

State of California
Department of Industrial Relations
Occupational Safety and Health Standards Board

Petition File No. 598

Board Staff Evaluation
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State of California
Gavin Newsom, Governor

INTRODUCTION

Petition File No. 598 (Petition) was received from Thom Sicklesteel, Chief Executive Officer National Commission for the Certification of Crane Operators (NCCCO, Petitioner), on July 18, 2023. The Petition requests the Occupational Safety and Health Standards Board (Board) review and consider modifying the General Industry Safety Orders (GISO) for cranes and other hoisting equipment (Group 13)¹ operator recertification requirements.

REQUESTED ACTION

The Petitioner requests the Board amend subsection 5006.2(d)(3) Re-certification, to allow accredited bodies to determine the appropriate amount of operating experience necessary to be exempt from the practical examination at the time of recertification.

BACKGROUND/HISTORY

In 1984, the California Division of Occupational Safety and Health (Cal/OSHA) called a series of meetings of all certifiers to urge them to organize an association which would establish standards of conduct for their profession and be a source of consultation with the Crane Unit. A steering committee was elected by and from the certifiers to establish a *crane certification* association. A year later, in 1985, the California Crane Certification Association (CCCA) was founded and incorporated. In 1988, the name of CCCA was changed to the Crane Certification Association of America (CCAA), the corporate documents were changed accordingly, and national officers were elected. At that time the CCAA filed several petitions, including Petition 260 (April 14, 1988), which requested that the GISO require licensing for crane operators to establish minimum level of competency. However, petition 260 was denied.

Since then, there have been five petitions related to the subject of crane operator certifications. These five petitions are summarized as follows:

1. OSHSB Petition File No. 404 by Bo Bradley, Chair, Safety, Health and Environmental Committee, Associated General Contractors of California, granted February 17, 2000.

Bo Bradley requested an amendment of GISO section 5006 pertaining to crane operator qualifications. The Petitioner contended that title 8 qualifications at the time were not at least as effective as their federal counterpart since they did not address the issue of crane operator qualifications. The petition was granted and an advisory committee was convened to consider the Petitioner's request to make recommended changes to section 5006. The advisory committee convened and combined the original petition 404 with the below petition (409).

¹ Unless otherwise noted, all references are to California Code of Regulations, title 8.

2. OSHSB Petition File No. 409 by Brad Closson, Executive Vice President, North American Crane Bureau (NACB) Technical Services, granted April 13, 2000.

Brad Closson requested an amendment of GISO sections 5006, 5008, and 5009, regarding crane operator qualifications to make them equivalent to the American Society of Mechanical Engineers (ASME) B30.5, Mobile and Locomotive Crane standard. The petition was granted to the extent that Board staff was directed to convene an advisory committee to consider the Petitioner's requests.

Petitions 404 and 409 were subsequently combined and both Board staff and Cal/OSHA concurred with the Petitioner that an expansion of section 5006 should be proposed that would define and bring crane operator qualifications to a level above the outdated American National Standards Institute (ANSI) B30.5-1968 (re: Crawler, Locomotive, and Truck Cranes) standards referenced in the Federal Occupational Safety and Health Administration (federal OSHA) 29 Code of Federal Regulations (CFR) 1926, Subpart N and clarify what is meant by "qualified operator."

In May of 2000, the advisory committee reached a consensus for a new section 5006.1 for mobile and tower crane operator qualifications and certification, which resulted in section 5006.1 being based on more comprehensive requirements set forth in the American Society of Mechanical Engineers (ASME) B30.5-1995 standard.

3. OSHSB Petition File No. 468 by William J. Morgan, Accredited Certification Associates, denied October 20, 2005.

This petition, received shortly before the effective date of the new crane operator certification standard, requested reconsideration of and relief from GISO section 5006.1(c) which requires certifying entities to be accredited by the National Commission for Certifying Agencies (NCCA). The Petitioner also opposed provisions of subsections 5006.1(a) and (c) which preclude them from providing one-stop training, testing and certification of crane operators. The petition was denied as these premises were either determined to be based on misunderstandings or were proven invalid.

4. OSHSB Petition File No. 475, by Ted Blanton, Sr., President, NACB Group, Inc., denied February 16, 2006.

This petition requested that the GISO subsection 5006.1(c) definition of accredited certifying entity be amended to include certifying organizations whose certification programs are accredited by the NCCA, ANSI, the National Center for Construction Education and Research (NCCER) or an equivalent accrediting body approved by Cal/OSHA or certification programs that meet other criteria established by Cal/OSHA.

Due to the wide range of opinion in the marketplace as to what is required for accreditation, allowing accredited certification bodies to determine the appropriate amount of operating experience necessary to be exempt from the hands-on exam will not assure public safety. The Board determined that this petition lacked merit and it was denied.

5. OSHSB Petition File No. 504, by Roy A. Swift, Ph.D., granted September 18, 2008.

This petition, received after the effective date of the new crane operator certification standard, requested an amendment to subsection 5006.1(c) which required certifying entities to be accredited by the NCCA. The Petitioner requested that ANSI be added as an approved accrediting agency for certification of crane operators. Cal/OSHA agreed that certifying another entity would be beneficial in allowing more agencies to certify crane operators and the Board granted the petition to the extent that a representative advisory committee be convened by Board staff to consider amendments to subsection 5006.1.

PETITIONER'S ASSERTIONS

The Petitioner asserts:

- California's existing state plan language diverges, in material ways, from federal OSHA requirements and guidance.
- California's requirement of 1,000 hours of "hands-on" experience is less flexible and more prescriptive than the applicable federal OSHA standards for operator recertification.
- California's more stringent standard for an experience exemption from the "hands-on" examination may not be reasonably attainable for many or most crane operators.
- California's re-certification requirements may create unintended burdens on California crane operators, employers and other stakeholders.

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (Cal/OSHA) EVALUATION

In their evaluation dated October 11, 2023, Cal/OSHA notes that they inquired with stakeholders to determine the assertions of the existing recertification process as being a financial burden. According to a stakeholder interviewed by Cal/OSHA, the practical/hands-on examination is indeed a financial burden to both employers and operators. "During practical/hands-on examinations, the operators must take time off from work and spend time and money to re-certify. Based on information provided by stakeholders, the practical/hands-on examination portion can double the cost of re-certification"... "However, employees should not be paying for certification. Section 5006.2 requires the employer to pay for all costs of certification or licensure of crane operators and that none of the costs be passed on to employees."

Cal/OSHA recommends that petition 598 be DENIED because title 8 and ASME B30.5 require crane operators to qualify based on a specific type of crane. Section 5006.1(d) and 5006.2(d)(3) requirements aim to ensure crane operators who hold a certificate for a crane type have the proficiency to operate it safely. Basing operator experience on a certifying entity's subjective decision decreases worker safety.

STAFF EVALUATION

Board staff reviewed previous petitions and rulemaking packets on this topic and had conversations with several stakeholders including OE3, Morrow Construction, Pape Machinery, and the Department of Utilities at the City of Sacramento. Board staff also contacted the ANSI National Accreditation Board (ANAB) and training agencies in other states that also have state specific crane operator certifications.

Relevant Standards

Federal Standards

The federal counterpart for California crane standards is federal OSHA 29 CFR 1926.1427.

California Standards

Sections 5006.1 and 5006.2 requirements for the re-certification of crane operators as follows:

General Industry Safety Orders

Group 13. Cranes and Other Hoisting Equipment

Article 98. Operating Rules

5006.1. Mobile Crane and Tower Crane -- Operator Qualifications and Certification (Applicable to Cranes in General Industry Only).

* * * * *

(d) Re-certification. Crane operators shall re-certify every five (5) years and shall be required to meet all of the qualifications set forth in subsection (a). Operators with at least one-thousand (1,000) hours of documented experience operating the specific type of crane for which re-certification is sought as covered by this section during the immediately preceding certification period and who meet the physical examination, substance abuse, and written examination requirements set forth in subsections (a)(1), (a)(2) and (a)(3) of this section shall not be required to take the practical/hands-on examination specified in subsection (a)(4) to re-certify.

* * * * *

5006.2. Operator Training, Certification, and Evaluation for Cranes and Derricks in Construction.

* * * * *

(d) (3) Re-certification. Crane operators shall re-certify every five (5) years and shall be required to meet all of the qualifications set forth in subsection (d)(1). Operators with at least one-thousand (1,000) hours of documented experience operating the specific type of crane for which re-certification is sought as covered by this section during the immediately preceding certification period and who meet the physical examination, substance abuse, and written examination requirements set forth in subsection (g)(1)-(g)(3) shall not be required to take the “hands-on” examination specified in subsection (g)(4) to re-certify.

* * * * *

Consensus Standards

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) have partnered to develop international consensus standards that address accreditation of certifying entities:

- ISO/IEC 17011:2017 Conformity assessment – General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies;
- ANSI/ISO/IEC 17024:2003, Conformity Assessment – General Requirements for Bodies Operating Certification of Persons

These consensus standards address requirements for (1) bodies providing accreditation, and (2) bodies certifying persons against specific requirements, including the development and maintenance of certification scheme for personnel.

Title 8 sections 5006.1 and 5006.2 reference the examination criteria specified in the ASME B30.5-2000 Mobile and Locomotive Cranes standard for crane operator qualifications and certification.

Other Standards, Guidelines, Codes

Other relevant standards that have been used to set criteria for written and practical operator examinations is the “Standards for Educational and Psychological Testing,” 2014, developed and published jointly by the Joint Committee of the American Educational Research Association, The American Psychological Association, and the National Council in Measurement in Education. These three organizations form the Joint Committee Standards (JCS). Testing programs constructed in accordance with Joint Committee Standards can help ensure a scientifically valid assessment of the operator’s competence to operate mobile and tower cranes safely.

Staff Analysis

During the course of investigating Petition No. 475 staff determined that of the three organizations mentioned in the petition, each derived their basis for accreditation from a different source.

The NCCA grants accreditation to programs that meet its standards. The NCCA standards were developed in accordance with certification industry consensus and were originally developed in 1977 under a grant from the U.S. Department of Health, Education & Welfare (now Department of Health & Human Services) to determine what made a quality certification program in the allied health care profession.

Some methods of accreditation are more thorough than others. Some are limited to paper audits. Others include site visits and periodic re-evaluation. The need for uniform accreditation of certifying entities is important to ensure that certification bodies operate in a consistent, comparable and reliable manner to assure the safe operation of applicable cranes.

The Petitioner is requesting to amend an “exception” which was included in the regulation to simplify and expedite the recertification of crane operators who operate the same type of equipment on a frequent basis. The Petitioner asserts that no information in the rulemaking record establishes the soundness of the 1,000 hours as a threshold of operating equipment. However, the 1,000-hour experience over a five-year period threshold was derived through consensus by an advisory committee as shown in the rulemaking records from December 12, 2002, when new section 5006.1 was adopted. The Board relied upon the expertise of nationally recognized and NCCA accredited certifying entities, including members from NCCCO, who determined through experience the number of hours of crane operation sufficient to allow operators to waive the practical exam.

Board staff agrees with the Petitioner that California’s existing regulations differ from and exceed federal OSHA requirements. Currently only six states require operator certifications (California, Maryland, Minnesota, Nevada, Utah and Washinton). These requirements are more stringent than the federal requirement. California requirements were designed to address an emerging trend toward frequent accidents caused by operator error and poorly trained operators, and is currently the only state that offers a practical exam exemption.

As of August 2023, there are three agencies which are accredited by ANAB. The process and requirements to obtain and maintain certification are different at each agency and are not aligned with California’s exemption. According to NCCCO, 94% of operators applying for re-certification attested that they qualified for the exception and applied for the waiver.

OSHSB Petition File No. 598
Board Staff Evaluation
September 29, 2023

In the Final Statement of Reasons for the proposal to consolidate construction safety orders (Article 15) into General Industry Safety Orders, Group 13 (Cranes and Other Hoisting Equipment) in 2021, board staff recommended convening an advisory committee to confirm the necessity for changes to 5006.1(d) re-certification. However, as noted earlier, each certifying organization derives their basis for accreditation from a different source.

The need for uniform accreditation of certifying entities is important to ensure that certification bodies operate in a consistent, comparable and reliable manner to assure the safe operation of applicable cranes. The certification scheme between accrediting agencies is, and always has been, inconsistent and should not be the sole basis for an amendment of section 5006.1, as it could jeopardize worker safety. The existing regulation provides sufficient flexibility for employers and has resulted in a reduction of crane incidents in California since its implementation.

STAFF RECOMMENDATION

Consistent with the foregoing discussion, Board staff recommends Petition File No. 598 be **DENIED**.