(b) Machinery and equipment shall be operated only by persons authorized to operate such machinery or equipment.

(c) Repairs or maintenance shall not be performed on machinery until the power is off and the machinery is blocked against motion, except where machinery motion is necessary to make adjustments.

(d) Machinery shall not be lubricated manually while in motion, unless equipped with extended fittings or cups.

[38 FR 4976, Feb. 23, 1973]

§ 75.1726 Performing work from a raised position; safeguards.

(a) Men shall not work on or from a piece of mobile equipment in a raised position until it has been blocked in place securely. This does not preclude the use of equipment specifically designed as elevated mobile work platforms.

(b) No work shall be performed under machinery or equipment that has been raised until such machinery or equipment has been securely blocked in position.

[38 FR 4976, Feb. 23, 1973]

§ 75.1727 Drive belts.

(a) Drive belts shall not be shifted while in motion unless the machines are provided with mechanical shifters.

(b) Belt dressing shall not be applied while belts are in motion except where it can be applied without endangering a person.

[38 FR 4976, Feb. 23, 1973]

§ 75.1728 Power-driven pulleys.

(a) Belts, chains, and ropes shall not be guided onto power-driven moving pulleys, sprockets, or drums with the hands except on slow-moving equipment especially designed for hand feeding.

(b) Pulleys of conveyors shall not be cleaned manually while the conveyor is in motion.

(c) Coal spilled beneath belt conveyor drives or tail pieces shall not be removed while the conveyor is in motion, except where such coal can be removed without endangering persons.

[38 FR 4976, Feb. 23, 1973]

§ 75.1729 Welding operations.

Welding operations shall be shielded and the area shall be well ventilated.

[38 FR 4976, Feb. 23, 1973]

§ 75.1730 Compressed air; general; compressed air systems.

(a) All pressure vessels shall be constructed, installed, and maintained in accordance with the standards and specifications of Section VIII ''Unfired Pressure Vessels,'' of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (1971), which is hereby incorporated by reference and made a part hereof. This document may be purchased from the American Society of Mechanical Engineers, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey 07007, Phone: 800–843–2763 (toll free); *http://www.asme.org*; and it is available for examination in every MSHA Coal Mine Safety and Health district office.

(b) Compressors and compressed-air receivers shall be equipped with automatic pressure-relief valves, pressure gages, and drain valves.

(c) Repairs involving the pressure system of compressors, receivers, or compressed-air-powered equipment shall not be attempted until the pressure has been relieved from that part of the system to be repaired.

(d) At no time shall compressed air be directed toward a person. When compressed air is used, all necessary precautions shall be taken to protect persons from injury.

(e) Safety chains, suitable locking devices, or automatic cut-off valves shall be used at connections to machines of high-pressure hose lines of three-fourths of an inch inside diameter or larger, and between high-pressure hose lines of three-fourths of an inch inside diameter or larger, where a connection failure would create a hazard. For purposes of this paragraph, high-pressure means pressure of 100 p.s.i. or more.

[38 FR 4976, Feb. 23, 1973, as amended at 71 FR 16669, Apr. 3, 2006]

§ 75.1731 Maintenance of belt conveyors and belt conveyor entries.

(a) Damaged rollers, or other damaged belt conveyor components, which

pose a fire hazard must be immediately repaired or replaced. All other damaged rollers, or other damaged belt conveyor components, must be repaired or replaced.

(b) Conveyor belts must be properly aligned to prevent the moving belt from rubbing against the structure or components.

(c) Materials shall not be allowed in the belt conveyor entry where the material may contribute to a frictional heating hazard.

(d) Splicing of any approved conveyor belt must maintain flame-resistant properties of the belt.

[73 FR 80616, Dec. 31, 2008]

§ 75.1732 Proximity detection systems.

Operators must install proximity detection systems on certain mobile machines.

(a) *Machines covered.* Operators must equip continuous mining machines, except full-face continuous mining machines, with proximity detection systems by the following dates. For proximity detection systems with miner-wearable components, the mine operator must provide a miner-wearable component to be worn by each miner on the working section by the following dates.

(1) Continuous mining machines manufactured after March 16, 2015 must meet the requirements in this section no later than November 16, 2015. These machines must meet the requirements in this section when placed in service with a proximity detection system.

(2) Continuous mining machines manufactured and equipped with a proximity detection system on or before March 16, 2015 must meet the requirements in this section no later than September 16, 2016.

(3) Continuous mining machines manufactured and not equipped with a proximity detection system on or before March 16, 2015 must meet the requirements in this section no later than March 16, 2018. These machines must meet the requirements in this section when placed in service with a proximity detection system.

(b) *Requirements for a proximity detection system.* A proximity detection system includes machine-mounted components and miner-wearable components. The system must:

(1) Cause a machine, which is tramming from place-to-place or repositioning, to stop before contacting a miner except for a miner who is in the on-board operator's compartment;

(2) Provide an audible and visual warning signal on the miner-wearable component and a visual warning signal on the machine that alert miners before the system causes a machine to stop. These warning signals must be distinguishable from other signals;

(3) Provide a visual signal on the machine that indicates the machine-mounted components are functioning properly;

(4) Prevent movement of the machine if any machine-mounted component of the system is not functioning properly. However, a system with any machine-mounted component that is not functioning properly may allow machine movement if it provides an audible or visual warning signal, distinguishable from other signals, during movement. Such movement is permitted only for purposes of relocating the machine from an unsafe location for repair;

(5) Be installed to prevent interference that adversely affects performance of any electrical system; and

(6) Be installed and maintained in proper operating condition by a person trained in the installation and maintenance of the system.

(c) *Proximity detection system checks.* Operators must:

(1) Designate a person who must perform a check of machine-mounted components of the proximity detection system to verify that components are intact, that the system is functioning properly, and take action to correct defects—

(i) At the beginning of each shift when the machine is to be used; or

(ii) Immediately prior to the time the machine is to be operated if not in use at the beginning of a shift; or

(iii) Within 1 hour of a shift change if the shift change occurs without an interruption in production.

(2) Check for proper operation of miner-wearable components at the beginning of each shift that the components are to be used and correct defects before the components are used.