

239. Where a mine contains separate seams, all regulations regarding explosives shall apply to each seam as if it were a separate mine.

240. A copy of all regulations regarding explosives shall be supplied in booklet form by the owner to every shot-firer, and shall also be kept posted up in some conspicuous place at or near the mine where it may be conveniently read or seen by the persons employed.

Part II.—Special Provisions.

241. (1.) In any coal-mine in which inflammable gas has been found within the previous three months in such quantity as to be indicative of danger, or in which safety-lamps are required to be used, no explosive other than a permitted explosive as hereinafter defined shall be used in or taken for the purpose of use into the seam or seams in which the gas has been found, or any shaft or drift communicating therewith which is in process of being sunk, deepened, driven, or enlarged, as the case may be.

(2.) In all coal-mines (other than opencast workings) which are not naturally wet throughout, no explosive other than a permitted explosive as hereinafter defined shall be used in or taken for the purpose of use into any road or any dry and dusty part of the mine, or any shaft or drift communicating therewith which is in process of being sunk, deepened, driven, or enlarged, as the case may be.

242. In all cases in which permitted explosives are required by these regulations to be used—

(a.) (1.) No shot shall be fired except by a shot-firer.

(ii.) No shot shall be fired unless the shot-firer has examined with a locked safety-lamp or other apparatus approved for the purpose by the Minister the place where the shot is to be fired and all contiguous accessible places within a radius of 20 yards from the place, and has found them clear of inflammable gas.

(iii.) No shot shall be fired unless a shot-firer has examined the floor, roof, and sides of the contiguous places within a radius of 5 yards of the place where the shot is to be fired, for coaldust, and has taken efficient steps to render any dust within that area harmless.

(b.) No shot shall be fired in coal unless the coal has been holed or sidecut to a depth greater than the depth of the shot-hole. This provision shall not apply to any anthracite-mine or to any mine or part of any mine which may be exempted by the Inspector on the ground that, by reason of the character of the coal or the inclination of the seam, holing would be impracticable or dangerous.

(c.) No cartridge shall be used unless it is marked in the manner set forth in the Third Schedule to the British Home Office Explosives in Coal-mines Orders from time to time issued, in addition to any marks required by the First or Second Schedule thereof.

(d.) Every shot shall be charged and stemmed by or under the supervision of a shot-firer. Before the hole is charged a shot-firer shall examine it for breaks running along or across, and if any such break is found the hole shall not be charged, except in stone drifts, if special permission has been given in writing by the manager or underviewer.

(e.) (i.) Two or more shots shall not be fired in the same place simultaneously and the precautions prescribed by clause (a) of this regulation shall be taken separately for each shot and immediately before the firing of same.

(ii.) If two or more shotholes have been bored in the same place the second hole shall not be charged till after the first has been fired, and the same with the second and third and following shots.

(iii.) The requirements of this clause shall not apply to stone drifts or sinking shafts, provided that the precautions prescribed by clause (a) of this regulation are taken before the firing of each round of shots, and provided also that in stone drifts the number of shots which may be fired simultaneously shall not exceed three, unless fired electrically in series.

(f.) A shot-firer shall keep a daily record (in a book which shall be kept at the mine for the purpose) of the number of shots fired by him, the number of missed shots (if any), and the number of cartridges in each shot. Such daily record shall be kept in the form set forth in Form 14 in the Schedule hereto.

(g.) No shot shall be fired except by means of an efficient magneto-electrical apparatus so enclosed as to afford reasonable security against the ignition of inflammable gas.

(h.) Each explosive shall be used in the manner and subject to the conditions prescribed in the Schedules to the British Home Office Explosives in Coal-mines Orders from time to time issued.

243. In the main haulage-roads and main intake-airways, and any place immediately contiguous thereto, in any coal-mine which is not naturally wet throughout—

(a.) No explosive shall be used other than a permitted explosive as hereinafter defined, and in accordance with the conditions prescribed by these regulations.

(b.) No shot shall be fired without the special permission in writing of the manager or underviewer.

(c.) No shot shall be fired unless the workmen have been removed from the seam in which the shot is to be fired and from all seams communicating with the shaft on the same level, except the men engaged in firing the shot and in addition such other persons, not exceeding ten, as are necessarily employed in attending to the ventilating-furnaces, steam boilers, engines, machinery or ventilating appliances, signals or horses, or in inspecting the mine:

Provided that in mines where mechanical power or gravity is used for the purpose of haulage from the face, and the movement of the strata renders it necessary to maintain the height of the roads by ripping, the foregoing provisions relating to the removal of workmen shall not apply to men who may remain in the mine for the purpose of carrying on the ripping within such distance of the face as may be fixed by the manager with the approval of the Inspector, or for the purpose of repairs.

244. (1.) In all regulations regarding explosives—

The term "permitted explosives" means the explosives in the Explosives in Coal-mines Orders from time to time issued and enforced by the British Home Office.

The term "road" includes all roads of any description extending from the shaft or outlet to within 10 yards of the coal-face.

Part III.—Supplemental.

245. The foregoing provisions shall apply in the case of sinking operations, with the following additions:—

(a.) No explosive shall be taken or sent into the shaft until immediately before it is required for use.

(b.) No shot shall be fired except by means of an efficient magneto-electrical apparatus.

(c.) The firing-cable shall not be coupled up to the fuse or detonator wires until the kettle, kibble, tub, bowk, or hoppet is conveniently placed for the men in the shaft to enter, and the chargeman shall receive a signal from the surface that the engineman is ready to draw away on receipt of the signal to do so, and the cable shall not be coupled to the firing-apparatus until all persons are in a place of safety.

(d.) After a shot has been fired the chargeman shall not allow any person to descend until he has descended, accompanied, if necessary, by not more than two other persons, and has examined the place and found it to be safe in all respects. If the place is one in which inflammable gas has been found or is likely to be found, the examination shall be made with an approved locked safety-lamp of a type which will indicate the presence of such gas.

PREVENTION OF THE INFLAMMATION OF COALDUST.

246. (1.) In all working-places of a mine where permitted explosives are required to be used, and where the coaldust does not contain normally more than one-third its own weight of water, no shot shall be fired unless efficient steps have been taken by watering by a suitable atomizer the floor, roof, and sides within a radius of 5 yards of the drilled shot-hole. The quantity of water distributed before firing shall not be less in weight than the coaldust present.

(2.) In all haulage or travelling roads of a mine where permitted explosives are required to be used, or where fine coaldust does not normally contain more than one-third its own weight of water, or more than such quantity of incombustible matter as would make a mixture yielding on incineration at least 50 per cent. of ash, the floor, roof, and sides shall be treated with—

(a.) Incombustible dust thrown about by hand or distributed by other approved methods, the proportion of incombustible dust to coaldust being maintained in all roads at equal parts by weight; or

(b.) Water in a state of intimate mixture with the coaldust, and maintained at a proportion of one-third by weight (of water) in such mixture; or

(c.) A combination of the two previous methods—i.e., the treatment of the roads first with incombustible dust and then with water.