

1970. No. 129

[C]

COAL AND OTHER MINES**Fire and Rescue**

REGULATIONS, DATED 1ST JUNE 1970, MADE BY THE MINISTRY OF COMMERCE UNDER SECTIONS 13(2), 72 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), 72 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 (Fire and Rescue) Regulations (Northern Ireland) 1970.

Application

2. Except where otherwise expressly provided, Part II of these regulations shall apply to every mine of coal, stratified ironstone, shale or fireclay, Part III thereof to mines of coal, stratified ironstone, shale or fireclay, in which or in part of which the use of lamps or lights, other than permitted lights, is unlawful, and Part IV thereof to every mine of coal or shale, other than a mine at which not more than ten persons are employed below ground, and in these regulations "mine" shall be construed accordingly.

Interpretation

3. 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;

"fresh air base" has the meaning assigned thereto in regulation 23;

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

"the Ministry" means the Ministry of Commerce.

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

PART II

FIRE PRECAUTIONS AND EQUIPMENT

4.—(1) No highly inflammable material shall be stored below ground in any mine except in a fireproof room, compartment or box.

(2) At any mine at which more than thirty persons are employed below ground, no building or structure at the top of any shaft or outlet shall be made of or comprise any inflammable material likely to cause danger from fire to any person so employed.

(3) No engine-room or motor-room below ground in any mine shall be made of or comprise any inflammable material likely to cause danger from fire to any person employed in the mine.

5. It shall be the duty of the manager of every mine to secure the provision of suitable and sufficient means of extinguishing fire at each of the following places, that is to say—

- (a) at the top of and at every entrance to a shaft or outlet, being a place in the construction of which inflammable material is used;
- (b) in every engine-room, motor-room or boiler gallery, being a place in the construction of which inflammable material is used; and
- (c) at any place at which inflammable material is stored.

6. It shall be the duty of the manager of every mine to secure the provision and readiness for immediate use in case of fire of a sufficient supply of suitable dust or sand in suitable containers at an appropriate place in relation to every electric motor, which is not portable apparatus for the purposes of the Coal and Other Mines (Electricity) Regulations (Northern Ireland) 1970(b), transformer and switchgear installed at the mine.

7. It shall be the duty of the manager of every mine, other than a mine which is naturally wet throughout and at which not more than thirty persons are employed below ground, or a mine of stratified ironstone, to secure the provision and readiness for immediate use in case of fire of—

- (a) an adequate supply of water; or
- (b) sufficient portable fire extinguishers and a sufficient supply of suitable dust or sand; and
- (c) appropriate equipment for conveying and using the water, dust or sand in that case;

at appropriate places in relation to each working face and along any length of road below ground, being a length which is a main intake airway or a main return airway for the purposes of the Coal and Other Mines (Ventilation) Regulations (Northern Ireland) 1970(c).

8.—(1) It shall be the duty of the manager of every mine, other than a mine at which less than one hundred persons are employed below ground, to secure the provision and readiness for immediate use in case of fire below ground of adequate supplies of water and efficient means for delivering it promptly at adequate pressure and in adequate volume to every place in the mine at which persons work otherwise than occasionally or for short periods or which persons going to or from their working places ordinarily pass, being in either case a place at which fire is liable to occur:

(b) S.R. & O. (N.I.) 1970, No. 130.

(c) S.R. & O. (N.I.) 1970, No. 125.

(2) Except in so far as provision is made in pursuance of the last preceding paragraph to deliver water through pipelines and hose extensions to every place at which it is required to be available, provision shall be made for delivery from tanks or barrels by portable manual pumps.

9. Where at any mine machinery for cutting or getting mineral is in use at a working face at which an ignition of gas has been or having regard to the nature of the strata is liable to be, produced by such machinery, it shall be the duty of the manager to secure that—

- (a) the machine is provided with effective means to prevent such ignition; or
- (b) a portable fire extinguisher or supply of suitable dust or sand in a suitable container is carried on the machine; or
- (c) if owing to the height of the working it is impracticable to carry such an extinguisher or such a container on the machine, portable fire extinguishers or supplies of suitable dust or sand in suitable containers are provided at suitable intervals along the face and at any point at which an airway, which as regards the face is an intake airway, meets the face.

10. No fire extinguisher which is liable when operated to give off poisonous gas shall be provided below ground whether in pursuance of these regulations or otherwise.

11.—(1) It shall be the duty of the manager of every mine to make and ensure the efficient carrying out of arrangements—

- (a) whereby all equipment provided in pursuance of this Part of these regulations is inspected by competent persons appointed by him at intervals not exceeding thirty days; and
- (b) for the discharge and refilling of each fire extinguisher to ensure that it is maintained in good working order.

(2) Every person making such an inspection shall make a full and accurate report thereon to the manager in writing.

12. It shall be the duty of the manager of every mine, other than a mine at which less than one hundred persons are employed below ground, to make arrangements to secure a proper organisation of persons for combating any outbreak of fire and such arrangements shall include fire drills.

PART III

PRECAUTIONS IN CASE OF OUTBREAK OR SUSPECTED OUTBREAK OF FIRE

13.—(1) Without prejudice to the generality of section 79 of the Act if in any mine there appears any smoke or other sign indicating that a fire has or may have broken out below ground at any place, the persons in charge of any parts of the mine likely to be affected by such a fire, by products of combustion thereof or by any explosion resulting therefrom, shall cause all persons employed at any place likely to be so affected to leave it:

Provided that in any case in which it appears to the person in charge of the part of the mine from which that sign emanates that there exists no immediate danger persons may remain there for the purpose of preventing danger from arising.

(2) Where on any occasion persons have been caused to leave any place in pursuance of the provisions of the last preceding paragraph, no person shall thereafter be permitted to enter it until after examination thereof it is reported safe for him to do so either by the manager or an under-manager of the mine and by two members of the panel appointed for the mine under section 105 of the Act or, if they do not concur, by an inspector :

Provided that nothing in this paragraph shall be taken to prohibit a person from entering any place for the purpose of saving life, ascertaining the condition of that place, ascertaining or taking any measures that it is necessary to take for the purpose of rendering it safe or ascertaining the effectiveness of such measures :

Provided also that the concurrence of two members of the said panel shall not be required if such persons are not available within a reasonable period after the manager or an under-manager of the mine has informed the person for the time being nominated to receive notices under subsection (1) of section 98 of the Act of the occurrence.

(3) Any report under the last preceding paragraph shall be a full and accurate report signed by the persons making it and the position of the fire or suspected fire shall, if possible, be indicated by means of a plan. A copy of any such report shall forthwith be posted at the pithead.

(4) If on any occasion it is ascertained that fire has broken out at any place the following parts of the mine shall be deemed for the purposes of paragraph (1) of this regulation to be affected, that is to say, all parts of the seam in which the fire exists and all parts of any other seam reached from an entrance below ground to a shaft or outlet being an entrance from which the first mentioned seam is reached :

Provided that a part of the mine other than that in which the fire exists shall be deemed not to be affected if it is protected against the spread thereto of any explosion by means approved by the Ministry for the purposes of this regulation, and a seam other than that in which the fire exists shall be deemed not to be affected if it is naturally wet throughout.

(5) If on any occasion a fire is being dammed off all parts of the mine below ground shall be deemed for the purposes of paragraph (1) of this regulation to be affected, and until the work is completed no person shall be permitted to go below ground except for the purposes of that work or otherwise for securing the safety of the mine.

(6) If on any occasion it is ascertained that fire has broken out at any place measures shall be taken to render harmless any coal dust in accessible parts of the mine contiguous to the fire.

PART IV

RESCUE

Establishment of a scheme of emergency procedure

14. It shall be the duty both of the owner and of the manager of every mine to make arrangements for prompt action and conduct of operations for rescue and other necessary work at that mine after an explosion or a fire, or in an atmosphere which is or may be irrespirable, thereat, such arrangements to be in accordance with the following provisions of this Part of these regulations and to be drawn up in a scheme of emergency procedure to be approved by the Ministry.

Provision of certain rescue equipment

15. It shall be the duty of the manager of every mine to secure the provision and readiness for immediate use at all times of—

- (a) a set of reviving apparatus, not being apparatus of a forced breathing type, with a cylinder or cylinders capable of supplying not less than twenty cubic feet of oxygen; and
- (b) small birds for testing for noxious gases.

Breathing apparatus

16. Without prejudice to the operation of sections 98 and 99 of the Act, on the happening of any accident or occurrence at a mine likely to require the use by persons engaged in rescue work of breathing apparatus, the manager shall inform by the quickest means available the Ministry and the person for the time being nominated to receive notices under subsection (1) of section 98 of the Act.

Signals for use in rescue work

17. In rescue work and practice therefor the signals specified in Schedule 1 to these regulations and no other shall be used for the purposes specified in relation thereto.

Accommodation for persons engaged in rescue work at mines

18.—(1) It shall be the duty of the manager of every mine to secure the provision on the surface thereof of a suitable room with sufficient accommodation for any persons who may be engaged in rescue work or practice. That room shall be near to a shaft or outlet normally used by persons employed below ground at the mine and shall be adequately heated and lighted and kept clean and properly maintained.

(2) At every mine at which not less than one hundred persons are employed below ground the said room, if not permanently separated from accommodation used for any other purpose, shall be so arranged that it can readily be so separated.

(3) The manager of every mine shall appoint a responsible person to be in charge of the room provided in pursuance of this regulation.

Plans

19. It shall be the duty of the manager of every mine to keep at the mine or at such other place as may be approved by the Ministry a sufficient number of sets of plans, in a form suitable for use by persons engaged in rescue work, of the workings of the mine, so that at any time there are plans for each part of the mine showing clearly and accurately up to a date not more than three months past the extent of the workings, the airways and the direction of the air current therein and all principal doors, stoppings, air crossings and regulators and telephone stations by means of the signs specified in Schedule 2 to these regulations.

Provisions relating to conduct of rescue work

20.—(1) It shall be the duty of the manager of every mine to make rules allotting to competent persons the duties to be performed by them on any occasion on which rescue work is about to be or is being carried out at that mine.

(2) Such rules shall include provisions to ensure that on any such occasion, at any time when the manager is not himself performing those functions, a competent person is in charge on the surface to secure that—

- (a) no person enters any shaft or outlet for the purpose of going to a part of the mine affected, unless he is duly authorised so to do;
- (b) the name of every person going below ground or returning above ground at the mine is recorded in writing;
- (c) such other steps as can be taken on the surface to regulate and facilitate the rescue work are taken.

21. On any occasion on which rescue work is about to be or is being carried on in any mine, no person shall go below ground for the purpose of going to a part of the mine affected unless authorised so to do.

22.—(1) On any occasion on which rescue work is about to be or is being carried on in any mine, no person shall be authorised to go below ground for any purpose which may involve the use of breathing apparatus unless he is a person for the time being entitled to do so in accordance with a scheme drawn up in pursuance of regulation 14.

(2) On any such occasion no person shall be permitted to engage in a second or subsequent spell of work involving the use of breathing apparatus unless he has been medically examined since the preceding spell of work and is found fit to undertake it.

23.—(1) On any occasion on which rescue work is to be carried out in a mine in an atmosphere which is or may be irrespirable, there shall be organised as soon as may be a base or bases (hereinafter referred to as a "fresh air base") in respirable air but as near to the places in which the work has to be carried out as appears safe.

(2) Whenever any persons are engaged in rescue work beyond the fresh air base there shall, so far as is practicable, be stationed thereat—

- (a) two persons including a person competent to test and maintain breathing apparatus and other rescue equipment and a person qualified in first-aid in accordance with the Coal and Other Mines (First-Aid) Regulations (Northern Ireland) 1970(d);
- (b) a team of persons to engage in rescue work in accordance with a scheme made in pursuance of regulation 14 ready for immediate service and equipped with breathing apparatus; and
- (c) a set of reviving apparatus, a stretcher and a cage of birds.

(3) Telephonic communication shall, if practicable, be established and maintained between any fresh air base and the surface of the mine or an entrance below ground to a shaft or outlet.

24.—(1) On any occasion on which rescue work is to be carried out in a mine, no team of persons engaged in rescue work shall go beyond a fresh air base, or where an appropriate fresh air base has not been established shall go below ground, unless the person in charge of that team has been given clear instructions where the team is to go and what it is to attempt by the person in charge at the fresh air base or on the surface, as the case may be.

(d) S.R. & O. (N.I.) 1970, No. 131.

(2) The person in charge of such a team shall not proceed without a plan of the relevant part of the mine made in pursuance of regulation 19 and on which the route to be taken is clearly marked.

25.—(1) It shall be the duty of the person in charge of any team of persons engaged in rescue work in any mine to devote himself to the direction of those persons and to secure their safety, and accordingly he shall not engage in manual work.

(2) Without prejudice to the generality of the foregoing, the person in charge of a team so engaged shall examine the state of the roof and sides of any place to be entered or passed by the team and he shall not permit the team to pass any place which appears to him insecure or except where it is necessary so to do in an attempt to save life to pass through any passage less than two feet high and three feet wide.

(3) If visibility is obscured by smoke, the person in charge of a rescue team shall secure that a life-line is taken in from the fresh air base or another place at which the air is respirable and that no member of the team moves out of reach of that line or, if that is not practicable, shall ensure that any road branching from a route is fenced off before the junction is passed.

(4) If visibility is not obscured by smoke, the person in charge of a rescue team when passing any junction shall see that the route is clearly indicated by means of arrows or other suitable marks:

26. The person in charge of any rescue team which is to use breathing apparatus in the course of any rescue work at any mine shall make sure that each such apparatus is working properly immediately before the team enters an atmosphere which is or may be irrespirable and shall in the case of such apparatus in which compressed oxygen is used read the pressure of oxygen at intervals not exceeding twenty minutes.

27. On any occasion on which a fire is being dammed off, there shall be kept available at or near the place two suits of breathing apparatus and persons entitled to use them under regulation 22, or two smoke helmets and persons competent to use them.

Sealed with the Official Seal of the Ministry of Commerce for Northern Ireland this 1st day of June 1970 in the presence of

(L.S.)

J. H. Armstrong,
Assistant Secretary.

SCHEDULE 1
(Regulation 17)
Code of Signals

Electric signalling	Signal	Signalling between Members of a Brigade	Signal
'Distress' or 'Help wanted'	ONE ring	'Distress' or 'Help wanted'	ONE hoot
(If NO ANSWER is given to a call 'Distress' is to be understood)			
'Not understood' or 'Repeat the Message'	TWO rings	Halt	TWO hoots
'No'	THREE rings	Retire	THREE hoots
'Yes' or 'All right' or 'All's well'	FOUR rings	Advance	FOUR hoots
To 'ring up'. To 'ring off'	FIVE rings	To call attention	FIVE hoots

SCHEDULE 2
(Regulation 19)
Code of Signs

Brick, stone or concrete stoppings, constructed in the manner described in regulation 25(2) of the Coal and Other Mines (Ventilation) Regulations (Northern Ireland) 1970



Brick, stone or concrete stoppings, other than the above



Fire dams or seals



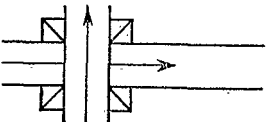
Doors

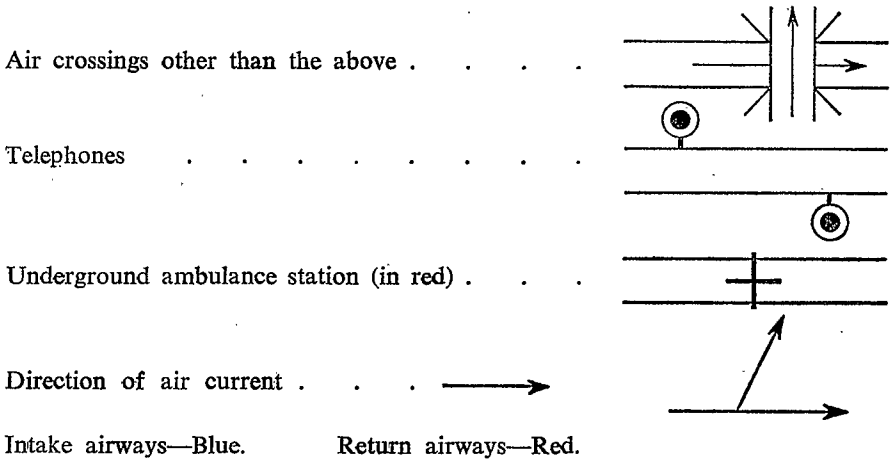


Regulators



Air crossings, explosion proof





EXPLANATORY NOTE

(This note is not part of the regulations but is intended to indicate their general purport.)

These regulations prescribe fire precautions and equipment for all mines of coal, stratified ironstone, shale and fireclay and prescribe precautions to be taken in case of fire or suspected outbreak of fire at any such mines in which or in part of which the use of lamps or lights other than permitted lights, is unlawful. The regulations further make provision, with regard to certain mines of coal and shale, for the establishment of a scheme of emergency procedure to be put into operation in the event of certain specified occurrences and lay down general requirements for the efficient conduct of rescue operations.