PROPOSED PETITION DECISION OF THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
(PETITION FILE NO. 534)

INTRODUCTION

The Occupational Safety and Health Standards Board (Board) received a petition on May 13, 2013, from Mr. Joel A. Goldman, Clark Trevithick Law Corporation, representing Alimak Hek, Inc. (Petitioner). The Petitioner requests the Board to amend Title 8, California Code of Regulations, Construction Safety Orders (CSO) Sections 1604.1(c)(1), 1604.20, and 1604.27. The petition is related to safety concerns regarding the recertification and/or servicing and maintenance of sealed safety brakes and speed governors used on rack and pinion driven Construction Personnel Hoists (CPH).

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 in 2011 it began meeting with Division staff regarding safety concerns associated with the recertification of sealed safety brakes on Alimak rack and pinion driven CPHs (construction elevators) by third parties in a manner contrary to the manufacturer's published recommendations. Sealed safety brakes on the subject elevators include a speed controlling monitoring and detection device referred to as a "speed governor" that triggers the CPH safety brakes when an elevator over speed situation is detected. The speed governor and safety brake devices subject to the petition request are designed as a sealed unit and are referred to in this evaluation as the "sealed safety brake."

The Petitioner is concerned that other companies that refurbish and/or replace parts from Alimak sealed safety brake systems do not meet Alimak specifications and safety standards for safe operation of the brakes. In one case, the Petitioner examined a safety brake refurbished/recertified by another company. The Petitioner found by its factory testing, inspection and evaluation that none of the internal replacement parts which are always or routinely replaced at the Alimak factory

1 Rack and Pinion Machine. A machine in which the motion of a car is obtained by a power-driven rotating pinion mounted on the car and traveling on a stationary rack mounted on the supporting mast or tower.
had been replaced. The Petitioner concluded that the safety brake failed their established manufacturer’s standards.

DIVISION’S EVALUATION

The Division states in its September 20, 2013, evaluation that the manufacturer may have more consistent quality control of replacement or reconditioning of over-speed brake parts. If the petition were granted, it would have to substantially limit the repair, servicing and testing of CPH governors and the availability of parts to only the manufacturer of the rack and pinion hoist. There are several hoist manufacturers active in Canada, Asia and Eastern Europe; retrofit manufacturer/suppliers; and CPH owners and building contractors, which are also involved in this issue. The Petitioner refers to a 2007 version ANSI A10.4 that has not been adopted by the Standards Board requiring a replacement component to be labeled by the certifying organization. It is not clear what certifying organization would label such parts or components as meeting the requirements of the ANSI standard other than the manufacturer or the entity reconditioning the device.

The Division recommends that the petition be granted to the extent of forming an advisory committee of interested parties to evaluate the proposed change to the CSO.

STAFF’S EVALUATION

According to stakeholders\(^2\), including the Petitioner, Alimak Hek, Inc. manufactures and provides the majority share of CPH elevators used in California. There are several other manufacturers of CPH elevators used in California including, but not limited to, USA Hoist, Geda USA Elevator and Material Lift Company, LLC, and Avro Hoist Company. Alimak’s recommendations for maintenance and servicing of CPHs include the recommendation that sealed safety brakes be returned to the manufacturer for replacement of the unit or replacement of parts and components.

However, there are CPH manufacturers that not only service and/or replace their own sealed safety brakes, but they also remanufacture other manufacturer’s sealed safety brakes (including Alimak models) by testing, inspection, replacing parts and components, or providing new sealed safety brake devices/units. Factors such as the car size, travel speed of the elevator, rated capacity, type and frequency of use are some of the factors considered by engineering and technical staff in the process of remanufacturing sealed safety brakes units.

Stakeholders contacted confirm that the specific parts for automatic replacement when remanufacturing/refurbishing brakes, and parts subject to inspection for wear or damage and their limitations for continued service, are the proprietary information of the manufacturer and are not published. Therefore, the Petitioner indicated that only the manufacturer of the sealed safety brake

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\(^2\) For the purposes of this evaluation “stakeholders” may include, but are not limited to, the Petitioner, other CPH manufacturers, Division representatives, elevator companies that specialize in the servicing and maintenance of CPHs and companies that own, rent and use CPH equipment.
can properly inspect, service or remanufacture these parts with the assurance of continued safe
operation of safety brake systems for CPHs.

The Petitioner also recommends language for Section 1604.20 “Governors” that would provide a
new subsection (i). This subsection would require speed governors that cannot be internally
inspected through an inspection plate (cover or service opening) to be replaced by the owner in
accordance with the instructions and specific date on the manufacturer’s data plate. The speed
governor and safety brake devices subject to the petition request are designed as a sealed unit.
Since the Petitioner’s specifications are to return these sealed parts to the manufacturer when
service is due, this addition would have a similar effect to that of the Petitioner’s other
recommended amendments of Sections 1604.1(c)(1) and 1604.27 (those recommendations being
that sealed safety brakes/governors must be returned to the manufacturer for inspection and
replacement of parts at intervals specified by the manufacturer).

Some stakeholders are of the opinion that the manufacturer should be the only entity permitted to
service or remanufacturer sealed safety brakes for CPHs. This opinion is based on the concept that
the manufacturer has the experience and knowledge to determine which parts and components
should be automatically replaced when service is due and which should be subject to the
determinations of qualified and experienced persons (e.g. professional licensed engineers) familiar
with the design and operation of CPHs.

Several companies that own, rent, sell, inspect, service and maintain rack and pinion driven CPHs
in California indicate that to mandate that servicing and/or remanufacturing of safety brakes be
done only by the original manufacturer is costly, onerous and unnecessary. Engineering opinions
from these companies and/or their representatives assert that the sealed safety brakes can be
remanufactured/refurbished for safe operation by third party suppliers and that third parties have
provided such services for a number of years, going back to at least the mid-1990’s and earlier.

Discussions with stakeholders did not identify any record of specific accidents in California
associated with the malfunction or failure of sealed safety brakes, whether they are serviced and
remanufactured by the manufacturer or by third party suppliers. However, as indicated earlier, the
Petitioner’s technical staff has thoroughly examined a third party remanufactured/refurbished safety
brace, and the Petitioner asserts that the examined safety brake was substandard and did not meet
the Petitioner’s criteria for the safe servicing and/or remanufacturing of sealed safety brakes.

Notwithstanding the above, third party companies that inspect, service and remanufacture/refurbish
safety brakes and the companies that own CPHs and buy and use such parts assert that, based on
their experience, there is no valid reason to prohibit the market availability of these replacement
safety brake systems. Elevator companies that remanufacture CPH safeties assert that sound
engineering practices, including inspection and appropriate testing and evaluation of parts and
components, are used in the process of remanufacturing/refurbishing sealed safety brake systems.

Board staff as well as some stakeholders found that the regulatory requirements of Section
1604.1(c)(1) may need clarification. For instance, the phrase, “Where the manufacturer’s
specifications are not available....” lacks clarity as to what is meant by “not available.” Does it mean that the manufacturer is out of business or not operating in California or that the specifications are not available or published by the CPH manufacturer? Furthermore, there are differing opinions from engineering and technical specialists in the CPH industry and other stakeholders as to the merits and/or necessity of amendments based upon this Petition request that would be appropriately discussed by an advisory committee.

For the reasons stated above, Board staff is of the opinion that an advisory committee of stakeholders should be convened by the Board staff to consider the Petitioner’s request and assist in determining if amendments are necessary for consideration by the Board.

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 Standards Board staff shall convene a representative advisory committee. The Petitioner should be invited to participate in this advisory committee.