1970. No. 130 **[C]**

COAL AND OTHER MINES

Electricity

REGULATIONS, DATED 1ST JUNE 1970, MADE BY THE MINISTRY OF COMMERCE UNDER SECTIONS 13(2), 68(1) AND 120 OF THE MINES ACT (NORTHERN IRELAND) 1969.

WHEREAS in pursuance of Part I of Schedule 2 to the Mines Act (Northern Ireland) 1969(a) the Ministry of Commerce has published notice of its intention to make the following regulations and has not received any objection to the draft thereof in respect to which it is required to refer the draft regulations for inquiry and report:

NOW, THEREFORE, the Ministry of Commerce in exercise of the powers conferred on it by sections 13(2), 68(1) and 120 of the Mines Act (Northern Ireland) 1969 and of all other powers enabling it in that behalf, hereby makes the following regulations:—

PART I

GENERAL

Citation

1. These regulations may be cited as the Coal and Other Mines (Electricity) Regulations (Northern Ireland) 1970.

Application

2. These regulations shall apply to every mine of coal, stratified ironstone, shale or fireclay and in these regulations "mine" means such a mine.

Interpretation

3.—(1) In these regulations, unless the context otherwise requires, the following expressions have the meanings hereby respectively assigned to them, that is to say—

"the Act" means the Mines Act (Northern Ireland) 1969;

"circuit breaker" includes a fuse;

"concentric cable" means a cable in which an outer conductor is disposed around an inner conductor;

"electrical apparatus" includes electric cables and any part of any machinery, apparatus, or appliance being a part designed for the generation, conversion, storage, transmission or utilisation of electricity;

"flexible cable" means a cable which is designed to be movable while in use;

"incendive sparking" means, in relation to any electrical apparatus, sparking in such circumstances that inflammable gas present in the air outside the apparatus might be ignited directly or indirectly;

(a) 1969. c. 6 (N.I.)

"metallic covering" in relation to any cable means an iron or steel wire covering and any lead or other metallic sheath provided in addition thereto or an iron or steel pipe;

"mine" has the meaning assigned thereto in regulation 2;

"the Ministry" means the Ministry of Commerce;

"portable apparatus" includes any electrical apparatus that is designed to be moved while working.

(2) Without prejudice to section 151 of the Act, for purposes of these regulations anything for the time being certified or approved under the corresponding provision of the Mines and Quarries Act 1954(**b**) or regulations made thereunder shall be deemed to be certified or approved by the Ministry, unless the Ministry by notice published in the *Belfast Gazette* and otherwise brought to the notice of persons concerned in such manner as the Ministry thinks fit, directs that it shall not be so deemed:

Provided that the foregoing shall not affect the interpretation of the expression "approved by the Ministry" as used in regulation 7.

(3) Expressions to which meanings are assigned by the Act or by these regulations shall (unless the contrary intention appears) have the same meanings in any document issued under the provisions of these regulations.

Exemptions

4. If an inspector is satisfied that the application of any provision of these regulations is inappropriate in relation to any mine or part of a mine or is not requisite for safety in relation to any electrical apparatus therein, the Ministry may by notice served on the manager of that mine grant exemption from that provision in respect of that mine or part thereof or in respect of that apparatus, as the case may be.

Saving

5. Nothing in these regulations shall apply to any electrical apparatus which is not used and is not intended to be used as, and does not form and is not intended to form, part of the equipment of a mine.

PART II

MISCELLANEOUS PROVISIONS

Notice of introduction of electricity

6.—(1) Electrical apparatus shall not be installed below ground in any part of a mine being a part in which electrical apparatus is not already installed, unless the manager of the mine has served on the Ministry notice of the intention so to do in such form and accompanied by such particulars as may be specified by the Ministry, and the Ministry has not within thirty days of the service of that notice served a notice on the manager in relation to such installation in pursuance of sub-section (2) of section 68 of the Act.

(2) Nothing in this regulation shall apply—

(*a*) to the installation of electrical apparatus in any part of a mine, being a part in which the installation of such apparatus was lawful immediately before the commencement of the Act;

(*b*) to the installation of telephone or signalling apparatus, and for the purposes of this regulation no account shall be taken of such apparatus already installed.

(**b**) 2 & 3 El. 2. c. 70.

Plan of electrical apparatus

7. It shall be the duty of the manager of every mine in which there is installed below ground electrical apparatus, other than telephone or signalling apparatus, to keep at the office at the mine or at such other place as may be approved by the Ministry, plans, on the same scale as the plans of the workings in the mine so kept, showing the position of all such electrical apparatus other than portable apparatus and cables.

Main switchgear for cutting off electricity

8.—(1) There shall be provided at the surface at every mine in which there is installed below ground electrical apparatus, other than telephone or signalling apparatus, suitable switchgear for cutting off the supply of electricity therefrom.

(2) The manager of every such mine shall make and secure the efficient carrying out of arrangements whereby a competent person appointed by him for the purpose of operating such switchgear is in attendance at the surface at the mine whenever any cable below ground in the mine is live.

(3) There shall be provided effective means of telephonic communication or other equivalent means of transmitting speech between the place at which such switchgear is situate and a place at or near every such entrance below ground to every shaft or outlet as is regularly used for affording means of ingress and egress by persons employed in a part of the mine in which electrical apparatus is installed or a place at or near the main distributing centre (if any) for the part of the mine to which that entrance gives access. There shall be kept posted in a suitable position near such means of communication a notice in such characters as to be easily seen and read specifying how communication with the person in attendance at that switchgear is to be obtained.

Other means for cutting off electricity

9.—(1) There shall be provided in relation to every electrical circuit at every mine (whether at the surface or below ground) effective means suitably placed for cutting off the supply of electricity from that circuit as may be necessary to prevent danger, and without prejudice to the generality of the aforesaid such means shall be provided for cutting off the supply from any flexible cable at the apparatus by which it is connected to fixed cable.

(2) There shall be provided in relation to every such electrical circuit such effective means for cutting off the supply of electricity automatically from that circuit in the event of any fault occurring in any part of that circuit as may be necessary to prevent danger.

(3) There shall be provided in relation to every motor at a mine such switchgear that the supply of electricity can be entirely cut off from the motor and any starter therefor, being switchgear so placed as to be easily operated by the person operating the motor.

Cutting off electricity where inflammable gas is found

10.—(1) Where any person finds that at any place below ground in a mine an amount of inflammable gas is present in the general body of the air at that place exceeding one-and-a-quarter per cent. by volume or sees an indication of gas at that place on the lowered flame of a safety-lamp, then, without prejudice to the generality of the application of sections 79 and 80 of the Act, that person shall—

(*a*) forthwith cause the supply of electricity to be cut off from all electrical apparatus at that place, other than any telephone or signalling apparatus or any apparatus for detecting or measuring inflammable gas including ancillary apparatus operated by such apparatus or any electric safety-lamp, if the taking of those measures falls within the scope of his normal duties; or

(*b*) if not, forthwith report the matter to an official of the mine or a person whose normal duties include the taking of those measures.

(2) Any person to whom the presence of inflammable gas at that place is reported in pursuance of sub-paragraph (*b*) of the last preceding paragraph shall forthwith cause the supply of electricity to be cut off from all electrical apparatus at that place, other than any telephone or signalling apparatus or any apparatus for detecting or measuring inflammable gas including ancillary apparatus operated by such apparatus or any electric safety-lamp.

(3) After the supply of electricity has been cut off from electrical apparatus at that place in pursuance of sub-paragraph (*a*) of paragraph (1) or paragraph (2) of this regulation, no such supply shall be restored to that apparatus at that place until the senior official on duty at the mine, being satisfied that the amount of inflammable gas present in the general body of the air at that place does not exceed one-and-a-quarter per cent. by volume, so directs.

Restriction on use of high voltages

11. Electricity at a voltage exceeding six hundred and fifty shall not be applied to—

(*a*) any portable apparatus; or

(*b*) any motor at a mine rated at less than twenty horse-power; or

(*c*) the rotating parts of any apparatus.

Housing of apparatus

12.—(1) Wherever necessary to prevent danger therefrom or damage thereto electrical apparatus at the surface of any mine shall be installed in a room, compartment or box so constructed or treated as to be fire resisting.

(2) Wherever necessary to prevent danger therefrom or damage thereto any transformer or switchgear below ground in any mine shall be installed in a room, compartment or box which shall be of substantial construction and kept dry. Unless the apparatus so installed is so constructed, protected and worked as to obviate risk of fire, no inflammable material shall be used in the construction of any such room, compartment or box or of any of the fittings therein.

(3) No inflammable or explosive material shall be stored at any mine in any room, compartment or box containing any electrical apparatus or below ground in the vicinity of any electrical apparatus.

13.—(1) All parts of electrical apparatus that require attention and all handles for the operation of electrical apparatus shall be so placed that there is safe means of access thereto and adequate working space thereat.

(2) All such handles shall be kept free of obstruction and conveniently placed for operation.

Protection of apparatus

14. Every person doing any work which may result in such damage to any electrical apparatus at a mine that that apparatus might be a source of danger to persons employed thereat shall take such steps to protect it from such damage as may be appropriate.