terial, maintained in good condition, and kept closed.

### (e) Transportation of explosives or detonators in underground mines

Explosives or detonators shall be transported in special closed containers (1) in cars moved by means of a locomotive or rope, (2) on belts, (3) in shuttle cars, or (4) in equipment designed especially to transport such explosives or detonators

# (f) Storage of explosives and detonators in working sections of underground mines; containers; locations

When supplies of explosives and detonators for use in one or more working sections are stored underground, they shall be kept in section boxes or magazines of substantial construction with no metal exposed on the inside, located at least twenty-five feet from roadways and power wires, and in a dry, well rock-dusted location protected from falls of roof, except in pitching beds, where it is not possible to comply with the location requirement, such boxes shall be placed in niches cut into the solid coal or rock.

#### (g) Location of explosive and detonator containers in working places of underground mines

Explosives and detonators stored in the working places shall be kept in separate closed containers which shall be located out of the line of blast and not less than fifty feet from the working face and fifteen feet from any pipeline, powerline, rail, or conveyor, except that, if kept in niches in the rib, the distance from any pipeline, powerline, rail, or conveyor shall be at least five feet. Such explosives and detonators, when stored, shall be separated by a distance of at least five feet.

(Pub. L. 91–173, title III, §313, Dec. 30, 1969, 83 Stat. 785.)

#### §874. Hoisting and mantrips

#### (a) Transporting of persons; required equipment and capabilities; safety catches; daily examinations; operators

Every hoist used to transport persons at a coal mine shall be equipped with overspeed, overwind, and automatic stop controls. Every hoist handling platforms, cages, or other devices used to transport persons shall be equipped with brakes capable of stopping the fully loaded platform, cage, or other device; with hoisting cable adequately strong to sustain the fully loaded platform, cage, or other device; and have a proper margin of safety. Cages, platforms, or other devices which are used to transport persons in shafts and slopes shall be equipped with safety catches or other no less effective devices approved by the Secretary that act quickly and effectively in an emergency, and such catches shall be tested at least once every two months. Hoisting equipment, including automatic elevators, that is used to transport persons shall be examined daily. Where persons are transported into, or out of, a coal mine by hoists, a qualified hoisting engineer shall be on duty while any person is underground, except that no such engineer shall be required for automatically operated cages, platforms, or elevators.

#### (b) Promulgation of other safeguards

Other safeguards adequate, in the judgment of an authorized representative of the Secretary, to minimize hazards with respect to transportation of men and materials shall be provided.

### (c) Rated capacities; indicator for position of cage

Hoists shall have rated capacities consistent with the loads handled and the recommended safety factors of the ropes used. An accurate and reliable indicator of the position of the cage, platform, skip, bucket, or cars shall be provided.

### (d) Methods for signaling between shaft stations and hoist rooms

There shall be at least two effective methods approved by the Secretary of signaling between each of the shaft stations and the hoist room, one of which shall be a telephone or speaking tube.

### (e) Braking equipment for haulage cars used in underground mines

Each locomotive and haulage car used in an underground coal mine shall be equipped with automatic brakes, where space permits. Where space does not permit automatic brakes, locomotives and haulage cars shall be subject to speed reduction gear, or other similar devices approved by the Secretary which are designed to stop the locomotives and haulage cars with the proper margin of safety.

#### (f) Automatic couplers for haulage equipment

All haulage equipment acquired by an operator of a coal mine on or after one year after the operative date of this subchapter shall be equipped with automatic couplers which couple by impact and uncouple without the necessity of persons going between the ends of such equipment. All haulage equipment without automatic couplers in use in a mine on the operative date of this subchapter shall also be so equipped within four years after the operative date of this subchapter.

(Pub. L. 91–173, title III, §314, Dec. 30, 1969, 83 Stat. 786.)

### REFERENCES IN TEXT

For the operative date of this subchapter, referred to in subsec. (f), see section 509 of Pub. L. 91–173, set out as an Effective Date note under section 801 of this title.

## § 875. Emergency shelters; construction; contents; implementation plans

The Secretary or an authorized representative of the Secretary may prescribe in any coal mine that rescue chambers, properly sealed and ventilated, be erected at suitable locations in the mine to which persons may go in case of an emergency for protection against hazards. Such chambers shall be properly equipped with first aid materials, an adequate supply of air and selfcontained breathing equipment, an independent communication system to the surface, and proper accommodations for the persons while awaiting rescue, and such other equipment as the Secretary may require. A plan for the erection, maintenance, and revisions of such chambers and the training of the miners in their proper use shall be submitted by the operator to the Secretary for his approval.