

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**PROPOSED PETITION DECISION OF THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
(PETITION FILE NO. 537)****INTRODUCTION**

The Occupational Safety and Health Standards Board (Board) received a petition on September 11, 2013, from Walter W. Wise, General President of the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers (Petitioner). The Petitioner is requesting the petition on behalf of an industry coalition of labor and management organizations¹ to urge the Board to adopt new reinforcing steel and post-tensioning standards² for placement in Title 8, Construction Safety Orders (CSO) Section 1712 "Reinforcing Steel and Similar Projections."

Labor Code section 142.2 permits interested persons to propose new or revised regulations concerning occupational safety and health and requires the Board to consider such proposals, and render a decision no later than six months following receipt. Further, as required by Labor Code section 147, any proposed occupational safety or health standard received by the Board from a source other than the Division of Occupational Safety and Health (Division) must be referred to the Division for evaluation, and the Division has 60 days after receipt to submit a report on the proposal.

SUMMARY

The Petitioner states that the current provisions in Section 1712 "Reinforcing Steel and Other Similar Projections" contain limited references pertaining to reinforcing steel activities and do not contain any references to post-tensioning operations. The Petitioner states there is a correlation related to the hazards and injuries to workers involved in concrete reinforcing steel and post-tensioning activities and the lack of specific regulations addressing these hazards. The

¹ The Coalition of Industry Stakeholders includes the District Council of Ironworkers of the State of California, California State Building and Construction Trades Council, Ironworker Management Progressive Action Cooperative Trust, Concrete Reinforcing Steel Institute, Post Tensioning Institute, National Association of Reinforcing Steel Contractors, Western Steel Council, Department of Reinforcing Ironworkers Advisory Committee, and the Center for Construction Research and Training.

² Post-tensioning is a technique for reinforcing concrete. Post-tensioning tendons are steel cables placed inside plastic ducts or sleeves that are positioned in concrete forms before the concrete is placed. Afterwards, once the concrete has gained strength but before the service loads are applied, the cables are pulled tight, or tensioned, usually by hydraulic jacking systems and then anchored against the outer edges of the concrete to ensure support for service loads.

Petitioner projects that the use of steel reinforced and post-tensioned poured in-place concrete is expected to double by the year 2015 from its 1990 level and may comprise a majority of commercial and industrial construction activities.

The Petitioner recommends the adoption into Title 8 of standards that are similar to those in the national consensus standards, ANSI/ASSE A10.9 – 2013 “Safety Requirements for Concrete and Masonry Work.” There are provisions for site access and layout, written notifications prior to commencement of reinforcing steel activities, stability for reinforcing assemblies, impalement protection and custody of impalement protection, hoisting and rigging reinforcement assemblies, post tensioning activities, fall protection, formwork and falsework stability and training.

In addition to the above provisions, the proposal would also place certain responsibilities on controlling contractors, such as ensuring safe jobsite access roads and conditions for the safe storage of materials and equipment. Other requirements for controlling contractors include, but are not limited to, providing written notification prior to the commencement of reinforcing steel activities; ensuring the stability of formwork and maintaining custody of rebar protective covers after completion of work by the reinforcing steel contractor. The Petitioner notes that several similar controlling contractor responsibilities have been adopted for structural steel erection work in the CSO Section 1710. The Petitioner and supporting organizations believe the adoption of these standards would mitigate the potential for accidents and injuries to workers involved in reinforcing steel and post-tensioning operations.

DIVISION’S EVALUATION

The Division submitted an evaluation to the Board dated December 31, 2013. It is the Division’s opinion that certain provisions in Title 8, Article 29 of the Construction Safety Orders “Erection and Construction” are more effective than the proposed language in the petition. As an example of this, the Division’s opinion is that the proposed language pertaining to impalement protection in Section IV of the Petitioner’s proposal is less effective than the current language in Section 1712. Placing all, or even the majority, of the proposed language in Section 1712 could change that section into a set of safety requirements limited to the placement and installation of reinforcing steel and concrete. However, the Division states that the impalement protection requirements apply to all construction trades and operations, and should remain in a dedicated section.

The Division recommends that several existing sections of Article 29 that pertain to provisions in the Petitioner’s proposal be reorganized and that a thorough comparison of the proposal and existing standards should be made. The Division recommends that the Board approve the petition, to the extent that an advisory committee is established to consider the petition and specific language that should be adopted.

STAFF’S EVALUATION

The petition suggests a number of safeguards and requirements that are not addressed in existing Title 8 standards. For example, existing Section 1721 “Post-Tensioning Operations” has

minimal requirements that pertain only to the use of signs and barriers and the location of employees during post-tensioning operations. Section VI of the proposal contains more comprehensive post-tensioning requirements and procedures to mitigate employee hazards during such operations. The proposal also addresses safe site conditions for access, delivery and storage of materials and equipment and includes additional responsibilities for controlling contractors.

The Petitioner requests that the proposed new standards be placed into Section 1712 as a vertical (industry specific) standard. However, Section 1712 in scope pertains to all work sites and locations where employees work around or over exposed, projecting reinforcing steel or other similar projections. Optimal formatting and evaluation of any new provisions by an advisory committee is recommended.

The proposal also includes provisions related to the stability of vertical formwork and falsework, impalement protection, working under suspended loads and fall protection. There are provisions primarily located in existing Article 29 and other construction safety orders that in part, address similar construction activities. A thorough evaluation and comparison of existing standards and the Petitioner's proposal would be necessary in order to avoid potential duplication or conflict with existing standards.

Several major associations representing construction contractors have requested the opportunity to express concerns and to be involved in any advisory committee and rulemaking action that may be initiated as a result of this petition. The petition has received a broad range of support from labor groups and the ironworker/reinforcing steel industry, including the entities listed in the coalition of stakeholders. In Board staff's opinion the petition includes a number of new provisions that would reduce hazards and injuries to workers engaged in concrete reinforcing steel and post-tensioning operations.

For the reasons stated above, Board staff's opinion is that an advisory committee of stakeholders should be convened to consider the Petitioner's request.

CONCLUSION AND ORDER

The Board has considered the petition and the recommendations of the Division and Board staff. For reasons stated in the preceding discussion, the petition is hereby GRANTED to the extent the Board staff shall convene a representative advisory committee to consider the subject matter of the petition and such additional possible rulemaking as the Board staff deems appropriate in light of its review of the petition. The Petitioners should be invited to participate in this advisory committee.