#### § 77.1908-1

minute when within 100 feet of any stop.

- (k) A notice of established speeds shall be posted in clear view of the hoistman.
- (1) Conveyances being lowered in a shaft in which men are working shall be stopped at least 15 feet above such men and shall be lowered further only after the hoistman has received a signal that all men who may be endangered by the conveyance are in the clear.
- (m) No skip or bucket shall be raised or lowered in a slope or shaft until it has been trimmed to prevent material from falling back down the slope or shaft.
- (n) Measures shall be taken to prevent material from falling back into the shaft while buckets or other conveyances are being unloaded.
- (o) Properly attached safety belts shall be worn by all persons required to work in or over any shaft where there is a drop of 10 or more feet, unless other acceptable means are provided to prevent such persons from falling into the shaft.

### § 77.1908-1 Hoist operation; qualified hoistman.

Hoists shall be under the control of and operated by a qualified hoistman when men are in a slope or shaft.

## § 77.1909 Explosives and blasting; use of permissible explosives and shot-firing units.

Except as provided in §77.1909–1, only permissible explosives and permissible shot-firing units shall be used in sinking shafts and slopes.

# § 77.1909-1 Use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager.

Where the Coal Mine Health and Safety District Manager has determined that the use of nonpermissible explosives and nonpermissible shot-firing units will not pose a hazard to any person during the development of a slope or shaft, he may, after written application by the operator, approve the use of such explosives and shot-firing units and issue a permit for the use of such explosives and devices setting forth the safeguards to be employed by

the operator to protect the health and safety of any person exposed to such blasting.

(Pub. L. No. 96–511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[36 FR 9364, May 22, 1971, as amended at 60 FR 33723, June 29, 1995]

### § 77.1910 Explosives and blasting; general.

- (a) Light and power circuits shall be disconnected or removed from the blasting area before charging and blasting.
- (b) All explosive materials, detonators, and any other related blasting material employed in the development of any slope or shaft shall be stored, transported, carried, charged, and fired in accordance with the provision of Subpart N, "Explosives and Blasting," of this Part 77. Except as provided in paragraph (c) of this section, all shots shall be fired from the surface.
- (c) Where tests for methane have been conducted and methane has not been found and only permissible blasting units are being employed, shots may be fired from an upper level of the slope or shaft.
- (d) Except as provided in paragraph (c) of this section, all men shall be removed from the slope or shaft prior to blasting.
- (e) Blasting areas in slopes or shafts shall be covered with mats or other suitable material when the excavation is too shallow to retain blasted material.
- (f) Where it is impracticable to prepare primers in the blasting area, primers may be prepared on the surface and carried into the shaft in specially constructed, insulated, covered containers.
- (g) No other development operation shall be conducted in a shaft or at the face of a slope while drill holes are being charged and until after all shots have been fired.
- (h) The sides of the slope or shaft between the overhead platform and the bottom where men are working shall be examined after each blast and loose material removed.
- (i) Loose rock and other material shall be removed from timbers and platforms after each blast before men are lowered to the shaft bottom.