

*et seq.* ("the Act"), National Biodiesel Accreditation Commission ("NBAC") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing additions or changes to its standards development activities. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances.

Specifically, the NBAC has: (1) Amended its Marketer Program Requirements to adopt new normative references, require updating of quality management systems, make corrections to a specification procedure, add a cold soak filterability test requirement, require specification of final biodiesel content of a blended product prior to sale, change sampling and testing requirements of biodiesel stored for more than thirty days, require documentation of certain reinspections, require periodic validation of blending system accuracy, and delete a sixty-day storage sampling requirement; (2) amended its Producer Program Requirements to adopt new normative references, require the updating of quality management systems, amend the definition of Producer, add a cold soak filterability test requirement, amend production lot homogeneity requirements, add sampling requirements, add an oxidative stability test requirement for commingled production lots, provide an alternative test for the presence of certain elements, require disclosure of specifications which are less than full specifications, change the testing required of certain stored biodiesel, and add a new appendix diagramming the requirements for production lot homogeneity testing; and (3) adopted a laboratory certification program for the operation of commercial laboratories which test biodiesel and biodiesel blends for compliance with regulatory standards. Certification by the Commission indicates the applicant laboratory possesses and implements a quality control/quality assurance program meeting the Commission's requirements.

On August 27, 2004, NEAC filed its original notification pursuant to Section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to Section 6(b) of the Act on October 4, 2004 (69 FR 59269).

The last notification was filed with the Department on June 19, 2007. A notice was published in the **Federal Register** pursuant to Section 6(b) of the

Act on September 11, 2007 (72 FR 51841).

**Patricia A. Brink,**  
*Deputy Director of Operations, Antitrust Division.*  
[FR Doc. E9-16776 Filed 7-16-09; 8:45 am]  
**BILLING CODE 4410-11-M**

## DEPARTMENT OF LABOR

### Occupational Safety and Health Administration

[Docket No. OSHA-2007-0046]

#### **Calaveras Power Partners L.P., Matrix Service Inc., T.E. Ibberson Company, TIC—The Industrial Company, and Zachry Construction Corporation; Grant of a Permanent Variance**

**AGENCY:** Occupational Safety and Health Administration (OSHA), Department of Labor.

**ACTION:** Notice of a grant of a permanent variance.

**SUMMARY:** This notice announces the grant of a permanent variance to Calaveras Power Partners L.P., Matrix Service Inc., T.E. Ibberson Company, TIC—The Industrial Company, and Zachry Construction Corporation ("the employers"). The permanent variance addresses the provision that regulates the tackle used for boatswain's chairs (29 CFR 1926.452(o)(3)), as well as the provisions specified for personnel hoists by paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of 29 CFR 1926.552. As an alternative to complying with these provisions, the employers may instead comply with the conditions listed in this grant; these alternative conditions regulate hoisting systems used during inside or outside chimney construction to raise or lower workers in personnel cages, personnel platforms, and boatswain's chairs between the bottom landing of a chimney and an elevated work location. Accordingly, OSHA finds that these alternative conditions protect workers at least as well as the requirements specified by 29 CFR 1926.452(o)(3) and 1926.552(c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16).

**DATES:** The effective date of the permanent variance is July 17, 2009.

**FOR FURTHER INFORMATION CONTACT:** For information about this notice contact Ms. MaryAnn Garrahan, Director, Office of Technical Programs and Coordination Activities, Room N-3655, OSHA, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693-2110; fax (202) 693-1644. Electronic copies of this

notice are available at <http://www.regulations.gov>. Electronic copies of this notice, as well as news releases and other relevant information, are available on OSHA's Web page at <http://www.osha.gov>.

Additional information also is available from the following OSHA Regional Offices:

U.S. Department of Labor, OSHA, JFK Federal Building, Room E340, Boston, MA 02203; telephone: (617) 565-9860; fax: (617) 565-9827.

U.S. Department of Labor, OSHA, 201 Varick Street, Room 670, New York, NY 10014; telephone: (212) 337-2378; fax: (212) 337-2371.

U.S. Department of Labor, OSHA, the Curtis Center, Suite 740 West, 170 South Independence Mall West, Philadelphia, PA 19106-3309; telephone: (215) 861-4900; fax: (215) 861-4904.

U.S. Department of Labor, OSHA, Atlanta Federal Center, 61 Forsyth Street, SW., Room 6T50, Atlanta, GA 30303; telephone: (404) 562-2300; fax: (404) 562-2295.

U.S. Department of Labor, OSHA, 230 South Dearborn Street, Room 3244, Chicago, IL 60604; telephone: (312) 353-2220; fax: (312) 353-7774.

U.S. Department of Labor, OSHA, Two Pershing Square Building, 2300 Main Street, Suite 1010, Kansas City, MO 64108-2416; telephone: (816) 283-8745; fax: (816) 283-0547.

U.S. Department of Labor, OSHA, 525 Griffin Street, Suite 602, Dallas, TX 75202; telephone: (972) 850-4145; fax: (972) 850-4149.

U.S. Department of Labor, OSHA, 1999 Broadway, Suite 1690, Denver, CO 80202; telephone: (720) 264-6550; fax: (720) 264-6585.

U.S. Department of Labor, OSHA, 90 7th Street, Suite 18100, San Francisco, CA 94103; telephone: (415) 625-2547; fax: (415) 625-2534.

U.S. Department of Labor, OSHA, 1111 Third Avenue, Suite 715, Seattle, WA 98101-3212; telephone: (206) 553-5930; fax: (206) 553-6499.

#### **SUPPLEMENTARY INFORMATION:**

##### **I. Background**

In the past 35 years, a number of chimney-construction companies have demonstrated to OSHA that several personnel-hoist requirements (*i.e.*, paragraphs (c)(1), (c)(2), (c)(3), (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of 29 CFR 1926.552), as well as the tackle requirements for boatswain's chairs (*i.e.*, paragraph (o)(3) of 29 CFR 1926.452), result in access problems that pose a serious danger to their workers. These companies requested permanent

variances from these requirements, and proposed alternative equipment and procedures to protect workers while being transported to and from their elevated worksites during chimney construction and repair. The Agency subsequently granted these companies permanent variances based on the proposed alternatives (see 38 FR 8545 (April 3, 1973), 44 FR 51352 (August 31, 1979), 50 FR 20145 (May 14, 1985), 50 FR 40627 (October 4, 1985), 52 FR 22552 (June 12, 1987), 68 FR 52961 (September 8, 2003), 70 FR 72659 (December 6, 2005), and 71 FR 10557 (March 1, 2006)).<sup>1</sup>

Calaveras Power Partners L.P., Matrix Service Inc., T.E. Ibberson Company, TIC—The Industrial Company and Zachry Construction Corporation applied for a permanent variance from the same personnel-hoist and boatswain's-chair requirements as the previous companies, and proposed as an alternative to these requirements the same equipment and procedures approved by OSHA in the earlier variances (see Exhibits OSHA-2007-0046-0002 through -0006). The Agency published their variance applications in the **Federal Register** on January 23, 2009 (74 FR 4237).

Calaveras Power Partners L.P., Matrix Service Inc., T.E. Ibberson Company, TIC—The Industrial Company and Zachry Construction Corporation ("the employers") construct, remodel, repair, maintain, inspect, and demolish tall chimneys made of reinforced concrete, brick, and steel. This work, which occurs throughout the United States, requires the employers to transport workers and construction material to and from elevated work platforms and scaffolds located, respectively, inside and outside tapered chimneys. While tapering contributes to the stability of a chimney, it necessitates frequent relocation of, and adjustments to, the work platforms and scaffolds so these structures will fit the decreasing circumference of the chimney as construction progresses upwards.

To transport workers to various heights inside and outside a chimney, the employers proposed in their variance application to use a hoist system that lifts and lowers personnel-transport devices that include personnel cages, personnel platforms, or

boatswain's chairs. In this regard, the employers proposed to use personnel cages, personnel platforms, or boatswain's chairs solely to transport workers with the tools and materials necessary to do their work, and not to transport only materials or tools on these devices in the absence of workers. In addition, the employers proposed to attach a hopper or concrete bucket to the hoist system to raise or lower material inside or outside a chimney.

The employers also proposed to use a hoist engine, located and controlled outside the chimney, to power the hoist system. The proposed system consisted of a wire rope that: Spools off a winding drum (also known as the hoist drum or rope drum) into the interior of the chimney; passes to a footblock that redirects the rope from the horizontal to the vertical planes; goes from the footblock through the overhead sheaves above the elevated platform; and finally drops to the bottom landing of the chimney where it connects to a personnel- or material-transport device. A cathead, which is a superstructure at the top of the system, supports the overhead sheaves. The overhead sheaves (and the vertical span of the hoist system) move upward with the system as chimney construction progresses. Two guide cables, suspended from the cathead, eliminate swaying and rotation of the load. If the hoist rope breaks, safety clamps activate and grip the guide cables to prevent the load from falling. The employers proposed to use a headache ball, located on the hoist rope directly above the load, to counterbalance the rope's weight between the cathead sheaves and the footblock.

Additional conditions that the employers proposed to follow to improve worker safety included:

- Attaching the wire rope to the personnel cage using a keyed-screwpin shackle or positive-locking link;
- Adding limit switches to the hoist system to prevent overtravel by the personnel- or material-transport devices;
- Providing the safety factors and other precautions required for personnel hoists specified by the pertinent provisions of 29 CFR 1926.552(c), including canopies and shields to protect workers located in a personnel cage from material that may fall during hoisting and other overhead activities;
- Providing falling-object protection for scaffold platforms as specified by 29 CFR 1926.451(h)(1);
- Conducting tests and inspections of the hoist system as required by 29 CFR 1926.20(b)(2) and 1926.552(c)(15);

- Establishing an accident-prevention program that conforms to 29 CFR 1926.20(b)(3);

- Equipping workers who use a personnel cage, personnel platform, or boatswain's chair with, and ensuring that they use, personal fall-arrest systems meeting the requirements of 29 CFR 1926.502(d);

- Ensuring that workers using a personnel cage secure their personal fall-arrest system to an attachment point located inside the cage, and that workers using personnel platforms or boatswain's chairs secure their personal fall-arrest systems to a vertical lifeline;

- When using vertical lifelines, securing the lifelines to the top of the chimney and weighting the lifelines properly or suitably affixing the lifelines to the bottom of the chimney, and ensuring that workers remain attached to their lifeline during the entire period of vertical transit;

- Providing instruction to each worker who uses a personnel platform or boatswain's chair regarding the shearing and struck-by hazards posed by the hoist system (*e.g.*, work platforms, scaffolds), and the need to keep their limbs or other body parts clear of these hazards during hoisting operations;

- Providing the instruction on shearing and struck-by hazards before a worker uses one of these personnel-transport devices at the worksite; and periodically, and as necessary, thereafter, including whenever the worker demonstrates: A lack of knowledge about the hazard or how to avoid it, a modification occurs to an existing shearing hazard, or a new shearing hazard develops at the worksite;

- Attaching a readily visible warning to each personnel platform and boatswain's chair notifying workers in a language they understand of potential shearing hazards during hoisting operations; for warnings located on personnel platforms, using the following (or equivalent) wording: "Warning—To avoid serious injury, keep your hands, arms, feet, legs, and other parts of your body inside this platform while it is in motion"; and for boatswain's chairs, the warning uses the following (or equivalent) wording: "Warning—To avoid serious injury, do not extend your hands, arms, feet, legs, or other parts of your body from the side or to the front of this chair while it is in motion"; and

- Establishing a clearly designated safety zone around the hoist system's bottom landing and prohibiting any worker from entering the safety zone except to access a personnel cage, personnel platform, boatswain's chair, or material-transport device, and then

<sup>1</sup> Zurn Industries, Inc. received two permanent variances from OSHA. The first variance, granted on May 14, 1985 (50 FR 20145), addressed the boatswain's-chair provision (then in paragraph (l)(5) of 29 CFR 1926.451), as well as the hoist-platform requirements of paragraphs (c)(1), (c)(2), (c)(3), and (c)(14)(i) of 29 CFR 1926.552. The second variance, granted on June 12, 1987 (52 FR 22552), includes these same paragraphs, as well as paragraphs (c)(4), (c)(8), (c)(13), and (c)(16) of 29 CFR 1926.552.

only when the personnel- and material-transport device is at the bottom landing and not in operation.

## **II. Proposed Variance From 29 CFR 1926.452(o)(3)**

The employers noted in their variance request that it is necessary, on occasion, to use a boatswain's chair to transport workers to and from a bracket scaffold on the outside of an existing chimney during flue installation or repair work, or to transport them to and from an elevated scaffold located inside a chimney that has a small or tapering diameter. Paragraph (o)(3) of 29 CFR 1926.452, which regulates the tackle used to rig a boatswain's chair, states that this tackle must "consist of correct size ball bearings or bushed blocks containing safety hooks and properly 'eye-spliced' minimum five-eighth ( $\frac{5}{8}$ ) inch diameter first-grade manila rope [or equivalent rope]."

The primary purpose of this paragraph is to allow a worker to safely control the ascent, descent, and stopping locations of the boatswain's chair. However, the employers stated in their variance request that, because of space limitations, the required tackle is difficult or impossible to operate on some chimneys that are over 200 feet tall. Therefore, as an alternative to complying with the tackle requirements specified by 29 CFR 1926.452(o)(3), the employers proposed to use the hoisting system described above in section I ("Background") of this notice to raise or lower workers in a personnel cage to work locations both inside and outside a chimney. In addition, the employers proposed to use a personnel cage for this purpose to the extent that adequate space is available, and to use a personnel platform only when using a personnel cage was infeasible because of limited space. When available space makes using a personnel platform infeasible, the employers proposed to use a boatswain's chair to lift workers to work locations. The proposed variance limited use of the boatswain's chair to elevations above the last work location that the personnel platform can reach; under these conditions, the employers proposed to attach the boatswain's chair directly to the hoisting cable only when the structural arrangement precludes the safe use of the block and tackle required by 29 CFR 1926.452(o)(3).

## **III. Proposed Variance From 29 CFR 1926.552(c)**

Paragraph (c) of 29 CFR 1926.552 specifies the requirements for enclosed hoisting systems used to transport workers from one elevation to another. This paragraph ensures that employers

transport workers safely to and from elevated work platforms by mechanical means during the construction, alteration, repair, maintenance, or demolition of structures such as chimneys. However, this standard does not provide specific safety requirements for hoisting workers to and from elevated work platforms and scaffolds in tapered chimneys; the tapered design requires frequent relocation of, and adjustment to, the work platforms and scaffolds. The space in a small-diameter or tapered chimney is not large enough or configured so that it can accommodate an enclosed hoist tower. Moreover, using an enclosed hoist tower for outside operations exposes workers to additional fall hazards because they need to install extra bridging and bracing to support a walkway between the hoist tower and the tapered chimney.

Paragraph (c)(1) of 29 CFR 1926.552 requires the employers to enclose hoist towers located outside a chimney on the side or sides used for entrance to, and exit from, the chimney; these enclosures must extend the full height of the hoist tower. The employers asserted in their proposed variance that it is impractical and hazardous to locate a hoist tower outside tapered chimneys because it becomes increasingly difficult, as a chimney rises, to erect, guy, and brace a hoist tower; under these conditions, access from the hoist tower to the chimney or to the movable scaffolds used in constructing the chimney exposes workers to a serious fall hazard. Additionally, they noted that the requirement to extend the enclosures 10 feet above the outside scaffolds often exposes the workers involved in building these extensions to dangerous wind conditions.

Paragraph (c)(2) of 29 CFR 1926.552 requires that employers enclose all four sides of a hoist tower even when the tower is located inside a chimney; the enclosure must extend the full height of the tower. In the proposed variance, the employers contended that it is hazardous for workers to erect and brace a hoist tower inside a chimney, especially small-diameter or tapered chimneys or chimneys with sublevels, because these structures have limited space and cannot accommodate hoist towers; space limitations result from chimney design (e.g., tapering), as well as reinforced steel projecting into the chimney from formwork that is near the work location.

As an alternative to complying with the hoist-tower requirements of 29 CFR 1926.552(c)(1) and (c)(2), the employers proposed to use the hoist system discussed in section I ("Background") of

this notice to transport workers to and from work locations inside and outside chimneys. They claimed that this hoist system would make it unnecessary for them to comply with other provisions of 29 CFR 1926.552(c) that specify requirements for hoist towers, including:

- (c)(3)—Anchoring the hoist tower to a structure;
- (c)(4)—Hoistway doors or gates;
- (c)(8)—Electrically interlocking entrance doors or gates that prevent hoist movement when the doors or gates are open;
- (c)(13)—Emergency stop switch located in the car;
- (c)(14)(i)—Using a minimum of two wire ropes for drum-type hoisting; and
- (c)(16)—Construction specifications for personnel hoists, including materials assembly, structural integrity, and safety devices.

The employers asserted that the proposed hoisting system protected workers at least as effectively as the personnel-hoist requirements of 29 CFR 1926.552(c). The following section of this preamble reviews the comments received on the employers' proposed variance.

## **IV. Comments on the Proposed Variance**

OSHA received no comments on the proposed variance.

## **V. Decision**

Calaveras Power Partners L.P., Matrix Service Inc., T. E. Ibberson Company, TIC—The Industrial Company, and Zachry Construction Corporation seek a permanent variance from the provision that regulates the tackle used for boatswain's chairs (29 CFR 1926.452(o)(3)), as well as the provisions specified for personnel hoists by paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of 29 CFR 1926.552.

Paragraph (o)(3) of 29 CFR 1926.452 states that the tackle used for boatswain's chairs must "consist of correct size ball bearings or bushed blocks containing safety hooks and properly 'eye-spliced' minimum five-eighth ( $\frac{5}{8}$ ) inch diameter first-grade manila rope [or equivalent rope]." The primary purpose of this provision is to allow a worker to safely control the ascent, descent, and stopping locations of the boatswain's chair. The proposed alternative to these requirements allows the employer to use a boatswain's chair to lift workers to work locations inside and outside a chimney when either a personnel cage or a personnel platform is infeasible. The employers proposed to attach the boatswain's chair to the

hoisting system described as an alternative to paragraph (c) of 29 CFR 1926.552.

Paragraph (c) of 29 CFR 1926.552 specifies the requirements for enclosed hoisting systems used to transport personnel from one elevation to another. This paragraph ensures that employers transport workers 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 29 CFR 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 29 CFR 1926.552, employers must enclose all four sides of a hoist tower located inside a chimney; these enclosures also must extend the full height of the tower.

As an alternative to complying with the hoist-tower requirements of 29 CFR 1926.552(c)(1) and (c)(2), the employers proposed to use a hoist system to transport workers 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 workers 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 may use a personnel platform above the last worksite that the cage can reach. Further, when the employers show that space limitations make it infeasible to use a work platform for transporting workers, they have proposed to use a boatswain's chair above the last worksite serviced by the personnel platform. Using the proposed hoist system as an alternative to the hoist-tower requirements of 29 CFR 1926.552(c)(1) and (c)(2) eliminates the need to comply with the other provisions of 29 CFR 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)).

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, the working conditions of their workers will be at least as safe and healthful as if the employers complied with the working conditions specified by paragraph (o)(3) of 29 CFR 1926.452, and paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of 29 CFR 1926.552.

## VI. Order

OSHA issues this order authorizing Calaveras Power Partners L.P., Matrix Service Inc., T. E. Ibberson Company, TIC—The Industrial Company, and Zachry Construction Corporation (“the employers”) to comply with the following conditions instead of complying with paragraph (o)(3) of 29 CFR 1926.452 and paragraphs (c)(1) through (c)(4), (c)(8), (c)(13), (c)(14)(i), and (c)(16) of 29 CFR 1926.552:

### 1. Scope of the Permanent Variance

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

(b) When using a hoist system as specified in this permanent variance, the employers must:

(i) Use the personnel cages, personnel platforms, or boatswain's chairs raised and lowered by the hoist system solely to transport workers with the tools and materials necessary to do their work; and

(ii) Attach a hopper or concrete bucket to the hoist system to raise and lower all other materials and tools inside or outside a chimney.

(c) Except for the requirements specified by 29 CFR 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 Boatswain's Chair

(a) *Personnel platform.* When the employers demonstrate that available space makes a personnel cage for transporting workers 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) *Boatswain's chair.* Employers must:

(i) Before using a boatswain's chair, demonstrate that available space makes

it infeasible to use a personnel platform for transporting workers;

(ii) Limit use of a boatswain's chair to elevations above the last work location that the personnel platform can reach; and

(iii) Use a boatswain's chair in accordance with block-and-tackle requirements specified by 29 CFR 1926.452(o)(3), unless they can demonstrate that the structural arrangement of the chimney precludes such use.

### 3. Qualified Competent Person

(a) The employers must:

(i) Provide a qualified competent person, as specified in paragraphs (f) and (m) of 29 CFR 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 workers.

(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, boatswain's 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.

(e) *Line-speed indicator.* The employers must:

(i) Equip the hoist machine with an operating line-speed indicator maintained in good working order; and

(ii) Ensure that the line-speed indicator is in clear view of the hoist operator during hoisting operations.

(f) *Braking systems.* The employers must equip the hoist machine with two (2) independent braking systems (*i.e.*, one automatic and one manual) located on the winding side of the clutch or couplings, with each braking system being capable of stopping and holding 150 percent of the maximum rated load.

(g) *Slack-rope switch.* The employers must equip the hoist machine with a slack-rope switch to prevent rotation of the winding drum under slack-rope conditions.

(h) *Frame.* The employers must ensure that the frame of the hoist machine is a self-supporting, rigid, welded-steel structure, and that holding brackets for anchor lines and legs for anchor bolts are integral components of the frame.

(i) *Stability.* The employers must secure hoist machines in position to prevent movement, shifting, or dislodgement.

(j) *Location.* The employers must:

(i) Locate the hoist machine far enough from the footblock to obtain the correct fleet angle for proper spooling of the cable on the drum; and

(ii) Ensure that the fleet angle remains between one-half degree ( $1/2^\circ$ ) and one and one-half degrees ( $1\frac{1}{2}^\circ$ ) for smooth drums, and between one-half degree ( $1/2^\circ$ ) and two degrees ( $2^\circ$ ) for grooved drums, with the lead sheave centered on the drum.<sup>2</sup>

(k) *Drum and flange diameter.* The employers must:

(i) Provide a winding drum for the hoist that is at least 30 times the

diameter of the rope used for hoisting; and

(ii) Ensure that the winding drum has a flange diameter that is at least one and one-half ( $1\frac{1}{2}$ ) times the winding-drum diameter.

(l) *Spooling of the rope.* The employers must *never* spool the rope closer than two (2) inches (5.1 cm) from the outer edge of the winding-drum flange.

(m) *Electrical system.* The employers must ensure that all electrical equipment is weatherproof.

(n) *Limit switches.* The employers must equip the hoist system with limit switches and related equipment that automatically prevent overtravel of a personnel cage, personnel platform, boatswain's chair, or material-transport device at the top of the supporting structure and at the bottom of the hoistway or lowest landing level.

## 5. Methods of Operation

(a) *Employee qualifications and training.* The employers must:

(i) Ensure that only trained and experienced workers, who are knowledgeable of hoist-system operations, control the hoist machine; and

(ii) Provide instruction, periodically and as necessary, on how to operate the hoist system, to each worker who uses a personnel cage for transportation.

(b) *Speed limitations.* The employers must not operate the hoist at a speed in excess of:

(i) Two hundred and fifty (250) feet (76.9 m) per minute when a personnel cage is being used to transport workers;

(ii) One hundred (100) feet (30.5 m) per minute when a personnel platform or boatswain's chair is being used to transport workers; or

(iii) A line speed that is consistent with the design limitations of the system when only material is being hoisted.

(c) *Communication.* The employers must:

(i) Use a voice-mediated intercommunication system to maintain communication between the hoist operator and the workers located in or on a moving personnel cage, personnel platform, or boatswain's chair;

(ii) Stop hoisting if, for any reason, the communication system fails to operate effectively; and

(iii) Resume hoisting only when the site superintendent determines that it is safe to do so.

## 6. Hoist Rope

(a) *Grade.* The employers must use a wire rope for the hoist system (*i.e.*, “hoist rope”) that consists of extra-

improved plow steel, an equivalent grade of non-rotating rope, or a regular lay rope with a suitable swivel mechanism.

(b) *Safety factor.* The employers must maintain a safety factor of at least eight (8) times the safe workload throughout the entire length of hoist rope.

(c) *Size.* The employers must use a hoist rope that is at least one-half ( $1/2$ ) inch (1.3 cm) in diameter.

(d) *Inspection, removal, and replacement.* The employers must:

(i) Thoroughly inspect the hoist rope before the start of each job and on completing a new setup;

(ii) Maintain the proper diameter-to-diameter ratios between the hoist rope and the footblock and the sheave by inspecting the wire rope regularly (*see* Conditions 7(c) and 8(d), below); and

(iii) Remove and replace the wire rope with new wire rope when any of the conditions specified by 29 CFR 1926.552(a)(3) occurs.

(e) *Attachments.* The employers must attach the rope to a personnel cage, personnel platform, or boatswain's chair with a keyed-screwpin shackle or positive-locking link.

(f) *Wire-rope fastenings.* When the employers use clip fastenings (*e.g.*, U-bolt wire-rope clips) with wire ropes, they must:

(i) Use Table H-20 of 29 CFR 1926.251 to determine the number and spacing of clips;

(ii) Use at least three (3) drop-forged clips at each fastening;

(iii) Install the clips with the “U” of the clips on the dead end of the rope; and

(iv) Space the clips so that the distance between them is six (6) times the diameter of the rope.

## 7. Footblock

(a) *Type of block.* The employers must use a footblock:

(i) Consisting of construction-type blocks of solid single-piece bail with a safety factor that is at least four (4) times the safe workload, or an equivalent block with roller bearings;

(ii) Designed for the applied loading, size, and type of wire rope used for hoisting;

(iii) Designed with a guard that contains the wire rope within the sheave groove;

(iv) Bolted rigidly to the base; and

(v) Designed and installed so that it turns the moving wire rope to and from the horizontal or vertical direction as required by the direction of rope travel.

(b) *Directional change.* The employers must ensure that the angle of change in the hoist rope from the horizontal to the vertical direction at the footblock is approximately  $90^\circ$ .

<sup>2</sup> This variance adopts the definition of, and specifications for, fleet angle from *Cranes and Derricks*, H. I. Shapiro, *et al.* (eds.); New York: McGraw-Hill; 3rd ed., 1999, page 592. Accordingly, the fleet angle is “[t]he angle the rope leading onto a [winding] drum makes with the line perpendicular to the drum rotating axis when the lead rope is making a wrap against the flange.”

(c) *Diameter*. The employers must ensure that the line diameter of the footblock is at least 24 times the diameter of the hoist rope.

#### 8. Cathead and Sheave

(a) *Support*. The employers must use a cathead (*i.e.*, “overhead support”) that consists of a wide-flange beam, or two (2) steel-channel sections securely bolted back-to-back to prevent spreading.

(b) *Installation*. The employers must ensure that:

(i) All sheaves revolve on shafts that rotate on bearings; and

(ii) The bearings are mounted securely to maintain the proper bearing position at all times.

(c) *Rope guides*. The employers must provide each sheave with appropriate rope guides to prevent the hoist rope from leaving the sheave grooves when the rope vibrates or swings abnormally.

(d) *Diameter*. The employers must use a sheave with a diameter that is at least 24 times the diameter of the hoist rope.

#### 9. Guide Ropes

(a) *Number and construction*. The employers must affix two (2) guide ropes by swivels to the cathead. The guide ropes must:

(i) Consist of steel safety cables not less than one-half ( $\frac{1}{2}$ ) inch (1.3 cm) in diameter; and

(ii) Be free of damage or defect at all times.

(b) *Guide rope fastening and alignment tension*. The employers must fasten one end of each guide rope securely to the overhead support, with appropriate tension applied at the foundation.

(c) *Height*. The employers must rig the guide ropes along the entire height of the hoist-machine structure.

#### 10. Personnel Cage

(a) *Construction*. A personnel cage must be of steel-frame construction and capable of supporting a load that is four (4) times its maximum rated load capacity. The employers also must ensure that the personnel cage has:

(i) A top and sides that are permanently enclosed (except for the entrance and exit);

(ii) A floor securely fastened in place;

(iii) Walls that consist of 14-gauge, one-half ( $\frac{1}{2}$ ) inch (1.3 cm) expanded metal mesh, or an equivalent material;

(iv) Walls that cover the full height of the personnel cage between the floor and the overhead covering;

(v) A sloped roof constructed of one-eighth ( $\frac{1}{8}$ ) inch (0.3 cm) aluminum, or an equivalent material;

(vi) Safe handholds (*e.g.*, rope grips—but *not* rails or hard protrusions<sup>3</sup>) that accommodate each occupant; and

(vii) Attachment points to which workers secure their personal fall-protection systems.

(b) *Overhead weight*. A personnel cage must have an overhead weight (*e.g.*, a headache ball of appropriate weight) to compensate for the weight of the hoist rope between the cathead and the footblock. In addition, the employers must:

(i) Ensure that the overhead weight is capable of preventing line run; and

(ii) Use a means to restrain the movement of the overhead weight so that the weight does *not* interfere with safe personnel hoisting.

(c) *Gate*. The personnel cage must have a gate that:

(i) Guards the full height of the entrance opening; and

(ii) Has a functioning mechanical lock that prevents accidental opening.

(d) *Operating procedures*. The employers must post the procedures for operating the personnel cage conspicuously at the hoist operator's station.

(e) *Capacity*. The employers must:

(i) Hoist no more than four (4) occupants in the cage at any one time; and

(ii) Ensure that the rated load capacity of the cage is at least 250 pounds (113.4 kg) for each occupant so hoisted.

(f) *Worker notification*. The employers must post a sign in each personnel cage notifying workers of the following conditions:

(i) The standard rated load, as determined by the initial static drop test specified by Condition 10(g) (“Static drop tests”) below; and

(ii) The reduced rated load for the specific job.

(g) *Static drop tests*. The employers must:

(i) Conduct static drop tests of each personnel cage that comply with the definition of “static drop test” specified by section 3 (“Definitions”) and the static drop-test procedures provided in section 13 (“Inspections and Tests”) of American National Standards Institute (ANSI) standard A10.22–1990 (R1998) (“American National Standard for Rope-Guided and Non-guided Worker's Hoists—Safety Requirements”);

(ii) Perform the initial static drop test at 125 percent of the maximum rated load of the personnel cage, and subsequent drop tests at no less than 100 percent of its maximum rated load; and

(iii) Use a personnel cage for raising or lowering workers only when no damage occurred to the components of the cage as a result of the static drop tests.

#### 11. Safety Clamps

(a) *Fit to the guide ropes*. The employers must:

(i) Fit appropriately designed and constructed safety clamps to the guide ropes; and

(ii) Ensure that the safety clamps do not damage the guide ropes when in use.

(b) *Attach to the personnel cage*. The employers must attach safety clamps to each personnel cage for gripping the guide ropes.

(c) *Operation*. The safety clamps attached to the personnel cage must:

(i) Operate on the “broken rope principle” defined in section 3 (“Definitions”) of ANSI standard A10.22–1990 (R1998);

(ii) Be capable of stopping and holding a personnel cage that is carrying 100 percent of its maximum rated load and traveling at its maximum allowable speed if the hoist rope breaks at the footblock; and

(iii) Use a pre-determined and pre-set clamping force (*i.e.*, the “spring compression force”) for each hoist system.

(d) *Maintenance*. The employers must keep the safety-clamp assemblies clean and functional at all times.

#### 12. Overhead Protection

(a) The employers must install a canopy or shield over the top of the personnel cage that is made of steel plate at least three-sixteenths ( $\frac{3}{16}$ ) of an inch (4.763 mm) thick, or material of equivalent strength and impact resistance to protect workers (*i.e.*, both inside and outside the chimney) from material and debris that may fall from above.

(b) The employers must ensure that the canopy or shield slopes to the outside of the personnel cage.<sup>4</sup>

#### 13. Emergency-Escape Device

(a) *Location*. The employers must provide an emergency-escape device in at least one of the following locations:

(i) In the personnel cage, provided that the device is long enough to reach the bottom landing from the highest possible escape point; or

(ii) At the bottom landing, provided that a means is available in the personnel cage for the occupants to raise

<sup>3</sup> To reduce impact hazards should workers lose their balance because of cage movement.

<sup>4</sup> Paragraphs (a) and (b) were adapted from OSHA's Underground Construction standard (29 CFR 1926.800(t)(4)(iv)).

the device to the highest possible escape point.

(b) *Operating instructions.* The employers must ensure that written instructions for operating the emergency-escape device are attached to the device.

(c) *Training.* The employers must instruct each worker who uses a personnel cage for transportation on how to operate the emergency-escape device:

(i) Before the worker uses a personnel cage for transportation; and

(ii) Periodically, and as necessary, thereafter.

#### 14. Personnel Platforms

(a) *Personnel platforms.* When the employers elect to replace the personnel cage with a personnel platform in accordance with Condition 2(a) of this variance, they must:

(i) Ensure that an enclosure surrounds the platform, and that this enclosure is at least 42 inches (106.7 cm) above the platform's floor;

(ii) Provide overhead protection when an overhead hazard is, or could be, present; and

(iii) Comply with the applicable scaffolding strength requirements specified by 29 CFR 1926.451(a)(1).

#### 15. Protecting Workers From Fall and Shearing Hazards

(a) *Fall hazards.* The employers must:

(i) Before workers use personnel cages, personnel platforms, or boatswain's chairs, equip the workers with, and ensure that they use, personal fall-arrest systems that meet the requirements of 29 CFR 1926.502(d);

(ii) Ensure that workers using personnel cages secure their fall-arrest systems to attachment points located inside the cage;

(iii) Ensure that workers using personnel platforms and boatswain's chairs secure their personal fall-arrest systems to a vertical lifeline; and

(iv) When using vertical lifelines:

(A) Secure the lifelines to the top of the chimney;

(B) Weight the lifelines properly or suitably affix the lifelines to the bottom of the chimney; and

(C) Ensure that workers remain attached to their lifeline during the entire period of vertical transit.

(b) *Shearing hazards.* The employers must:

(i) Provide workers who use personnel platforms or boatswain's chairs with instruction on the shearing hazards posed by the hoist system (e.g., work platforms, scaffolds), and the need to keep their limbs or other body parts clear of these hazards during hoisting operations;

(ii) Provide the instruction on shearing and struck-by hazards:

(A) Before a worker uses a personnel platform or boatswain's chair at the worksite; and

(B) Periodically, and as necessary, thereafter, including whenever a worker demonstrates a lack of knowledge about the hazards or how to avoid the hazards, a modification occurs to an existing shearing or struck-by hazard, or a new shearing or struck-by hazard develops at the worksite; and

(iii) Attach a readily visible warning to each personnel platform and boatswain's chair notifying workers in a language they understand of potential shearing hazards they may encounter during hoisting operations, and that uses the following (or equivalent) wording:

(A) For personnel platforms:

"Warning—To avoid serious injury, keep your hands, arms, feet, legs, and other parts of your body inside this platform while it is in motion"; and

(B) For boatswain's chairs:

"Warning—To avoid serious injury, do not extend your hands, arms, feet, legs, or other parts of your body from the side or to the front of this chair while it is in motion."

#### 16. Safety Zone

The employers must:

(a) Establish a clearly designated safety zone around the bottom landing of the hoist system; and

(b) Prohibit any worker from entering the safety zone except to access a personnel- or material-transport device, and then only when the device is at the bottom landing and not in operation (i.e., when the drive components of the hoist machine are disengaged and the braking mechanism is properly applied).

#### 17. Inspections, Tests and Accident Prevention

(a) The employers must:

(i) Conduct inspections of the hoist system as required by 29 CFR 1926.20(b)(2);

(ii) Ensure that a competent person conducts daily visual inspections of the hoist system; and

(iii) Inspect and test the hoist system as specified by 29 CFR 1926.552(c)(15).

(b) The employers must comply with the accident-prevention requirements of 29 CFR 1926.20(b)(3).

#### 18. Welding

(a) The employers must use only qualified welders to weld components of the hoisting system.

(b) The employers must ensure that the qualified welders:

(i) Are familiar with the weld grades, types, and materials specified in the design of the system; and

(ii) Perform the welding tasks in accordance with 29 CFR 1926, subpart J ("Welding and Cutting").

#### 19. OSHA Notification

(a) At least 15 calendar days prior to commencing any chimney-construction operation using the conditions specified herein, the employers must notify the OSHA Area Office nearest to the worksite of the operation, including the location of the operation and the date that the operation will commence.

(b) Each employer must inform OSHA national headquarters as soon as it has knowledge that it will:

(i) Cease to do business; or

(ii) Transfer the activities covered by this permanent variance to a successor company.

#### VII. Authority and Signature

Jordan Barab, Acting Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Ave., NW., Washington, DC directed the preparation of this notice. OSHA is issuing this notice under the authority specified by Section 6(d) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655), Secretary of Labor's Order No. 5-2007 (72 FR 31160), and 29 CFR part 1905.

Signed at Washington, DC, on July 14, 2009.

**Jordan Barab,**

*Acting Assistant Secretary of Labor for Occupational Safety and Health.*

[FR Doc. E9-17023 Filed 7-16-09; 8:45 am]

**BILLING CODE 4510-26-P**

#### DEPARTMENT OF LABOR

##### Occupational Safety and Health Administration

##### Maritime Advisory Committee for Occupational Safety and Health (MACOSH)

**AGENCY:** Occupational Safety and Health Administration (OSHA), Labor.

**ACTION:** MACOSH meeting, notice of.

**SUMMARY:** The Maritime Advisory Committee for Occupational Safety and Health (MACOSH) was established under Section 7 of the Occupational Safety and Health (OSH) Act of 1970 to advise the Assistant Secretary of Labor for Occupational Safety and Health on issues relating to occupational safety and health in the maritime industries. The purpose of this **Federal Register**