

entire detonator shall be inserted into the detonator well of the unit and be held securely in place.

(c) Sheathed explosive units shall not be primed until immediately before the units are placed where they are to be fired. A sheathed explosive unit shall not be primed if it is damaged or deteriorated.

(d) Except in anthracite mines, rock dust shall be applied to the roof, ribs and floor within a 40-foot radius of the location where the sheathed explosive units are to be fired.

(e) No more than three sheathed explosive units shall be fired at one time.

(f) No sheathed explosive unit shall be fired in contact with another sheathed explosive unit.

§75.1315 Boreholes for explosives.

(a) All explosives fired underground shall be confined in boreholes except—

(1) Sheathed explosives units and other explosive units approved by MSHA for firing outside the confines of a borehole; and

(2) Shots fired in anthracite mines for battery starting or for blasting coal overhangs. No person shall go inside a battery to start the flow of material.

(b) Each borehole in coal for explosives shall be at least 24 inches from any other borehole and from any free face, unless prohibited by the thickness of the coal seam.

(c) Each borehole in rock for explosives shall be at least 18 inches from any other borehole in rock, at least 24 inches from any other borehole in coal, and at least 18 inches from any free face.

(d) No borehole that has contained explosives shall be used for starting any other hole.

(e) When blasting slab rounds off the solid, opener holes shall not be drilled beyond the rib line.

(f) When coal is cut for blasting, the coal shall be supported if necessary to maintain the stability of the column of explosives in each borehole.

§75.1316 Preparation before blasting.

(a)(1) All nonbattery-powered electric equipment, including cables, located within 50 feet from boreholes to be loaded with explosives or the sites where sheathed explosive units are to

be placed and fired shall be deenergized or removed to at least 50 feet from these locations before priming of explosives. Battery-powered equipment shall be removed to at least 50 feet from these locations before priming of explosives.

(2) As an alternative to paragraph (a)(1) of this section, electric equipment, including cables, need not be deenergized or removed if located at least 25 feet from these locations provided stray current tests conducted prior to priming the explosives detect stray currents of 0.05 ampere or less through a 1-ohm resistor.

(i) Tests shall be made at floor locations on the perimeter, on energized equipment frames and on repaired areas of energized cables within the area between 25 to 50 feet from the locations where the explosives are to be primed.

(ii) Tests shall be conducted using a blasting multimeter or other instrument specifically designed for such use.

(3) The blasting cable or detonator circuitry shall not come in contact with energized electric equipment, including cables.

(b) Before loading boreholes with explosives, each borehole shall be cleared and its depth and direction determined.

(c) No borehole drilled beyond the depth of cut coal shall be loaded with explosives unless that portion of the borehole deeper than the cut is tamped with noncombustible material.

(d) When two working faces are approaching each other, cutting, drilling and blasting shall be done at only one working face at a time if the two faces are within 25 feet of each other.

[35 FR 17890, Nov. 20, 1970, as amended at 56 FR 51616, Oct. 11, 1991]

§75.1317 Primer cartridges.

(a) Primer cartridges shall be primed and loaded only by a qualified person or a person working in the presence of and under the direction of a qualified person.

(b) Primer cartridges shall not be primed until immediately before loading boreholes.

(c) Only a nonsparking punch shall be used when priming explosive cartridges.