

Memorandum

To : Marley Hart, Executive Officer
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833

Date: June 23, 2014

From : Juliann Sum, Acting Chief
Division of Occupational Safety and Health



OCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

JUN 25 2014

Subject: Division Evaluation of Petition
Steven R. Lynn, Petition File No.541

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The Division reviewed Petition File No. 541 submitted by Steven R. Lynn, General Manager of Lynn Safety, Inc. Mr. Lynn has requested modification of the Window Cleaning Safety Orders Title 8, sections 3286 and 3282. The Window Cleaning Safety Orders began with the California Industrial Accident Commission standards in 1916 and have been updated by modifications supported by advisory committees to meet Federal OSHA and ANSI standards to maintain a high level of worker safety in a potentially dangerous occupation.

The petitioner proposes to delete section 3286(a)(1)A as follows:

3286. Manual Boatswain's Chairs and Controlled Descent Apparatus (CDA).

(a) Use and Application. (1)(A) ~~Boatswain's chairs and CDAs shall be used for window cleaning operations only where the windows cannot be cleaned safely and practicably by other means.~~

3282(p)(1)(C) 2. An OPOS shall be developed by a person(s) with knowledge in the design, installation and use of building maintenance equipment (i.e. possessing Scaffold Inspection Testing certification as specified in Section 3296) and signed by the S.I.T.'s E.O.R.(Engineer of Record). The OPOS shall be written in manner that can be readily understood by employers. An OPOS that requires structural modifications to the building or existing building maintenance equipment shall have such modifications designed by a mechanical, structural or civil engineer currently registered in the State of California with experience in the design and installation of such equipment.

Existing Standards:

The existing window cleaning standard 3286(a) allows for the use of Controlled Descent Apparatus (CDA) based on a worker safety comparison between the use CDA and other building façade access methods. The requirement for the engineer to sign or approve an Operating Procedures Outline Sheet (OPOS) has been optional.

Federal and Other Standards:

Federal OSHA does have minimal window cleaning standards 29 CFR 1910.66 for window cleaning equipment but does not have specific standards for the use of Controlled Descent Apparatus and type of

repelling equipment. ANSI/ASME A120.1 Safety Requirements for Powered Platforms and Traveling ladders and Gantries for Building Maintenance addresses window cleaning equipment and exterior building maintenance. ANSI/TWCA 114.1 Window Cleaning Safety Standard does provide standards for Rope Descent Systems (RDS) but does not specify the façade cleaning selection method.

Discussion:

The Division has a duty under the California Labor Code section 7325-7332 to assure that buildings have the required building safety equipment and Title 8, section 3282(a) requires "Windows shall not to be cleaned from the outside or inside unless means are provided to enable such work to be done in a safe manner as provided in these orders".

The petitioner recommends deleting subsection 3286(a)(1)(A). "Boatswain's chairs and CDAs shall be used for window cleaning operations only where the windows cannot be cleaned safely and practicably by other means". This deletion would eliminate the consideration of safer window cleaning and exterior building maintenance methods. The provision of other building safety equipment required for façade maintenance such as window replacement, painting, caulking, metal polishing, water blasting, light maintenance and other work cannot be performed with CDA repelling systems. The initial cost for some CDA systems may be less but it leaves a building owner unable to perform other maintenance without costly installations of additional suspension equipment and approved anchorages. In some cases it may not be safe or practical to rig platforms from the roof or ground due to obstructions or architectural configurations. There are many building features that make CDA equipment unsafe to use such as: non-structural parapets, extended overhanging ledges, fragile curtain walls, restricted landing areas, sloped parapets, glazed canopies and insufficient structure for independent anchorages. The decision to use the CDA system for window cleaning should only be made with full consideration of other façade access systems. The installation of incomplete or inappropriate CDA systems has required the building owners to retrofit building safety equipment involving extensive building structural reinforcement and roof modifications.

The requirement proposed for the Scaffold Inspection and Test (SIT) agencies Engineer of Record (EOR) to sign or approve the Operating Procedures Outline Sheet has been explored by the Division. The term "Engineer of Record (EOR)" is normally the professional engineer that evaluated and approved the building's structural design. If modifications are made to a building's window cleaning safety equipment the changes are required to be approved by an engineer experienced in such design. The SIT agencies are either California Professional Engineers experienced in the design of window cleaning and building maintenance equipment or SIT agencies that contract for such engineering services. Many of the professional engineers are reluctant to approve equipment, structural portions of the building or work procedures that they have not evaluated or have been included in their scope of work.

Conclusion:

The Division recommends that the Board not approve the petition because it would eliminate the consideration of safer window cleaning systems for California workers. Existing regulations require that modification of or new building safety equipment to be approved by an engineer and it is not necessary to add additional confusing language to the safety orders.

cc: Larry McCune, SSE
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