to the use of negotiated rulemaking, if rulemaking is warranted. The Agency would like public input identifying areas where this approach could be feasible.

Any revision of OSHA standards related to cranes could have a significant economic impact on small entities, particularly small businesses. In accordance with the provisions of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), OSHA invites information regarding the economic impact which any changes to these regulations might have on small businesses, including but not limited to compliance reporting and recordkeeping costs. OSHA also requests comments regarding alternatives which would minimize the economic impact on small businesses while at the same time accomplishing the objective of protecting worker safety

NOTE: new phone no.: (202) 219-8151.

and health. OSHA has also determined that this request for information is consistent with the Regulatory Flexibility Act's requirement that agencies periodically review their rules to gauge their impact on small entities.

#### Comments and Information Requested

##### I. Operator Certification versus Additional Specific Operator Qualification Criteria

OSHA does not presently have sufficient information to convince the Agency that a Federal crane operator certification program is the only approach to address this issue. Another alternative that has been suggested is for the Agency to require that operators have specific training in the safe operation of the crane being used, meet minimum medical requirements specified by the Agency and demonstrate the appropriate knowledge and skills necessary to operate safely the crane being used.

While the above approach is similar to what has been suggested for a certification program, it would be less structured and less formal. This approach would not preclude the use of existing or future certification programs as proof of meeting any requirements that may be promulgated by OSHA.

If this approach were to be adopted, OSHA solicits the following:

(1) What types of training would be necessary? Is this training currently available? Please identify this material and submit copies to assist the agency in evaluating this option. What is the cost of this training? How long should the training last? Is on-the-job training an acceptable alternative to formal training?

(2) What is the feasibility of this approach? Would this approach be more appropriate than a crane operator certification program? Why?

(3) How frequently should training/retraining be required?

(4) Should the content of training and retraining courses be tailored to the experience of the operator? What material should be covered under training and retraining? How should it be structured?

(5) Who should be responsible for the cost of any training that may be needed? For the cost of medical evaluation?

(6) Should a crane operator be medically evaluated? If so, how often? Are there any medical conditions or impairments which can contribute to crane accidents? Are vision, hearing, reflex, or other medical tests necessary to prevent accidents? Provide specific performance benchmarks. Please note whether these qualifying tests could be

expected to comply with the Americans with Disabilities Act.

(7) See questions below concerning knowledge and skills and respond as applicable to this issue.

##### II. Operator Certification

The Agency is aware of several governmental operator licensing/certification programs currently in place. However, many of these are for specific geographic areas such as the city of New York or the States of Connecticut and New York. Additionally, these existing programs are comprised of different components which vary with each individual program. The goals of each of the programs range from comprehensive employee and public safety laws to programs that are designed merely as fee generators for the controlling jurisdiction.

The Agency also is aware that some industry and national consensus groups have been working on projects to develop standards in the area of crane safety, especially in the area of operator certification. Two of these groups actively engaged in this area are the American National Standards Institute (ANSI) B30.5 committee, and the Specialized Carriers and Rigging Association (SC&RA).

OSHA has not determined the proper format for any Federal crane operator certification program, and the elements which that program should contain. However, the Agency believes that if this need can be demonstrated, any such program should be national in scope. It is possible that State-plan states could be allowed to operate federally directed certification programs, subject to the "at least as effective as" requirements of the OSH Act, in order to ensure its effectiveness and uniformity. Another approach would be for the program to be administered by a third party in accordance with guidelines provided by OSHA.

In order to determine the scope of any future rulemaking if this option is chosen, the Agency needs to determine which types of cranes would require operators to be certified. OSHA believes crane operators should be capable of operating safely any piece of equipment they are required to operate. However, the Agency wants to ascertain the need for operators to be certified on each individual type of crane operated, or to identify acceptable broader categories of cranes whose operations are sufficiently similar that certification in that category would be acceptable for all cranes in that category.

##### A. Scope

In light of the above discussion, OSHA solicits information and opinions, along with supporting data on the following:

(1) Should any cranes or similar lifting equipment be exempted from a requirement for operator certification? If so, please identify the criteria OSHA could use as a benchmark for these exclusions, and explain why this would be appropriate.

(2) Should OSHA require separate certification for each type of crane operated? If so, please provide the rationale for such a requirement.

(3) Instead of classifications for each type of crane, would other broader classifications such as crane capacity, boom length and types of crane be more appropriate, or better ensure safe operation of all cranes? Such categories would allow the use of a single certificate for each of the categories. If so, what are the most advantageous criteria to use in order to develop these categories? Please provide rationale and supporting data.

(4) Should the Agency phase in any requirement for crane operator certification? If so, what criteria should the Agency use for determining an appropriate phase-in period?

##### B. Format

(1) Should an OSHA requirement for crane operator certification have provisions for periodic recertification? If so, with what frequency? Should requirements for recertification be different than for initial certification? If so, how should they differ?

(2) Should OSHA "grandfather" operators into this program? If so, should this grandfathering be permanent, or should it be for a limited time? What should this time limit be? What criteria should OSHA require for grandfathering?

(3) Should a certification program have provision for revocation? If so, what circumstances would warrant revocation of an operator certificate? Should substance abuse (alcohol or drugs) or a DWI conviction warrant revocation?

(4) Should temporary revocation be mandatory when a certified crane operator is involved in an accident causing serious injury or death?

(5) If an operators' license is revoked, would an appeals process be appropriate? How should this process be structured? Should OSHA permit recertification of a revoked operators license after a specified period of time? If so, what period of time and under what conditions?

(6) Should an operator who has not passed one or more of the testing requirements for certification or recertification be allowed to take the test again after a specified period of time? What should this period be? Should the operator be prohibited from operating a crane while waiting for reexamination? How should such requirement be applied to apprentices?

(7) Should OSHA require that an operator carry the certificate at all times when operating equipment? If not, why not?

#### C. General

(1) Should OSHA specify a minimum age for operators? If yes, what should it be? Please provide your rationale including any evidence that indicates a correlation of operator age to accident rates.

(2) Should OSHA require that an operator receive a specified minimum amount of training before taking the certification test? If yes, should the minimum be the same for all types of cranes? Additionally, what would the training criteria consist of?

(3) Should OSHA require that the employer ensure, through a checkouts demonstration, that a certified operator has a minimum level of proficiency on the particular crane to be operated?

(4) Should a history file be kept on each particular operator, and if so, who should be the repository of the files?

(5) Should a "bad actor" list be created to attempt to track operators with unsafe operating histories and how should this program be formatted?

### III. Certification Program

#### A. Accredited Certifiers

As stated above, one possible approach for an Operator Certification program would be to have such a program administered by a third party in accordance with guidelines provided by OSHA.

If OSHA pursues a third party certification program, an accreditation program would be required to ensure that the third party certifying groups have the proper resources, i.e. technical, experience and administrative structure, to administer and implement the program on a credible basis.

Currently there are two OSHA accreditation programs that might be used in combination to model an accreditation program for third party crane certifiers. These are OSHA's maritime accreditation program and the accreditation program for Nationally Recognized Testing Laboratories.

Some of the basic criteria the Agency would consider when evaluating potential accredited certifiers include:

*Organizational Data.* The description of the organization and all relevant organizational components.

*Affiliations.* Evidence of independence of the applicant to achieve objectivity and preclude conflict of interest.

*Personnel.* The Accredited Certifying Organization must be staffed with personnel with the appropriate education, training, and experience.

*Services provided.* The types of services the organization is capable to provide must be delineated.

*Testing experience.* The Accredited Certifying Organization must be able to illustrate experience in the testing field.

*Test equipment.* The Accredited Certifying Organization is required to have appropriate, up-to-date test equipment.

Generally speaking, the Agency could employ these criteria to ascertain that the Accredited Certifying Organizations are technically experienced and qualified to carry out examinations and testing of crane operators.

OSHA is aware that certain industry and labor groups are either in the process of developing or have developed criteria for the structure and administration of crane operator certifications. While the Agency does not wish to "reinvent the wheel," it does want to receive as much input from all interested parties as possible. Therefore, the Agency requests commenters to provide comment and opinion on:

(1) Criteria to be used to evaluate potential accredited certifiers.

(2) Circumstances which would preclude an organization from becoming an accredited certifier.

(3) Frequency of reaccreditation.

(4) Circumstances which would warrant revocation of the accreditation.

(5) Frequency of OSHA monitoring of accredited certifiers.

(6) Should OSHA limit accreditation to organizations which are independent of trade associations, manufacturers or operator organizations? Please provide rationale for your answer.

#### B. Possible Elements of a Certification Program

(1) The ANSI B30.5 Committee (a consensus standards group representing business, labor, manufacturers, academia and government) is working on criteria for crane operator qualifications. This Committee has discussed an operator testing program having three components—medical, knowledge, and practical (skills), which OSHA believes may be workable.

*Medical testing* would require a comprehensive assessment by a licensed physician. After being given

information regarding the lifting device for which the operator is seeking certification, the physician makes an assessment of the prospective operator's medical capabilities.

*Knowledge testing* could include written and/or oral examinations which measure the operators' knowledge of a specific type crane for which certification is being sought. Load chart understanding and usage for a particular type crane would probably be the most important items which this type of test could measure. Other items which might be tested would most likely include crane set-up, inspection, controls, wire rope strength requirements, safety features of the particular type of crane, etc. When application is being made by an operator for the written test, a system could be set up to screen the applicant's previous work experience and training to ensure that it meets a set of agreed upon criteria.

*Practical testing* involves the operator actually getting behind the controls of the type of crane (or similar crane in the same classification) for which certification is being sought. The operator would be required to demonstrate a predetermined set of skills which are required for the safe operation of the particular crane. How should these three elements be incorporated into an operator testing certification program?

Are any or all three components necessary? Please provide rationale and information which demonstrates the effectiveness of any or all of these tests. What should be the criteria for these tests?

(2) Should OSHA specify minimum physical, sensory, and emotional requirements for operator certification. Should the Agency do so? If yes, what should these minimum requirements entail? Should an active operator, who cannot meet one or more of these minimum requirements, be denied certification even though he/she may have been a successful operator for years? What medical conditions, if any, should disqualify a crane operator from certification? Should "controllable" medical conditions which require daily medication be disqualifying factors? If so, which ones and why?

(3) If OSHA requires medical testing as one of the components of certification testing, should such medical testing be required for all operators or only for those operators who have been disqualified by a certifier?

(4) Should substance abuse testing be part of the medical examination? And if so, how often should testing be required? Or, on the other hand, should

the medical examination include a statement on the use/abuse of drugs and alcohol? Should crane operators be tested for drug/alcohol use: (a) following any accident? (b) on a random sample basis? (c) before the start of any new job?

(5) If OSHA requires a knowledge test for operator certification, should it be a written test (thereby specifying a minimum level of reading skills) or should it be an oral test? Would the ability to read a load chart constitute an adequate reading level for certification?

(6) If oral tests are allowed, how can it be determined that the operator can read and understand a load chart on a crane? If an operator understands the load chart enough to pass an oral examination for one type of crane, what will the results be if he moves to another type crane with different loading characteristics?

(7) Should OSHA require that an operator possess a specified minimum level of language skills? Should an operator be required to be conversant in the predominant language used on the worksite? Should an operator be required to speak more than one language in certain geographic areas? Please provide any evidence that indicates that language barriers have contributed to accidents.

(8) What would be a minimum passing score for a written or practical test?

(9) If an operator is disqualified should there be a period of time she/he must wait before reexamination? During this waiting period should the operator be prohibited from operating a crane, realizing that she/he would be denied her/his livelihood while waiting for reexamination?

(10) Who should develop the testing criteria for all three types of test? What should they be?

(11) Who should administer the knowledge and skills test? While a testing proctor may be able to administer the knowledge test (similar to a drivers license test), someone may be needed who has the particular knowledge of the operation of the different classifications of cranes being used for the skills test.

(12) Who should designate qualified examiners? Should this be handled at the State level, by private or non-profit groups or by the Federal government?

(13) Who should do the actual evaluation and grading of the skills and written tests?

(14) If a skills test is divided into different categories of cranes, should an operator who fails a test on a particular classification of crane be disqualified from operating other types of cranes in which she/he was tested and passed?

#### IV. Other Relevant Crane Safety Issues

The Agency also is interested in soliciting public input on the following other crane safety issues:

##### A. Crane Certification

A crane licensing/certification program would involve the agency, third party certifiers, or an employer/owner inspecting a crane and its components to ensure that the crane and crane components meet minimum specified criteria which are recognized as essential to the safe operation of the crane.

OSHA has construction crane inspection requirements under 29 CFR 1926.550(a) (5) and (6). General Industry crane inspection requirements found in 29 CFR 1910.179 and 1910.180 are somewhat more detailed. The current standards are largely performance oriented with minimal specific requirements. For example, the competent person provision relies on the employer/owner and competent person to be entirely truthful in the findings of the crane inspection. Specific criteria for the competent person has not been developed, therefore, the designation is ambiguous at best.

(1) The Agency has received input suggesting that construction and general industry cranes should be certified on an annual basis, similar to the program in effect in the maritime industry. Is such a requirement necessary? What benefits would be derived by such a requirement? Should all affected cranes be subject to such a requirement, and if not why not? Please provide any evidence that indicates that a lack of equipment certification has contributed to crane accidents.

(2) Should OSHA consider using the same criteria as used in the Maritime certification program? If not, what other criteria would be appropriate for affected cranes?

(3) What data are available to support such a requirement?

(4) In lieu of a crane certification requirement, would it be more appropriate for OSHA to provide more specific inspection requirements in any revised standards? If so, specifically what should these requirements address?

##### B. Riggers/Signalmen

Although there is no established definition of a rigger, a basic description might be the following—any person that assembles rigging (including boom, jibs, jumping frames, climbing section, or similar equipment) to lift equipment or material; selects cable, rope, pulleys, blocks and sheaves to be used in moving equipment or material; attaches loads to

the crane's lifting apparatus or gives direction to the crane operator engaged in moving equipment or material, through the use of verbal, visual or electronic signals. This definition could apply to all riggers on a crew, from the rigging supervisor all the way down to the least experienced crew member. However, when the subject of rigger licensing/certification has been addressed by industry it usually has referred only to the license/certification of the rigging supervisor.

Signalmen basically direct the moving of crane or crane loads by visual hand signals or radio contact with the operator. Many times the signalman is put into a hazardous situation underneath the load, within the turn radius of the crane superstructure or in the path of a moving crane. Signalmen have been fatally injured in these situations.

(1) Since the Agency is evaluating the need for a requirement for crane operator certification, it has been suggested that OSHA also look into the need for a requirement for the certification of riggers and/or signalmen. What are the advantages and disadvantages of such a requirement? Is such a requirement necessary, or would additional training requirements be a more appropriate way to address this issue. What training requirements would be appropriate? Please provide rationale and cost data.

(2) What accident or fatality data are available to support such a requirement? Please provide any data that indicates that training or certification of riggers/signalpersons would have prevented accidents.

##### C. Revision of subpart N, 29 CFR part 1910, and subpart N, 29 CFR part 1926

OSHA is considering the need for a complete revision of the existing crane safety regulations in 29 CFR part 1910 and 29 CFR part 1926, subparts N, dealing with cranes, derricks, hoists, elevators, conveyors, and other materials handling devices. The Agency recognizes that these regulations have not been revised in a number of years and contain incorporation by references of older editions of national consensus standards which have been updated several times by the consensus organization.

In recent years the Agency has moved away from incorporation by reference in its regulations, preferring to insert the text of specific provisions from appropriate consensus standards directly into the OSHA regulations.

(1) Are the existing regulations adequate (with the exception of operator

and rigger qualifications) to ensure employee safety during activities related to cranes? Why? If not, do the existing regulations need to be revised or do only certain sections need revision? Please provide rationale and any pertinent accident data.

(2) Are there any safety factors or types of equipment (for example, any two blocking devices, etc.) which should be addressed in the revision of the regulations that are not addressed in the existing subpart? What are they and why should they be addressed? Please provide any pertinent accident data.

OSHA solicits comments and information on which of the specific provisions of the currently referenced or newer consensus standards should be incorporated into any revised OSHA standard, and on how extensively any of those provisions need to be revised.

#### D. General Industry vs Construction

Considering the differences in types of equipment, conditions of use, work practices, and similar concerns, between construction and general industry, OSHA solicits the following:

(1) Should a requirement for crane operator training or certification differ between general industry and construction?

(2) Should an accreditation program for crane operator certifiers differ between general industry and construction?

(3) Should a requirement for special training or certification of riggers and or signalmen differ between general industry and construction?

(4) Should a requirement for crane certification differ between general industry and construction? Please discuss the differences and why they would be necessary for the above four questions.

#### V. Survey of Existing Programs

OSHA requests information from prime contractors, subcontractors and other employers of crane operators, as well as from State and local governments with crane operator certification programs, regarding the current state of the certification process and the potential costs and benefits of an OSHA-implemented program nationwide. In particular OSHA would like to know if the crane accident rate changed as a result of the state-based

licensing/certification programs that already exist? Information about the effectiveness of certification/licensing programs for the operation of the heavy equipment would also be useful.

In addition, OSHA requests similar information regarding certification programs covering riggers and signalmen. Separate information regarding the current state of the certification process and the potential costs and benefits of an OSHA-implemented program nationwide is also requested. The Agency also asks for separate information on the certification/inspection of cranes (equipment).

#### A. Training

(1) What percentage of crane operators currently receive training through a company or union apprenticeship program? What alternative training programs exist?

(2) What is the nature of the training provided—how long is it, what material is covered, how is it performed (on-the-job or classroom)? How frequently is it performed? Please discuss the safety performance of participants in these programs.

#### B. Certification

(1) How were crane operator certification or training requirements established? By union/management agreement? State or local government requirements?

(2) How is competency measured or tested (performance or written examination; both)?

(3) What are the requirements for certification covering your operators?

(4) Are different qualifications required to operate different types of cranes or for operating them in different situations?

#### C. Retraining/Certification

(1) How are your crane operator certification or retraining requirements established? By union/management agreement? State or local government requirements?

(2) What determines when retraining or recertification is required? Predetermined intervals? An accident? Technological changes?

(3) What is the content of retraining or recertification programs? Who conducts or sponsors the programs?

#### D. Costs

(1) What percentage of crane operator work is performed by prime contractors? By subcontractors? What determines if crane operators are maintained on the staff of a prime contractor on a permanent basis? Will a certification requirement alter this employment pattern? If so, why?

(2) Who pays for initial training and certification—prime contractors, subcontractors, or some other party? Who pays for retraining and recertification programs?

(3) What other costs are involved with the certification process?

(4) Please estimate all costs associated with your certification program. (For example: time spent in training/ retraining; the number of worker; cost of the providers of the training certification; and cost of operating test equipment).

#### E. Benefits

OSHA is particularly interested in the accident experience of states and localities with certification programs currently in existence.

For jurisdictions with retraining/ recertification programs, please provide any available information on crane-related accident rates in your jurisdiction. How do they compare with those in localities without such requirements? Does the level of construction activity influence your accident rates?

#### List of Subjects in 29 CFR Part 1910 and 1926

Business and Industry, Construction Industry, Cranes, Manpower Training Programs, Occupational Safety and Health

**Authority:** This document was prepared under the direction of Dorothy L. Strunk, Acting Assistant Secretary for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. It is issued under section 6(b) of the OSH Act (29 U.S.C. 655(b)).

Signed at Washington, DC, this 13th day of October, 1992.

**Dorothy L. Strunk,**  
Acting Assistant Secretary

[FR Doc. 92-25250 Filed 10-16-92; 8:45 am]

BILLING CODE 4510-26-F