§ 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.

§ 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.
- (1) 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.