
STATUTORY INSTRUMENTS

1989 No. 635

The Electricity at Work Regulations 1989

PART III

REGULATIONS APPLYING TO MINES ONLY

Provisions applying to mines only

17.—(1) The provisions of regulations 18 to 28 and Schedule 1 shall apply to mines only; and the provisions of that Schedule shall have effect in particular in relation to the use below ground in a coal mine of any film lighting circuit (as defined by paragraph 1 of that Schedule) at or in close proximity to a coal face.

(2) Expressions to which meanings are assigned by the Mines and Quarries Act 1954 shall, unless the contrary intention appears, have the same meanings in regulations 18 to 27 and Schedule 1.

Introduction of electrical equipment

18. Before electrical equipment (other than equipment approved for the purposes of regulation 20(1)) is first introduced into any underground part of a safety-lamp mine to which the Coal and Other Mines (Surveyors and Plans) Regulations 1956(1) apply, the manager shall submit to an inspector a copy of the ventilation plan required to be kept for that part by regulation 9 of those Regulations, on which the intended locations of that equipment shall be shown, together with a copy of any schematic diagram relating to that part prepared for the purposes of regulation 24(1).

Restriction of equipment in certain zones below ground

19.—(1) At every safety-lamp mine containing any zones below ground in which firedamp whether or not normally present is likely to occur in a quantity sufficient to indicate danger, there shall be prepared a suitable plan identifying such zones.

(2) Electrical equipment shall not be energised in such zones unless it is—

- (a) equipment of a kind approved for that purpose;
- (b) equipment approved pursuant to regulation 20(1);
- (c) equipment the use of which was lawful in such zones immediately before the coming into force of these Regulations;
- (d) equipment which has received a certificate of conformity or a certificate of inspection in accordance with Council Directive [82/130/EEC](#)(2) on the approximation of the laws of the Member States concerning electrical equipment for use in potentially explosive atmospheres in mines susceptible to firedamp, as adapted to technical progress by Commission Directive [88/35/EEC](#)(3);

(1) [S.I. 1956/1760](#), to which there are amendments not relevant to these Regulations.

(2) OJ No. L59, 2.3.82, p.10.

(3) OJ No. L64, 10.3.88, p.36.

- (e) equipment such as is specified in regulation 21(2);
- (f) equipment which is not capable of producing incendive electrical sparks in normal use; or
- (g) electrically-powered equipment not permanently installed in the mine but required occasionally for monitoring, testing, recording and measurement, and used where the concentration of firedamp is 0.8% by volume or less in accordance with suitable rules drawn up by the manager to ensure that danger will not thereby arise, which rules shall in particular include provision for personal supervision of that equipment by a competent person and testing for firedamp when it is in use;

and any lights which conform with this paragraph shall be permitted lights in any mine such as is specified in paragraph (1).

Cutting off electricity or making safe where firedamp is found either below ground or at the surface

20.—(1) Where any person at a mine detects firedamp in a concentration exceeding 1.25% by volume in the general body of the air either below ground at that mine or at any place on the surface thereat where any exhauster in a firedamp drainage system is installed, firedamp is monitored or its heat content measured, he shall forthwith—

- (a) cut off the supply of electricity to any electrical equipment situated at the place where the said concentration was detected; or
- (b) (where this is not possible) take all reasonably practicable steps to make such equipment safe; or
- (c) (if the taking of the measures specified in sub-paragraphs (a) and (b) above does not fall within the scope of his normal duties) report the matter to an official of the mine who shall ensure that those measures are taken;

except that the provisions of sub-paragraphs (a) to (c) above shall not apply if the electrical equipment is approved for the purpose of remaining energised in such circumstances or (in the case of a safety-lamp mine) is electrical equipment such as is specified in regulation 21(2).

(2) If the supply of electricity to electrical equipment is cut off or the equipment made safe in accordance with paragraph (1), it shall remain in that condition until the senior official on duty at the mine having determined that it is safe to do so, directs that such precautions are no longer necessary.

(3) If the supply of electricity to electrical equipment is cut off or the equipment made safe in accordance with paragraph (1), details of the time, duration and location shall be recorded.

Approval of certain equipment for use in safety-lamp mines

21.—(1) Subject to paragraph (2), no electric safety-lamp, gas detector, telephone or signalling equipment or other equipment associated therewith or required for the safety of persons shall be taken or used below ground at any safety-lamp mine unless it is equipment which has been approved pursuant to regulation 20(1) or (in the case of electric safety-lamps) is of a type for the time being approved pursuant to section 64(2) of the Mines and Quarries Act 1954.

(2) Nothing in paragraph (1) shall prevent the taking or use below ground at any safety-lamp mine of any electrical equipment which was, before the coming into force of these Regulations, approved pursuant to regulations 20 and 21A of the Coal and Other Mines (Electricity) Regulations 1956(4).

(4) S.I. 1956/1766; the relevant amending instruments are S.I. 1974/1853 and 1977/1205.

Means of cutting off electricity to circuits below ground

22. At every mine at which electrical equipment which may give rise to danger is installed below ground and is supplied from a power source at the surface of the mine, switchgear shall be provided at the surface for cutting off the supply of current to that equipment, and adequate provision shall be made for the operation of that switchgear, including such means of communication as will, so far as is reasonably practicable, enable the switchgear to be operated in case of danger.

Oil-filled equipment

23. Electrical equipment using oil as a means of cooling, insulation or arc suppression shall not be introduced below ground at a mine.

Records and information

24.—(1) Suitable schematic diagrams of all electrical distribution systems intended to be operated at the mine (other than those operating at a voltage not exceeding 250 volts) shall, so far as is reasonably practicable—

- (a) be prepared and kept in the office at the mine; and
- (b) show the planned settings of any circuit electrical protective devices.

(2) Copies of such portions of the schematic diagrams prepared pursuant to paragraph (1) as are necessary to prevent danger and which show at least those parts of the electrical system which are served by switchgear operating at a voltage in excess of 250 volts shall be displayed at each place where such switchgear is installed.

(3) Plans on a suitable scale shall be kept in the office at the mine showing, so far as is reasonably practicable, the position of all permanently installed electrical equipment at the mine supplied at a voltage in excess of 250 volts.

Electric shock notices

25. Where, at any place at a mine, electric arc welding is taking place or electrical energy is being generated, transformed or used at a nominal voltage in excess of 125 volts a.c. or 250 volts d.c., a notice shall be displayed in a form which can be easily read and understood and containing information on the appropriate first-aid treatment for electric shock and details of the emergency action to be taken in the event of electric shock.

Introduction of battery-powered locomotives and vehicles into safety-lamp mines

26. No locomotive or vehicle which uses an electrical storage battery, either partly or wholly, as a power source for traction purposes shall be introduced below ground at a safety-lamp mine unless it is an approved locomotive or vehicle.

Storage, charging and transfer of electrical storage batteries

27. At any mine in which electrical storage batteries are used below ground, those batteries shall, so far as is reasonably practicable, be used, stored, charged and transferred in a safe manner.

Disapplication of section 157 of the Mines and Quarries Act 1954

28. Section 157 of the Mines and Quarries Act 1954(5) (which provides a defence in legal proceedings and prosecutions in certain circumstances) shall not apply in relation to any legal

(5) 1954 c. 70; section 157 was amended by S.I. 1974/2013.

proceedings or prosecutions based on an allegation of a contravention of a requirement or prohibition imposed by regulations 18 to 27 or by or under Schedule 1.