§ 75.381

of shaft and slope openings that are part of escapeways.

- (k) Except where automatically activated hoisting equipment is used, the bottom of each shaft or slope opening that is part of a designated escapeway shall be equipped with a means of signaling a surface location where a person is always on duty when anyone is underground. When the signal is activated or the evacuation of persons underground is necessary, the person shall assure that mechanical escape facilities are operational as required by paragraph (j) of this section.
- (1)(1) Stairways or mechanical escape facilities shall be installed in shafts that are part of the designated escapeways and that are 50 feet or less in depth, except ladders may be used in shafts that are part of the designated escapeways and that are 5 feet or less in depth.
- (2) Stairways shall be constructed of concrete or metal, set on an angle not to exceed 45 degrees from the horizontal, and equipped on the open side with handrails. In addition, landing platforms that are at least 2 feet by 4 feet shall be installed at intervals not to exceed 20 vertical feet on the stairways and equipped on the open side with handrails.
- (3) Ladders shall be constructed of metal, anchored securely, and set on an angle not to exceed 60 degrees from the horizontal.
- (m) A travelway designed to prevent slippage shall be provided in slope and drift openings that are part of designated escapeways, unless mechanical escape facilities are installed.

[61 FR 9829, Mar. 11, 1996; 61 FR 20877, May 8, 1996, as amended at 61 FR 55527, Oct. 25, 1996; 69 FR 17530, Apr. 2, 2004; 71 FR 12269, Mar. 9, 2006; 71 FR 71452, Dec. 8, 2006; 73 FR 80613, Dec. 31, 2008]

§75.381 Escapeways; anthracite mines.

- (a) Except as provided in §§ 75.385 and 75.386, at least two separate and distinct travelable passageways shall be designated as escapeways and shall meet the requirements of this section.
- (b) Escapeways shall be provided from each working section continuous to the surface.
 - (c) Each escapeway shall be-

- (1) Maintained in a safe condition to always assure passage of anyone, including disabled persons;
- (2) Clearly marked to show the route of travel to the surface;
- (3) Provided with ladders, stairways, ramps, or similar facilities where the escapeways cross over obstructions; and
- (4) Maintained at least 4 feet wide by 5 feet high. If the pitch or thickness of the coal seam does not permit these dimensions to be maintained other dimensions may be approved in the ventilation plan.
- (5) Provided with a continuous, durable directional lifeline or equivalent device that shall be—
- (i) Installed and maintained throughout the entire length of each escapeway as defined in paragraph (b) of this section;
- (ii) Flame-resistant in accordance with the requirements of part 18 of this chapter upon replacement of existing lifelines; but in no case later than June 15, 2009;
- (iii) Marked with a reflective material every 25 feet;
- (iv) Located in such a manner for miners to use effectively to escape;
- (v) Equipped with one directional indicator cone securely attached to the lifeline, signifying the route of escape, placed at intervals not exceeding 100 feet. Cones shall be installed so that the tapered section points inby;
- (vi) Equipped with one sphere securely attached to the lifeline at each intersection where personnel doors are installed in adjacent crosscuts;
- (vii) Equipped with two securely attached cones, installed consecutively with the tapered section pointing inby, to signify an attached branch line is immediately ahead.
- (A) A branch line leading from the lifeline to an SCSR cache will be marked with four cones with the base sections in contact to form two diamond shapes. The cones must be placed within reach of the lifeline.
- (B) A branch line leading from the lifeline to a refuge alternative will be marked with a rigid spiraled coil at least eight inches in length. The spiraled coil must be placed within reach of the lifeline.

- (d) Surface openings shall be adequately protected to prevent surface fires, fumes, smoke, and flood water from entering the mine.
- (e) Primary escapeway. One escapeway that shall be ventilated with intake air shall be designated as the primary escapeway. The primary escapeway shall have a higher ventilation pressure than the belt entry unless the mine operator submits an alternative in the mine ventilation plan to protect the integrity of the primary escapeway, based on mine specific conditions, which is approved by the district manager.
- (f) Alternate escapeway. One escapeway that shall be designated as the alternate escapeway shall be separated from the primary escapeway for its entire length.
- (g) Mechanical escape facilities shall be provided—
- (1) For each shaft or slope opening that is part of a primary escapeway; and
- (2) For slopes that are part of escapeways, unless ladders are installed.
- (h) Within 30 minutes after mine personnel on the surface have been notified of an emergency requiring evacuation, mechanical escape facilities shall be operational at the bottom of each shaft and slope opening that is part of an escapeway.
- (i) Except where automatically activated hoisting equipment is used, the bottom of each shaft or slope opening that is part of a primary escapeway shall be equipped with a means of signaling a surface location where a person is always on duty when anyone is underground. When the signal is activated or the evacuation of personnel is necessary, the person on duty shall assure that mechanical escape facilities are operational as required by paragraph (h) of this section.
- [61 FR 9829, Mar. 11, 1996, as amended at 71 FR 12269, Mar. 9, 2006; 71 FR 71452, Dec. 8, 2006; 73 FR 80614, Dec. 31, 2008]

§ 75.382 Mechanical escape facilities.

- (a) Mechanical escape facilities shall be provided with overspeed, overwind, and automatic stop controls.
- (b) Every mechanical escape facility with a platform, cage, or other device

- shall be equipped with brakes that can stop the fully loaded platform, cage, or other device.
- (c) Mechanical escape facilities, including automatic elevators, shall be examined weekly. The weekly examination of this equipment may be conducted at the same time as a daily examination required by §75.1400–3.
- (1) The weekly examination shall include an examination of the headgear, connections, links and chains, overspeed and overwind controls, automatic stop controls, and other facilities.
- (2) At least once each week, the hoist shall be run through one complete cycle of operation to determine that it is operating properly.
- (d) A person trained to operate the mechanical escape facility always shall be available while anyone is underground to provide the mechanical escape facilities, if required, to the bottom of each shaft and slope opening that is part of an escapeway within 30 minutes after personnel on the surface have been notified of an emergency requiring evacuation. However, no operator is required for automatically operated cages, platforms, or elevators.
- (e) Mechanical escape facilities shall have rated capacities consistent with the loads handled.
- (f) Manually-operated mechanical escape facilities shall be equipped with indicators that accurately and reliably show the position of the facility.
- (g) Certification. The person making the examination as required by paragraph (c) of this section shall certify by initials, date, and the time that the examination was made. Certifications shall be made at or near the facility examined.

§ 75.384 Longwall and shortwall travelways.

(a) If longwall or shortwall mining systems are used and the two designated escapeways required by §75.380 are located on the headgate side of the longwall or shortwall, a travelway shall be provided on the tailgate side of that longwall or shortwall. The travelway shall be located to follow the most direct and safe practical route to a designated escapeway.