1970. No. 141 **[C]**

STRATIFIED IRONSTONE, SHALE AND FIRECLAY MINES

Explosives

REGULATIONS, DATED 1ST JUNE 1970, MADE BY THE MINISTRY OF COMMERCE UNDER SECTIONS 13(2), 69 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), 69 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 Stratified Ironstone, Shale and Fireclay Mines (Explosives) Regulations (Northern Ireland) 1970.

Application

2. Except where the application thereof is further expressly limited, these regulations shall apply to every mine of stratified ironstone, shale or fireclay, and in these regulations "mine" means (except in regulation 6 and where further expressly limited) such a mine.

Interpretation

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

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

"cross measure drift" includes any drift driven otherwise than in stratified ironstone, shale, fireclay or (in relation only to regulation 6) coal or otherwise than for the purpose of getting stratified ironstone, shale, fireclay or (in relation only to regulation 6) coal therefrom;

"deputy" and "deputy's district" have the meanings assigned thereto in the Coal and Other Mines (Managers and Officials) Regulations (Northern Ireland) 1970(b);

"detonator" includes safety fuse capped with a detonator;

"explosives store" has the meaning assigned thereto in paragraph (1) of regulation 7;

"firedamp content" means the percentage of inflammable gas present in the general body of the air;

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

"the Ministry" means the Ministry of Commerce;

(a) 1969, c. 6 (N.I.). (b) S.R. & O. (N.I.) 1970, No. 128.

"person appointed to fire shots by fuse" has the meaning assigned thereto in paragraph (1) of regulation 5;

"round", in relation to shots, means a number of shots fired—

(*a*) electrically in series, either simultaneously or by means of delay detonators; or

(*b*) by fuse, by means of apparatus approved for firing a number of shots by fuse simultaneously; or

(*c*) where the number does not exceed four, by fuses lighted at the same time;

"safety fuse" means fuse consisting of gunpowder protected either by not less than three coverings of thread or by not less than two coverings of thread and one of tape or gutta-percha, being of such a quality that the rate of burning does not vary more than ten seconds above or below the rate of thirty seconds for each foot of fuse;

"scheme of transit" has the meaning assigned thereto in paragraph (1) of regulation 14;

"sheathed explosive" means explosive covered by an external sheath of incombustible material spread evenly over the sides of the cartridge, and includes explosive in any type of cartridge certified by the Ministry to be equivalent in safety to sheathed explosive;

"shot firer" has the meaning assigned thereto in paragraph (1) of regulation 5.

(2) In these regulations any reference to the use of explosive includes the charging of a shot hole therewith.

(3) 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(c) 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 regulations 29(2), 36(3) and 49(*c*).

(4) 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 thereof, the Ministry may by notice served on the manager of that mine exempt it or a part thereof from the application of that provision.

PART II

APPOINTMENT AND QUALIFICATION OF SHOT FIRERS AND PERSONS APPOINTED TO FIRE SHOTS BY FUSE

5.—(1) No person shall fire a shot in any mine other than a person appointed to be a shot firer by the manager of that mine (any person so appointed being hereinafter referred to as a "shot firer"):

(c) 2 & 3 El. 2, c. 70.

Provided that any person appointed by the manager to fire shots in the mine by means of safety fuse other than safety fuse capped with a detonator (hereinafter referred to as a "person appointed to fire shots by fuse") may do so by that means.

(2) No shot firer shall fire a shot in any mine by means of a delay detonator or in a round of more than six shots unless he is appointed so to do by the manager and no shot firer shall be so appointed unless he has during not less than five shifts been employed in connection with the firing of such shots under the close personal supervision of a shot firer authorised to fire such shots who was not then supervising any other person for the purposes of this paragraph. The manager shall include a record of any such appointment in the record of the appointment of that shot firer kept in pursuance of section 113 of the Act.

Qualification of shot firers

6. No person shall be qualified to be appointed or to be a shot firer unless—

(*a*) he has attained the age of twenty-one years; and

(*b*) he has had not less than three years' practical experience below ground in one or more mines in which coal, stratified ironstone, shale or fireclay was in the course of being worked, including employment for not less than eighteen months in one or more of the following namely—

(i) getting or cutting any of those minerals;

(ii) ripping in a roadhead;

(iii) setting or withdrawing supports at or building packs at a face from which any of those minerals was in the course of being worked;

(iv) drilling shot holes at a face from which any of those minerals was in the course of being worked;

(v) for not more than six months, repairing or enlarging roads or driving cross measure drifts;

(vi) in the case of a master sinker or a deputy whose district consists of a shaft in the course of being sunk, sinking operations.

PART III

STORAGE, ISSUE AND CONVEYANCE OF EXPLOSIVES AND DETONATORS

7.—(1) The manager of a mine shall not permit any explosive, detonator or safety fuse to be stored thereat except in a place on the surface appointed by him for the purpose (hereinafter referred to as "an explosives store").

(2) The manager of every mine in which explosives are used shall appoint at least one place which shall be situate conveniently near the top of each shaft or outlet normally used by workmen, as a place for the deposit of explosives and detonators brought out of the mine, and may appoint a place (other than an explosives store) for the issue thereof.

(3) The manager of every mine in which explosives are used shall appoint such number of competent persons and make such arrangements as to secure that a competent person is in charge of each explosives store and place appointed for the purposes of the last preceding paragraph whenever explosives or detonators are to be issued or returned thereat.

8. No person shall cap safety fuse with a detonator at any place at a mine except at a workshop used in connection with an explosives store in pursuance of section 47 of the Explosives Act 1875(**d**).

Control of issue of detonators

9.—(1) All detonators at an explosives store or at a place appointed in pursuance of paragraph (2) of regulation 7 shall be in the sole charge of the manager of the mine except—

(*a*) during a shift for which the manager has appointed a competent person to have charge of that store or place;

(*b*) during any other period, in any case in which there is no means of entry to that store or place otherwise than through a doorway or doorways having a door or doors which can be securely locked and the manager has made such arrangements as to secure that that door is or those doors are kept securely locked throughout that period.

(2) No person shall be in possession of any detonator at any place at a mine other than an explosives store or a place appointed for the storage, issue or deposit of explosives except a shot firer to whom the detonator has been issued for use or a person authorised in writing by the manager of the mine so to be and save as aforesaid no person shall issue or take any detonator from such a store or place.

Conveyance and care of detonators

10.—(1) No person shall take any detonator below ground in a mine except in a securely locked detonator case provided by the owner of the mine:

Provided that nothing in this paragraph shall prevent a primer cartridge fitted with a detonator being taken into a shaft in the course of being sunk for use therein.

(2) No person shall put a detonator into a detonator case if it would then contain a delay detonator as well as a detonator which is not a delay detonator.

(3) No person shall put a delay detonator into a detonator case unless the detonator is clearly marked with a number which indicates the period of delay.

(4) The manager of every mine in which detonators are used shall ensure that no detonator case is issued for use in the mine unless it is so constructed and maintained that when the case is closed it is impossible for any detonator or the leads of any detonator contained in the case to touch any metal part thereof which is exposed outside the case or is in contact with any other metal part so exposed.

11.—(1) Any shot firer to whom a detonator case has been issued shall—

(*a*) retain the key of the case in his own possession throughout the period during which he is on duty;

(*b*) ensure that, apart from any check sheet for recording shots fired by him, nothing except detonators is in it;

(*c*) ensure that at any time at which it is not on his person it is in a safe place and, unless he remains in the immediate vicinity, in a securely locked box; and

(**d**) 38 & 39 Vict. c. 17.

(*d*) if at the end of his period of duty it contains any detonator, return it to the appropriate place on the surface appointed for the storage or deposit of explosives.

(2) No shot firer shall remove a detonator from a detonator case unless it is required immediately for charging a shot hole.

Conveyance and care of explosives

12. No person shall take any explosive below ground in any mine unless it is in the form of a cartridge.

13.—(1) Except in pursuance of the next following regulation, no person shall take any explosive below ground in any mine unless it is in a closed canister stoutly constructed and containing not more than five pounds of explosive:

Provided that nothing in this paragraph shall prevent a primer cartridge fitted with a detonator being taken into a shaft in the course of being sunk for use therein.

(2) No person shall put anything other than explosives into a canister provided for the purpose of taking explosives below ground in a mine.

(3) Every person having any canister of explosives in his possession or control shall ensure that it is not deposited at any time elsewhere than in a place of safety, and in particular if at the end of his period of duty the canister contains any explosive shall return it to the appropriate place on the surface appointed for the storage or deposit of explosives or, if he received it from a reserve station established for the purposes of a scheme of transit, to that reserve station or to a person and at a place appointed by the manager for the purposes of that scheme.

(4) No person below ground shall unlock or open any canister of explosives or take any explosive from any canister unless the shot firer or person appointed to fire shots by fuse (as the case may be) concerned requires to check the quantity of the explosives or the explosive is required immediately for charging a shot hole or the act in question has been authorised by a deputy or other official of the mine.

Conveyance of explosives in bulk

14.—(1) Subject to the following provisions of this regulation the manager of any mine may as respects that mine or any part thereof make a scheme for the conveyance of explosives in bulk (herein referred to as "a scheme of transit") whereby explosives packed at an explosives store in securely locked canisters of any size may be conveyed in a special carriage to one or more reserve stations in that mine or part of the mine or to the working face.

(2) Every scheme of transit shall contain provisions for securing safety with respect to each of the following matters—

(*a*) the location, construction and marking of each reserve station and the custody of the keys thereof;

(*b*) the design and construction of the special carriage;

(*c*) supervision of and precautions to be taken during the transit of the carriage;

(*d*) supervision of any explosives at a reserve station;

(*e*) if explosives are to be taken in bulk to any working face, the manner of so doing;