

are permitted to enter the drilling area. The results of all such inspections shall be recorded daily in a book approved by the Secretary.

(b) In addition, the face of all highwalls, to a distance of 25 feet on both sides of each drilling site, shall be inspected frequently by a certified person during any auger operation conducted either during or after a heavy rainfall or during any period of intermittent freezing and thawing and the results of such inspections shall be recorded as provided in paragraph (a) of this section.

(c) When an auger hole penetrates an abandoned or mined out area of an underground mine, tests for methane and oxygen deficiency shall be made at the collar of the hole by a qualified person using devices approved by the Secretary to determine if dangerous quantities of methane or oxygen-deficient air are present or being emitted. If such is found no further work shall be performed until the atmosphere has been made safe.

(d) Tests for oxygen deficiency shall be conducted with a permissible flame safety lamp or other means approved by the Secretary and all tests for methane shall be conducted with a methane detector approved by the Secretary.

(e) Internal combustion engines shall not be operated in the vicinity of any auger hole in which tests for methane or oxygen deficiency are being made.

§ 77.1502 Auger holes; restriction against entering.

No person shall be permitted to enter an auger hole except with the approval of the MSHA Coal Mine Safety and Health District Manager of the district in which the mine is located and under such conditions as may be prescribed by such managers.

[36 FR 9364, May 22, 1971, as amended at 71 FR 16669, Apr. 3, 2006]

§ 77.1503 Augering equipment; overhead protection.

(a) Auger machines which are exposed to highwall hazards, together with all those parts of any coal elevating conveyors where persons are required to work during augering operations, shall be covered with heavy

gauge screen which does not obstruct the view of the highwall and is strong enough to prevent injuries to workmen from falling material.

(b) No work shall be done under any overhang and, when a crew is engaged in connecting or disconnecting auger sections under a highwall, at least one person shall be assigned to observe the highwall for possible movement.

§ 77.1504 Auger equipment; operation.

(a) Persons shall be kept clear of the auger train while it is in motion and shall not be permitted to pass under or over an auger train, except where adequate crossing facilities are provided.

(b) Persons shall be kept clear of auger sections being swung into position.

(c) No person, including the auger machine operator, shall, where practicable, be stationed in direct line with a borehole during augering operations.

(d) Operator of auger equipment shall not leave the controls of such equipment while the auger is in operation.

(e) Adequate illumination shall be provided for work areas after dark.

§ 77.1505 Auger holes; blocking.

Auger holes shall be blocked with highwall spoil or other suitable material before they are abandoned.

Subpart Q—Loading and Haulage

§ 77.1600 Loading and haulage; general.

(a) Only authorized persons shall be permitted on haulage roads and at loading or dumping locations.

(b) Traffic rules, signals, and warning signs shall be standardized at each mine and posted.

(c) Where side or overhead clearances on any haulage road or at any loading or dumping location at the mine are hazardous to mine workers, such areas shall be conspicuously marked and warning devices shall be installed when necessary to insure the safety of the workers.

§ 77.1601 Transportation of persons; restrictions.

No person shall be permitted to ride or be otherwise transported on or in

§ 77.1602

the following equipment whether loaded or empty:

- (a) Dippers, shovels, buckets, forks, and clamshells;
- (b) The cargo space of dump trucks or haulage equipment used to transport coal or other material;
- (c) Outside the cabs and beds of mobile equipment;
- (d) Chain, belt, or bucket conveyors, except where such conveyors are specifically designed to transport persons; and
- (e) Loaded buckets on aerial tramways.

§ 77.1602 Use of aerial tramways to transport persons.

Persons other than maintenance men shall not ride empty buckets on aerial tramways unless the following features are provided:

- (a) Two independent brakes, each capable of holding the maximum load.
- (b) Direct communication between terminals.
- (c) Power drives with emergency power available in case of primary power failure.
- (d) Buckets equipped with positive locks to prevent accidental tripping or dumping.

§ 77.1603 Trains and locomotives; authorized persons.

- (a) Only authorized persons shall be permitted to ride on trains or locomotives and they shall ride in a safe position.
- (b) Men shall not get on or off moving equipment, except that trainmen may get on or off of slowly moving trains.

§ 77.1604 Transportation of persons; overcrowding.

- (a) No man-trip vehicle or other conveyance used to transport persons to and from work areas at surface coal mines shall be overcrowded and all persons shall ride in a safe position.
- (b) Supplies, materials, and tools other than small handtools shall not be transported with men in man-trip vehicles unless such vehicles are specifically designed to make such transportation safe.

30 CFR Ch. I (7-1-06 Edition)

§ 77.1605 Loading and haulage equipment; installations.

- (a) Cab windows shall be of safety glass or equivalent, in good condition and shall be kept clean.
- (b) Mobile equipment shall be equipped with adequate brakes, and all trucks and front-end loaders shall also be equipped with parking brakes.
- (c) Positive-action type brakes shall be provided on aerial tramways.
- (d) Mobile equipment shall be provided with audible warning devices. Lights shall be provided on both ends when required.
- (e) Guard nets or other suitable protection shall be provided where tramways pass over roadways, walkways, or buildings.
- (f) Guards shall be installed to prevent swaying buckets from hitting towers.
- (g) Aerial tramway cable connections shall be designed to offer minimum obstruction to the passage of wheels.
- (h) Rocker-bottom or bottom-dump cars shall be equipped with positive locking devices, or other suitable devices.
- (i) Ramps and dumps shall be of solid construction, of ample width, have ample clearance and headroom, and be kept reasonably free of spillage.
- (j) Chute-loading installations shall be designed so that the men pulling chutes are not required to be in a hazardous position during loading operations.
- (k) Berms or guards shall be provided on the outer bank of elevated roadways.
- (l) Berms, bumper blocks, safety hooks, or similar means shall be provided to prevent overtravel and overturning at dumping locations.
- (m) Roadbeds, rails, joints, switches, frogs, and other elements on railroads shall be designed, installed, and maintained in a safe manner consistent with the speed and type of haulage.
- (n) Where practicable, a minimum of 30 inches continuous clearance from the farthest projection of moving railroad equipment shall be provided on at least one side of the tracks; all places where it is not possible to provide 30-inch clearance shall be marked conspicuously.