

to lift employees to work locations inside and outside a chimney when both a personnel cage and a personnel platform are infeasible. The employers proposed to attach the boatswains' chair to the hoisting system described as an alternative for paragraph (c) of §1926.552.

Paragraph (c) of §1926.552 specifies the requirements for enclosed hoisting systems used to transport personnel from one elevation to another. This paragraph ensures that employers transport employees safely to and from elevated work platforms by mechanical means during construction work involving structures such as chimneys. In this regard, paragraph (c)(1) of §1926.552 requires employers to enclose hoist towers located outside a chimney on the side or sides used for entrance to, and exit from, the structure; these enclosures must extend the full height of the hoist tower. Under the requirements of paragraph (c)(2) of §1926.552, employers must enclose all four sides of a hoist tower located inside a chimney; these enclosures must extend the full height of the tower.

As an alternative to complying with the hoist-tower requirements of §1926.552(c)(1) and (c)(2), the employers proposed to use a rope-guided hoist system to transport employees to and from elevated work locations inside and outside chimneys. The proposed hoist system includes a hoist machine, cage, safety cables, and safety measures such as limit switches to prevent overrun of the cage at the top and bottom landings, and safety clamps that grip the safety cables if the main hoist line fails. To transport employees to and from elevated work locations, the employers proposed to attach a personnel cage to the hoist system. However, when they can demonstrate that adequate space is not available for the cage, they can use a personnel platform above the last worksite that the cage can reach. Further, when the employers can show that space limitations make it infeasible to use a work platform for transporting employees, they have proposed to use a boatswains' chair above the last worksite serviced by the personnel platform. Using the proposed hoist system as an alternative to the hoist-tower requirements of §1926.552(c)(1) and (c)(2) eliminates the need to comply with the other provisions of §1926.552(c) that specify requirements for hoist towers. Accordingly, the employers have requested a permanent variance from these and related provisions (*i.e.*, paragraphs (c)(3), (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16)).

After reviewing the variance application, as well as the comments made to the record regarding the application, OSHA has made only minor editorial amendments and technical corrections to the proposed variance. Therefore, under Section 6(d) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655), and based on the record discussed above, the Agency finds that when the employers comply with the conditions of the following order, their employees will be exposed to working conditions that are at least as safe and healthful as they would be if the employers complied with paragraph (o)(3) of §1926.452, and paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of §1926.552.

VIII. Order

OSHA issues this order authorizing Oak Park Chimney Corp. and American Boiler & Chimney Co. ("the employers") to comply with the following conditions instead of complying with paragraph (o)(3) of §1926.452 and paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of §1926.552:

1. Scope of the Permanent Variance

(a) This permanent variance applies only when the employers use a rope-guided hoist system during inside or outside chimney construction to raise or lower their employees between the bottom landing of a chimney and an elevated work location on the inside or outside surface of the chimney.

(b) Except for the requirements specified by §1926.452(o)(3) and §1926.552(c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16), the employers must comply fully with all other applicable provisions of 29 CFR parts 1910 and 1926.

2. Replacing a Personnel Cage With a Personnel Platform or a Boatswains' Chair

(a) *Personnel platform.* When the employers demonstrate that available space makes a personnel cage for transporting employees infeasible, they may replace the personnel cage with a personnel platform when they limit use of the personnel platform to elevations above the last work location that the personnel cage can reach.

(b) *Boatswains' chair.* When the employers demonstrate that available space makes a personnel platform for transporting employees infeasible, they may replace the personnel platform with a boatswains' chair when they limit use of the boatswains' chair to elevations above the last work location that the personnel platform can reach.

3. Qualified Competent Person

(a) The employers must:

(i) Provide a qualified competent person, as specified in paragraphs (f) and (m) of §1926.32, who is responsible for ensuring that the design, maintenance, and inspection of the hoist system comply with the conditions of this grant and with the appropriate requirements of 29 CFR part 1926 ("Safety and Health Regulations for Construction"); and

(ii) Ensure that the qualified competent person is present at ground level to assist in an emergency whenever the hoist system is raising or lowering employees.

(b) The employers must use a qualified competent person to design and maintain the cathead described under Condition 8 ("Cathead and Sheave") below.

4. Hoist Machine

(a) *Type of hoist.* The employers must designate the hoist machine as a portable personnel hoist.

(b) *Raising or lowering a transport.*

The employers must ensure that:

(i) The hoist machine includes a base-mounted drum hoist designed to control line speed; and

(ii) Whenever they raise or lower a personnel or material hoist (*e.g.*, a personnel cage, personnel platform, boatswains' chair, hopper, concrete bucket) using the hoist system:

(A) The drive components are engaged continuously when an empty or occupied transport is being lowered (*i.e.*, no "freewheeling");

(B) The drive system is interconnected, on a continuous basis, through a torque converter, mechanical coupling, or an equivalent coupling (*e.g.*, electronic controller, fluid clutches, hydraulic drives).

(C) The braking mechanism is applied automatically when the transmission is in the neutral position and a forward-reverse coupling or shifting transmission is being used; and

(D) No belts are used between the power source and the winding drum.

(c) *Power source.* The employers must power the hoist machine by an air, electric, hydraulic, or internal-combustion drive mechanism.

(d) *Constant pressure control switch.* The employers must:

(i) Equip the hoist machine with a hand-or foot-operated constant-pressure control switch (*i.e.*, a "deadman control switch") that stops the hoist immediately upon release; and

(ii) Protect the control switch to prevent it from activating if the hoist machine is struck by a falling or moving object.