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(c) The mine map required by §75.1200 may be used to satisfy the requirements for the ventilation map, provided that all the information required by this section is contained on the map.

 $[61\ {\rm FR}\ 9829,\ {\rm Mar}.\ 11,\ 1996,\ {\rm as}\ {\rm amended}\ {\rm at}\ 69\ {\rm FR}\ 17530,\ {\rm Apr}.\ 2,\ 2004]$ 

### § 75.373 Reopening mines.

After a mine is abandoned or declared inactive, and before it is reopened, mining operations shall not begin until MSHA has been notified and has completed an inspection.

# §75.380 Escapeways; bituminous and lignite mines.

- (a) Except in situations addressed in §75.381, §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) (1) Escapeways shall be provided from each working section, and each area where mechanized mining equipment is being installed or removed, continuous to the surface escape drift opening or continuous to the escape shaft or slope facilities to the surface.
- (2) During equipment installation, these escapeways shall begin at the projected location for the section loading point. During equipment removal, they shall begin at the location of the last loading point.
- (c) The two separate and distinct escapeways required by this section shall not end at a common shaft, slope, or drift opening, except that multiple compartment shafts or slopes separated by walls constructed of noncombustible material may be used as separate and distinct passageways.
  - (d) 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 and direction of travel to the surface;
- (3) Maintained to at least a height of 5 feet from the mine floor to the mine roof, excluding the thickness of any roof support, except that the escapeways shall be maintained to at least the height of the coalbed, excluding the thickness of any roof support, where the coalbed is less than 5 feet. In

areas of mines where escapeways pass through doors, the height may be less than 5 feet, provided that sufficient height is maintained to enable miners, including disabled persons, to escape quickly in an emergency. In areas of mines developed before November 16. 1992, where escapeways pass over or under overcasts or undercasts, the height may be less than 5 feet provided that sufficient height is maintained to enable miners, including disabled persons, to escape quickly in an emergency. When there is a need to determine whether sufficient height is provided, MSHA may require a stretcher test where 4 persons carry a miner through the area in question on a stretcher:

- (4) Maintained at least 6 feet wide except—
- (i) Where necessary supplemental roof support is installed, the escapeway shall not be less than 4 feet wide; or
- (ii) Where the route of travel passes through doors or other permanent ventilation controls, the escapeway shall be at least 4 feet wide to enable miners to escape quickly in an emergency, or
- (iii) Where the alternate escapeway passes through doors or other permanent ventilation controls or where supplemental roof support is required and sufficient width is maintained to enable miners, including disabled persons, to escape quickly in an emergency. When there is a need to determine whether sufficient width is provided, MSHA may require a stretcher test where 4 persons carry a miner through the area in question on a stretcher, or
- (iv) Where mobile equipment near working sections, and other equipment essential to the ongoing operation of longwall sections, is necessary during normal mining operations, such as material cars containing rock dust or roof control supplies, or is to be used for the evacuation of miners off the section in the event of an emergency. In any instance, escapeways shall be of sufficient width to enable miners, including disabled persons, to escape quickly in an emergency. When there is a need to determine whether sufficient width is provided, MSHA may require a stretcher test where 4 persons carry a miner

through the area in question on a stretcher;

- (5) Located to follow the most direct, safe and practical route to the nearest mine opening suitable for the safe evacuation of miners; and
- (6) Provided with ladders, stairways, ramps, or similar facilities where the escapeways cross over obstructions.
- (7) Provided with a continuous directional lifeline or equivalent device that shall be:
- (i) Installed and maintained throughout the entire length of each escapeway as defined in paragraph (b)(1) of this section.
  - (ii) Made of durable material.
- (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 directional indicators, signifying the route of escape, placed at intervals not exceeding 100 feet.
- (vi) Securely attached to and marked to show the location of any SCSR storage locations in the escapeways.
- (e) Surface openings shall be adequately protected to prevent surface fires, fumes, smoke, and flood water from entering the mine.
- (f) Primary escapeway. (1) One escapeway that is ventilated with intake air shall be designated as the primary escapeway.
- (2) Paragraphs (f)(3) through (f)(7) of this section apply as follows:
- (i) To all areas of a primary escapeway developed on or after November 16, 1992;
- (ii) Effective as of June 10, 1997, to all areas of a primary escapeway developed between March 30, 1970 and November 16, 1992; and
- (iii) Effective as of June 10, 1997, to all areas of the primary escapeway developed prior to March 30, 1970 where separation of the belt and trolley haulage entries from the primary escapeway existed prior to November 16, 1992.
- (3) The following equipment is not permitted in the primary escapeway:
- (i) Mobile equipment hauling coal except for hauling coal incidental to cleanup or maintenance of the primary escapeway.
  - (ii) Compressors, except—

- (A) Compressors necessary to maintain the escapeway in safe, travelable condition;
- (B) Compressors that are components of equipment such as locomotives and rock dusting machines; and
- $\left(C\right)$  Compressors of less than five horsepower.
- (iii) Underground transformer stations, battery charging stations, substations, and rectifiers except—
- (A) Where necessary to maintain the escapeway in safe, travelable condition; and
- (B) Battery charging stations and rectifiers and power centers with transformers that are either dry-type or contain nonflammable liquid, provided they are located on or near a working section and are moved as the section advances or retreats.
  - (iv) Water pumps, except—
- (A) Water pumps necessary to maintain the escapeway in safe, travelable condition;
  - (B) Submersible pumps;
- (C) Permissible pumps and associated permissible switchgear;
- (D) Pumps located on or near a working section that are moved as the section advances or retreats;
- (E) Pumps installed in anthracite mines; and
- (F) Small portable pumps.
- (4) Mobile equipment operated in the primary escapeway, except for continuous miners and as provided in paragraphs (f)(5), (f)(6), and (f)(7) of this section, shall be equipped with a fire suppression system installed according to §§ 75.1107–3 through 75.1107–16 that is—
- (i) Manually operated and attended continuously by a person trained in the systems function and use, or
- (ii) A multipurpose dry chemical type capable of both automatic and manual activation.
- (5) Personnel carriers and small mobile equipment designed and used only for carrying people and small hand tools may be operated in primary escapeways if—
- (i) The equipment is provided with a multipurpose dry chemical type fire suppression system capable of both automatic and manual activation, and the suppression system is suitable for the intended application and is listed

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or approved by a nationally recognized independent testing laboratory, or,

- (ii) Battery powered and provided with two 10 pound multipurpose dry chemical portable fire extinguishers.
- (6) Notwithstanding the requirements of paragraph (f)(3)(i), mobile equipment not provided with a fire suppression system may operate in the primary escapeway if no one is inby except those persons directly engaged in using or moving the equipment.
- (7) Notwithstanding the requirements of paragraph (f)(3)(i), mobile equipment designated and used only as emergency vehicles or ambulances, may be operated in the primary escapeway without fire suppression systems.
- (g) Except where separation of belt and trolley haulage entries from designated escapeways did not exist before November 15, 1992, and except as provided in §75.350(c), the primary escapeway must be separated from belt and trolley haulage entries for its entire length, to and including the first connecting crosscut outby each loading point except when a greater or lesser distance for this separation is specified and approved in the mine ventilation plan and does not pose a hazard to miners.
- (h) Alternate escapeway. One escapeway shall be designated as the alternate escapeway. The alternate escapeway shall be separated from the primary escapeway for its entire length, except that the alternate and primary escapeways may be ventilated from a common intake air shaft or slope opening.
- (i) Mechanical escape facilities shall be provided and maintained for—
- (1) Each shaft that is part of a designated escapeway and is greater than 50 feet in depth; and
- (2) Each slope from the coal seam to the surface that is part of a designated escapeway and is inclined more than 9 degrees from the horizontal.
- (j) Within 30 minutes after mine personnel on the surface have been notified of an emergency requiring evacuation, mechanical escape facilities provided under paragraph (i) of this section shall be operational at the bottom 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]

## § 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;