1969. No. 104 [NC]

METALLIFEROUS MINES

Safety, Health, Welfare and Electricity

REGULATIONS, DATED 22ND APRIL 1969, MADE BY THE MINISTRY OF COMMERCE UNDER SECTION 86 OF THE COAL MINES ACT 1911, AS APPLIED TO METALLIFEROUS MINES BY SECTION 19 OF THE MINING INDUSTRY ACT 1920.

The Ministry of Commerce in exercise of the powers conferred on it by section 86 of the Coal Mines Act 1911(a), as applied to Metalliferous Mines by section 19 of the Mining Industry Act 1920(b) 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 Metalliferous Mines (Safety, Health, Welfare and Electricity) Regulations (Northern Ireland) 1969.

Interpretation

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

the "Acts" mean the Metalliferous Mines Regulation Acts 1872(c) and 1875(d) as modified by the Mining Industry Act 1920;

the "Regulations" mean all the general regulations applicable to Metalliferous Mines, including these regulations;

"inspector" means an inspector appointed by the Ministry of Commerce under the Metalliferous Mines Regulation Act 1872;

"manager" means the agent of a mine, as defined by the Metalliferous Mines Regulation Act 1872, or where there is no such agent, the owner;

"mine" means any mine to which the Acts apply;

"the Ministry" means the Ministry of Commerce;

"owner" has the same meaning as in the Coal Mines Act 1911.

(2) The Interpretation Act (Northern Ireland) 1954(e) shall apply to these regulations and to documents issued thereunder as if the regulations were an enactment and such documents were statutory documents within the meaning of that Act.

Exemptions

3. Without prejudice to anything contained in these regulations the Ministry may by notice served on the manager of a mine exempt the mine, or any part thereof, or anything or class of things thereat, from the application of any provision of these regulations if an inspector is satisfied that the safety of persons employed at the mine will not be prejudiced in consequence of the

(a) 1 & 2 Geo. 5. c. 50.
(b) 10 & 11 Geo. 5. c. 50.
(c) 35 & 36 Vict. c. 77.
(d) 38 & 39 Vict. c. 39.
(e) 1954. c. 33.

granting of the exemption, and nothing contained in these regulations shall affect the operation of this regulation.

Operation

4. These regulations shall have effect notwithstanding anything in the General Rules contained in section 23 of the Metalliferous Mines Regulation Act 1872.

PART II

SAFETY

Shafts and Outlets

5.—(1) If an inspector is of opinion that provision of at least two shafts or outlets, so that two separate means of ingress and egress shall be available to the persons employed in the mine, whether the shafts or outlets belong to the same mine or to more than one mine, is necessary for the safety of the persons employed, the Ministry may by notice served on the manager, require provision of such shafts or outlets and the manager shall comply with the requisition unless he disputes the reasonableness thereof in which case he may within 14 days of service of such notice upon him serve on the Ministry a statement in writing of his objections thereto. The Ministry shall consider such objections and may withdraw or modify its notice. If the Ministry shall refuse to withdraw or modify such notice, the manager may refer the matter to arbitration in the manner provided by regulation 34. On the hearing of such arbitration the arbitrator may quash, modify or confirm such notice and if any such notice is modified or confirmed it shall take effect accordingly.

(2) If the only means of ingress and egress available to the persons employed in the mine consists of a single shaft, such shaft shall be fitted with a compartment separated throughout by a substantial partition from that part of the shaft in which persons are ordinarily lowered and raised and the compartment shall be provided with ladders or other satisfactory means of egress independent of the main winding apparatus.

(3) (*a*) A ladder ordinarily used for the ascent or descent of persons shall not be fixed in a vertical or overhanging position, and shall be inclined at the most convenient angle which the available space allows. Every such ladder shall have substantial platforms at intervals of not more than ten yards and unless strong hand-holds are provided shall project at least three feet above the platform or top of the shaft.

(*b*) In a shaft every ladder shall be securely fastened to the timbering or sides of the shaft and each platform shall be securely fenced.

(4) Guides shall be provided in the case of every working shaft over fifty yards in depth, and, in the case of every shaft in the course of being sunk, over one hundred yards in depth.

(5) Keps for supporting the cage when at rest shall be provided at the surface but shall not be provided at any intermediate landings in the shaft. The keps provided at the surface, and also the keps, if any, provided at the bottom of the shaft, shall be used when persons are entering or leaving the cage.

(6) Every cage, skip or gig which is used for lowering or raising tubs or wagons shall be provided with catches or other suitable contrivances to prevent them from falling out.

(7) Every cage, skip or gig used for lowering or raising persons shall be covered in completely at the top and closed in at the two sides so as to prevent persons or things from projecting beyond the sides, and shall be provided with suitable gates at the ends and with a rigid bar fixed in a position where it can be easily reached.

(8) In a sinking shaft and at other shafts where persons may be underneath, or it otherwise appears requisite, the tub or bucket shall be kept steady and no stones or loose material shall be allowed above the level of the top of it or to adhere to the bottom before it is sent away. Tools, material or other gear shall be safely slung or be loaded into an empty tub or bucket, and if they project above its rim, they shall be securely fastened to the bow or chains supporting the tub or bucket.

(9) Every working shaft and every shaft in the course of being sunk shall, if exceeding 25 yards in depth, be provided with some proper means of communicating distinct and definite signals from and to the bottom of the shaft, and from and to every entrance for the time being in use between the surface and the bottom of the shaft, to and from the surface, and the manager shall prescribe the signals to be used.

(10) There shall be in attendance at the top of every shaft by which persons are about to be lowered or raised in a mine, a competent person (hereinafter referred to as "the banksman") for the purpose of giving and receiving signals. All signals, other than those relating to underground haulage, transmitted to the surface shall be transmitted simultaneously to the engineman and to the banksman.

(11) No person shall give any signal unless he is authorised in writing by the manager to do so.

(12) Where there are entrances into the workings from the shaft at different levels, the manager shall prescribe the signals to be used to indicate the level to which the cage, skip or gig is to be sent and in respect of its movements between one level and another level, and shall fix any other signals that may be required.

(13) A notice shall be posted in the engine house and at the shaft top, and at each entrance into the workings from the shaft containing the signals prescribed in pursuance of paragraph (9).

(14) Where the natural strata are not safe, every working or pumping shaft and every such shaft in the course of being sunk shall be securely cased, lined, or otherwise made secure.

Banksman, Onsetter, etc.

6.—(1) As long as more than 15 persons are below ground in the mine the banksman shall always be in attendance for the purpose of giving and receiving signals.

(2) When persons are being lowered or raised the banksman or onsetter, as the case may be, shall not signal the cage away until the gates with which it is provided are effectively in position.

(3) No minerals, tubs or wagons, timber or other such materials shall be lowered or raised whilst persons are being lowered or raised in the same shaft or outlet, whether in the same cage or not. This paragraph shall not apply in the case of men working in the shafts or outlets, or in the case of men accompanying animals or bulky materials that cannot be lowered or raised in a cage, or in the case of the manager, or any person specially authorised by him other than the workmen employed in the mine.

(4) The maximum number of persons allowed to be carried at one time in any cage or, where it has more than one deck, on each deck of such cage, shall be determined by the manager and indicated in a notice which shall be kept posted up at the top and bottom of the shaft or outlet, and at every entrance for the time being in work between the top and bottom of the shaft or outlet, and no person shall be carried in a cage loaded with more than that number of persons.

(5) For the purpose of this regulation, the expression "cage" includes a skip or gig.

Winding Engineman

7.—(1) The winding engineman shall on no pretext leave the controlling gear whilst the engine or machinery is in motion, or when anyone is in or on the cage, skip or gig.

(2) The winding engineman shall—

(*a*) immediately before lowering or raising any person after any cessation of winding exceeding two hours, run the cage, skip or gig at least once between the surface and the lowest drawing level in order to ascertain whether everything is in order;

(*b*) if any defect is discovered likely to affect the proper working of the winding apparatus, not begin winding until the defect has been remedied;

(*c*) once at least during his shift examine the external parts of the engine to see that they are in proper working order;

(*d*) not allow any other person to handle or operate the winding engine and apparatus unless that person is authorised in writing to do so by the manager;

(*e*) attend during the whole time that any person is below ground in the mine, unless satisfactory means of egress from the mine are available otherwise than by means of the winding machinery.

Ventilation

8.—(1) An adequate amount of ventilation shall be constantly produced in every mine to such an extent that the shafts, outlets, winzes, rises, roads, sumps, levels, stables, pump rooms, haulage rooms, and workings in the mine, shall be in a fit state for working and passing therein. Provided that a discontinued or abandoned part of a mine, not used in connection with the working of the mine, shall, if properly fenced off, not be deemed to be a part of the mine within the meaning of this regulation.

(2) Without prejudice to the generality of the foregoing provisions of this regulation a place shall not be deemed to be adequately ventilated unless—

(*a*) the air contains not less than 19 per cent. of oxygen and not more than $1\frac{1}{4}$ per cent. of carbon dioxide;

(*b*) the supply of air is sufficient to dilute and render harmless any inflammable gases and all noxious gases, including those resulting from the firing of explosives; and

(*c*) the supply of air is sufficient to disperse and remove any airborne dust which is not supressed by other means.

(3) No stone or other material shall be allowed to accumulate in levels, cross-cuts or other underground workings so as to interfere with the ventilation.

(4) No person shall be liable in respect of any contravention of or failure to comply with the provisions of this regulation if he shows that the ventilation was interrupted in consequence of an accident, and that no persons were employed in any part of the mine which was not adequately ventilated, except such persons as it was necessary to employ in that part of the mine for the purpose of restoring the ventilation, under the supervision of the manager or a competent person appointed by him in writing for the purpose.

Water and Boreholes

9. Where at any time there is reasonable cause to apprehend that any working has approached within 40 yards of a place which may contain an accumulation of water or other liquid matter, or noxious gas, adequate and timely precautions shall be taken and, in particular, the working shall not be more than 8 ft. in width, or 8 ft. in height, and there shall constantly be kept at least one borehole not less than 10 ft. in igneous rock and 15 ft. in other strata in advance of the face of the said working, and sufficient flank, roof and floor boreholes of similar lengths as may be necessary to ensure that the water or other liquid matter or gas shall be tapped in the first instance by a borehole.

Travelling Roads, Outlets and Working Places

10.—(1) Every underground road on which persons travel shall be of adequate height and width and if an inspector is of opinion that the height or width of any such road is inadequate, the Ministry may, by notice served on the manager, require that the height or width be increased to such extent as may be specified in the notice, and the manager shall comply with the requisition unless he disputes the reasonableness thereof, in which case he may within 14 days of service of such notice upon him serve on the Ministry a statement in writing of his objections thereto. The Ministry shall consider such objections and may withdraw or modify its notice. If the Ministry refuses to withdraw or modify such notice, the manager may refer the matter to arbitration in the manner provided by regulation 34. On the hearing of such arbitration, the arbitrator may quash, modify or confirm such notice and if any such notice is modified or confirmed it shall take effect accordingly.

(2) Every underground road on which a horse or other animal is used, or by which it has to pass, shall be of sufficient dimensions to allow the animal to pass without rubbing itself or its harness against the roof or sides of the bars or props supporting roof or sides.

(3) The roof and sides of every travelling road, outlet and working place shall be made secure, and no person, unless engaged in repairing or in investigating the safety of the workings shall travel on or work in any travelling road or working place which is not so made secure.

(4) A sufficient supply of timber or other materials suitable for supports shall at all times be placed at the disposal of all workmen requiring to make or keep secure the roof and sides of any working place, outlet or travelling road; and such materials shall be kept in the mine at or near every working place where supports are required to be erected. A reserve supply shall be kept at other suitable places convenient to the workmen, or, if that is not practicable, close to the pithead.

(5) Every entrance to any place below ground in the mine which is not in actual use or course of working or extension shall be kept fenced across the whole width of the entrance so as to prevent persons entering it inadvertently.

(6) As far as is reasonably practicable, every permanent roadway, tramroad, or path across or through any open gunniss, bottoms, sinks or stopes, the top of all winzes, and the edges of all chambers shall be securely fenced.