the instructions of a registered professional engineer with knowledge and experience in ROPS design. The manufacturer or engineer shall certify that the ROPS meets the applicable performance requirements.

- (f) Exemptions. (1) This standard does not apply to—
- (i) Self-propelled mobile equipment manufactured prior to July 1, 1969;
- (ii) Over-the-road type tractors that pull trailers or vans on highways;
- (iii) Equipment that is only operated by remote control; and
- (2) Self-propelled mobile equipment manufactured prior to October 24, 1988, that is equipped with ROPS and seat belts that meet the installation and performance requirements of 30 CFR 57.9088 (1986 edition) shall be considered in compliance with paragraphs (b) and (h) of this section.
- (g) Wearing seat belts. Seat belts shall be worn by the equipment operator except that when operating graders from a standing position, the grader operator shall wear safety lines and a harness in place of a seat belt.
- (h) Seat belts construction. Seat belts required under this section shall meet the requirement of SAE J386, "Operator Restraint System for Off-Road Work Machines" (1985, 1993, or 1997), or SAE J1194, "Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors" (1983, 1989, 1994, or 1999), as applicable, which are incorporated by reference.
- (i) Seat belt maintenance. Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.
- (j) Publications. The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA's Office of Standards, Regulations, and Variances, 201 12th Street South, Arlington, VA 22202-5452; 202-693-9440; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go http://www.archives.gov/fed $eral_register/code_of_federal_regulations/$

ibr_locations.html. Copies may be purchased from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001; 724-776-4841; http://www.sae.org.

[53 FR 32528, Aug. 25, 1988; 53 FR 44588, Nov. 4, 1988, as amended at 60 FR 33722, June 29, 1995; 67 FR 38385, June 4, 2002; 68 FR 19347, Apr. 21, 2003; 80 FR 52988, Sept. 2, 2015]

§57.14131 Seat belts for surface haulage trucks.

- (a) Seat belts shall be provided and worn in haulage trucks.
- (b) Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.
- (c) Seat belts required under this section shall meet the requirements of SAE J386, "Operator Restraint System for Off-Road Work Machines" (1985, 1993, or 1997), which are incorporated by reference.
- (d) The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA's Office of Standards, Regulations, and Variances, 201 12th Street South, Arlington, VA 22202-5452; 202-693-9440; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go http:// www.archives.gov/federal register/ code_of_federal_regulations/

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[53 FR 32528, Aug. 25, 1988, as amended at 67 FR 38385, June 4, 2002; 68 FR 19347, Apr. 21, 2003; 80 FR 52988, Sept. 2, 2015]

§ 57.14132 Horns and backup alarms for surface equipment.

(a) Manually-operated horns or other audible warning devices provided on self-propelled mobile equipment as a safety device shall be maintained in a functional condition.

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- (b)(1) When the operator has an obstructed view to the rear, self-propelled mobile equipment shall have—
- (i) An automatic reverse-activated signal alarm:
- (ii) A wheel-mounted bell alarm which sounds at least once for each three feet of reverse movement:
- (iii) A discriminating backup alarm that covers the area of obstructed view: or
- (iv) An observer to signal when it is safe to back up.
- (2) Alarms shall be audible above the surrounding noise level.
- (3) An automatic reverse-activated strobe light may be used at night in lieu of an audible reverse alarm.
- (c) This standard does not apply to rail equipment.

§ 57.14160 Mantrip trolley wire hazards underground.

Mantrips shall be covered if there is danger of persons contacting the trolley wire.

§57.14161 Makeshift couplings.

Couplings used on underground rail equipment shall be designed for that equipment, except that makeshift couplings may be used to move disabled rail equipment for repairs if no hazard to persons is created.

§ 57.14162 Trip lights.

On underground rail haulage, trip lights shall be used on the rear of pulled trips and on the front of pushed trips.

SAFETY PRACTICES AND OPERATIONAL PROCEDURES

§ 57.14200 Warnings prior to starting or moving equipment.

Before starting crushers or moving self-propelled mobile equipment, equipment operators shall sound a warning that is audible above the surrounding noise level or use other effective means to warn all persons who could be exposed to a hazard from the equipment.

§ 57.14201 Conveyor start-up warnings.

(a) When the entire length of a conveyor is visible from the starting switch, the conveyor operator shall visually check to make certain that all

persons are in the clear before starting the conveyor.

(b) When the entire length of the conveyor is not visible from the starting switch, a system which provides visible or audible warning shall be installed and operated to warn persons that the conveyor will be started. Within 30 seconds after the warning is given, the conveyor shall be started or a second warning shall be given.

§ 57.14202 Manual cleaning of conveyor pulleys.

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

§ 57.14203 Application of belt dressing.

Belt dressings shall not be applied manually while belts are in motion unless a pressurized-type applicator is used that allows the dressing to be applied from outside the guards.

$\S 57.14204$ Machinery lubrication.

Machinery or equipment shall not be lubricated manually while it is in motion where application of the lubricant may expose persons to injury.

§ 57.14205 Machinery, equipment, and tools.

Machinery, equipment, and tools shall not be used beyond the design capacity intended by the manufacturer, where such use may create a hazard to persons.

§ 57.14206 Securing movable parts.

- (a) When moving mobile equipment between workplaces, booms, forks, buckets, beds, and similar movable parts of the equipment shall be positioned in the travel mode and, if required for safe travel, mechanically secured.
- (b) When mobile equipment is unattended or not in use, dippers, buckets and scraper blades shall be lowered to the ground. Other movable parts, such as booms, shall be mechanically secured or positioned to prevent movement which would create a hazard to persons.