

1970. No. 104

[C]

MISCELLANEOUS MINES**General**

ORDER, DATED 15TH MAY 1970, MADE BY THE MINISTRY OF COMMERCE UNDER SECTION 164 OF THE MINES ACT (NORTHERN IRELAND) 1969.

WHEREAS by subsection (1) of section 164 of the Mines Act (Northern Ireland) 1969(a) (hereinafter referred to as "the Act"), the Ministry of Commerce (hereinafter referred to as "the Ministry") is empowered to re-enact amongst other things (to the extent to which they could by virtue of the Act be enacted in regulations made under section 120 thereof) provisions of any regulation having effect by virtue of section 86 of the Coal Mines Act 1911(b) and the provisions of any enactment repealed by section 163 of the Act in so far as that enactment is not re-enacted in the Act, subject to such modifications (if any) as appear to the Ministry to be consequential on the passing of the Act or requisite for the purpose either of bringing those provisions into conformity with the Act or of expressly limiting their operation to mines of the class to which their operation is limited immediately before the commencement of the Act:

AND WHEREAS by subsection (2) of that section it is provided amongst other things that an order under subsection (1) shall set out in a schedule to the order the provisions thereby re-enacted and may direct that those provisions shall have effect as if they were regulations made under section 120 of the Act:

NOW, THEREFORE, the Ministry in pursuance of the powers conferred upon it by section 164 of the Act hereby makes the following order:—

1.—(1) The provisions set out in the schedule hereto, being the provisions of sections 14 and 19 of the Metalliferous Mines Regulation Act 1872(c) and the provisions of the Metalliferous Mines (Safety, Health, Welfare and Electricity) Regulations (Northern Ireland) 1969(d) relating to safety, health and welfare subject to such modifications as aforesaid, are hereby re-enacted and shall have effect as if they were regulations made under section 120 of the Act coming into operation at the commencement of the Act.

(2) The provisions set out in the schedule hereto may be cited as the Miscellaneous Mines (General) Regulations (Northern Ireland) 1970.

2. Any exemption, approval or notice given for the purpose of a provision of the Metalliferous Mines (Safety, Health, Welfare and Electricity) Regulations (Northern Ireland) 1969, shall, if in force at the commencement of the Act and so far as it could have been given for the purposes of the Miscellaneous Mines (General) Regulations (Northern Ireland) 1970 (whether by that instrument or an instrument to the like effect), have effect as if it had been so given.

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

(b) 1 & 2 Geo. 5. c. 50.

(c) 35 & 36 Vict. c. 77.

(d) S.R. & O. (N.I.) 1969, No. 104.

3. This order shall come into operation at the commencement of the Act and may be cited as the Miscellaneous Mines (General Regulations) Order (Northern Ireland) 1970.

Sealed with the Official Seal of the Ministry of Commerce for Northern Ireland this 15th day of May 1970 in the presence of

(L.S.)

W. McC. Taylor,
Assistant Secretary.

SCHEDULE

The Miscellaneous Mines (General) Regulations (Northern Ireland) 1970
having effect as if made under section 120 of the
Mines Act (Northern Ireland) 1969

PART I

GENERAL

Application

1. These regulations shall apply to mines other than mines of coal, stratified ironstone, shale or fireclay and in these regulations "mine" means such a mine.

Interpretation

2.—(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;

"air receiver" means—

(a) any vessel (other than a pipe or coil, or an accessory, fitting or part of a compressor) for containing compressed air and connected with an air compressor plant; and

(b) any fixed vessel for containing compressed air or compressed exhaust gas and used for the purpose of starting an internal combustion engine;

"banksman" has the meaning assigned thereto in regulation 17;

"cage" includes skip or gig;

"kibble" includes any form of bucket, basket or barrel in which things may be raised or lowered in a shaft or staple-pit;

"mine" has the meaning assigned thereto in regulation 1;

"steam boiler" means any closed vessel, whether separate or one of a range, in which for any purpose steam is generated at pressure greater than atmospheric pressure and includes any economiser used to heat water being fed to any such vessel and any superheater used for heating steam.

(2) 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

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

PART II

PLANS

4.—(1) It shall be the duty of the manager of every mine in which more than twelve persons are ordinarily employed below ground to keep at the office at the mine, or at such other place as may be approved by the Ministry accurate plans of all the workings in that mine (whether abandoned or not) up to a day not more than six months past.

(2) Nothing in the preceding paragraph shall require a plan to show workings in which no operations have been carried out since the first day of January 1872.

5.—(1) In the event of the abandonment of a mine in which more than twelve persons have ordinarily been employed below ground, or of the expiration of the period of twelve months from the time at which such a mine was last worked for the purpose of getting minerals or products of minerals, it shall be the duty of the person who was the owner of the mine at the time of the happening of that event within three months thereafter to send to the Ministry accurate plans showing the boundaries of the workings at that time.

(2) The plans referred to in the last preceding paragraph shall be on a scale not less than forty inches to the mile or on the scale of the plans last kept at the mine in pursuance of regulation 4.

PART III

INSPECTIONS OF THE MINE

6. In every mine a competent person appointed for that purpose by the manager shall—

- (a) during every ordinary mineral-getting shift, inspect every working place and every road (not being an outlet) in any part of the mine in which any person works during that shift and every road (not being an outlet) in any other part of the mine being a road along which any person has to pass during that shift;
- (b) during every day on which mineral is gotten, inspect any walkable outlet or ladder-way which has to be used by any person during that day;

for the purpose of ascertaining the condition thereof in regard to ventilation, state of roof and sides and general safety.

7. In every mine a competent person appointed for that purpose by the manager shall at intervals not exceeding seven days inspect thoroughly the state of every shaft, staple-pit and unwalkable outlet used as a means of ingress or egress.

8.—(1) In every mine a competent person appointed for that purpose by the manager shall at intervals not exceeding three months travel the whole length of any way affording to persons employed at any place means of ingress and egress, being a way which is not ordinarily used by any person, for the purpose of ascertaining whether it is traversable with safety and reasonable convenience.

(2) In every mine a competent person appointed for that purpose by the manager shall at intervals not exceeding thirty days inspect all accessible parts of each airway of the mine.

PART IV

SHAFTS, STAPLE-PITS AND OUTLETS AND WINDING AND
HAULAGE APPARATUS THEREFOR

9.—(1) Where access to any part of a mine in which persons work can be obtained only by passing through one shaft or unwalkable outlet (other than one in the course of being sunk or driven) and winding or haulage apparatus is ordinarily used in that shaft or outlet, there shall be provided a compartment therein separated throughout by a substantial partition from the part in which that winding or haulage apparatus operates and there shall be provided in that compartment ladders or other safe and reasonably convenient means of egress independent of that winding or haulage apparatus.

(2) Any ladder in a shaft or unwalkable outlet shall be securely fastened to the lining or sides thereof and any platform therein forming part of a ladder-way shall be securely fenced.

Brakes etc.

10.—(1) Where mechanically operated winding apparatus or mechanically operated rope haulage apparatus is used for carrying persons through a shaft, staple-pit or unwalkable outlet, there shall be provided one or more brakes on the drum or drum shaft (or if there is more than one drum on each drum or drum shaft) being brakes which will hold the drum stationary when the maximum torque in a downward direction is applied thereto by the engine and a fully loaded cage or carriage:

Provided that the Ministry may by notice served on the manager of the mine exempt an engine from the requirements of this paragraph.

(2) Where such apparatus is so used there shall be provided a suitable indicator (not being merely a mark on the rope or drum) showing the position of each cage or carriage in the shaft, staple-pit or outlet. That indicator shall be so placed as to be seen easily by the person operating the engine.

(3) Where such apparatus is so used there shall be provided on the drum such flanges or horns and, if the drum is conical, such other devices as will prevent the rope from slipping off.

Guides

11. In every shaft and staple-pit provided with winding apparatus, being a shaft or staple-pit in the case of which the distance between the top thereof and the lowest entrance thereto exceeds one hundred and fifty feet or being a shaft or staple-pit in the course of being sunk of a depth exceeding three hundred feet, guides shall be provided for the cage or kibble:

Provided that the Ministry may by notice served on the manager exempt a shaft or staple-pit from the requirements of this regulation.

Keps

12.—(1) In every shaft provided with a cage which is used for raising or lowering persons keps for supporting the cage when at rest shall be provided at the highest landing to which the cage is raised, may be provided at the lowest entrance to the shaft but shall not be provided at any intermediate entrance thereto.

(2) Keps shall be used when persons are entering or leaving a cage at a place at which they are provided.

Cages or carriages

13. Every cage or carriage which is used for carrying persons through a shaft, staple-pit or unwalkable outlet shall be covered in completely at the top, closed in at the two sides sufficiently to prevent persons or things projecting beyond the sides, and provided with suitable gates at the ends and with a rigid hand bar which can be easily reached by all persons in it.

14.—(1) The manager of every mine shall, in relation to each shaft, staple-pit or unwalkable outlet provided with a cage or carriage used for carrying persons, determine the maximum number of persons who may be carried at one time in any cage or carriage therein and, where a cage or carriage has more than one deck, on each deck of that cage or carriage.

(2) There shall be kept posted at each entrance for the time being in use to each such shaft, staple-pit or unwalkable outlet a notice specifying every number so determined.

15. Every cage or carriage which is used for carrying vehicles through a shaft, staple pit or unwalkable outlet shall be provided with catches or other suitable contrivances to prevent them from falling out.

16.—(1) Where mechanically operated winding apparatus is ordinarily used for carrying persons through a shaft in a cage, there shall be provided appropriate gear for detaching each cage from the rope and holding it stationary in the event of over-winding when it is ascending:

Provided that the Ministry may by notice served on the manager of the mine exempt any winding apparatus thereat from the requirements of this paragraph.

(2) Where mechanically operated winding apparatus is so used and the speed of winding can exceed twelve feet per second, the Ministry by notice served on the manager of the mine may require the provision in connection therewith within such period as may be specified in the notice, and the maintenance, of an automatic contrivance to prevent overwinding.

PART V

PROVISIONS RELATING TO CARRIAGE OF PERSONS AND THINGS THROUGH SHAFTS, STAPLE-PITS AND UNWALKABLE OUTLETS

Banksmen

17.—(1) At every mine where persons are carried through a shaft the manager shall make and secure the efficient carrying out of arrangements whereby a competent person (hereinafter referred to as "the banksman") is in attendance for the purpose of transmitting and receiving signals at the landing in use at the top of the shaft—

- (a) whenever any person is about to be carried through that shaft; and
- (b) whenever more than fifteen persons are below ground in the mine:

Provided that the Ministry may by notice served on the manager grant an exemption in respect of any shaft from the requirements of sub-paragraph (b).

(2) The means provided for transmitting signals shall be such that any signal transmitted from an entrance to the shaft underground shall be transmitted simultaneously to the person operating the winding apparatus and to the banksman.

Signals

18.—(1) In relation to each shaft, staple-pit and unwalkable outlet provided with winding or haulage apparatus the manager shall determine any signals necessary for the proper operation of that apparatus, and, in particular, where there is more than one entrance underground to such a shaft, staple-pit or unwalkable outlet he shall determine the signals to be used to indicate the entrance to or from which the cage, carriage or kibble is to be raised or lowered.

(2) There shall be kept posted at each entrance for the time being in use to each such shaft, staple-pit or unwalkable outlet, and in the place at which is operated the winding or haulage apparatus provided therefor, a notice specifying the signals determined by the manager for transmission therein.

19. No person other than a person authorised by the manager of the mine to do so shall transmit any signal from any entrance to a shaft, staple-pit or unwalkable outlet.

Loading

20. Where persons are to be carried through a shaft, staple-pit or unwalkable outlet in a cage or carriage, the banksman or other person authorised to transmit signals in relation thereto shall not signal the cage or carriage away if it or any deck thereof contains more than the maximum number of persons allowed to be carried or if the gates with which it is provided are not properly closed.

21.—(1) No minerals, equipment or materials (other than things which are required to be or are normally kept by a person in his possession) shall be carried through a shaft, staple-pit or unwalkable outlet whilst persons are being carried through it, whether in the same direction or not, and no person shall signal away a cage, carriage or kibble if he has any cause to believe that the preceding provisions of this paragraph would thereby be infringed.

(2) Nothing in paragraph (1) of this regulation shall prevent—

- (a) persons who are to work in a shaft, staple-pit or outlet having with them when being carried therethrough equipment or materials which they will or may require for the purposes of that work; or
- (b) persons accompanying bulky materials which cannot be lowered or raised in a cage or carriage;

and for the purposes of the said paragraph no account shall be taken of the carriage of the owner or manager of the mine or of any official, engineer or technician in the case of whom the manager has by notice directed that the said paragraph shall not apply.

22. Where a kibble is used in any shaft or staple-pit in which persons are or may be underneath the kibble, no person shall signal it away unless he is satisfied that—

- (a) no loose mineral is carried above the level of the rim;
- (b) tools, equipment or other materials for use or used in the mine are not loaded together with mineral;
- (c) when things which project above the rim are carried they are securely fastened to the bow of chains supporting the kibble;
- (d) nothing capable of causing injury is adhering to the outside of the kibble; and
- (e) when the kibble is being raised, it is in line with the pulleys and carefully steadied.

PART VI

DUTIES OF PERSONS OPERATING WINDING APPARATUS

23.—(1) A person operating any winding apparatus with which a shaft is provided shall not leave the controlling gear whilst the apparatus is in motion or when he has any cause to believe that anyone is in or on the cage or kibble.

(2) Every person operating any such winding apparatus shall at least once during his shift examine the external parts of any engine which he operates to see if they are in proper working order.

(3) After any cessation of winding exceeding two hours the person operating any such winding apparatus shall immediately before lowering or raising any person run the cage or kibble at least once between the top of the shaft and the lowest entrance to the shaft for the time being in use in order to ascertain whether winding can be safely resumed. If any defect likely to affect the proper working of the winding apparatus is thus discovered he shall not begin winding until the defect has been remedied.

24. No person operating any winding apparatus shall allow any engine to be operated under his supervision (on an occasion to which subsection (1) of section 42 of the Act does not apply) by any person other than one authorised in writing by the manager so to do.

PART VII

HAULAGE ROADS

25. Nothing in paragraph (a) of subsection (1) of section 39 of the Act shall prohibit a person passing on foot along a length of road during a period during which vehicles are moving therein—

- (a) if the maximum speed at which vehicles may run therein does not exceed six miles per hour; or
- (b) if there is a continuous clear space not less than two feet in width between the vehicles and one side of the road.

26.—(1) For the purposes of section 40 of the Act the intervals, which must not be exceeded, between refuge holes in roads in which vehicles run shall be—

- (a) in the case of a length of road in which the gradient does not exceed 1:20 and in which the maximum speed of the vehicles must not exceed four miles per hour, three hundred feet;
- (b) in any other case, sixty feet.

(2) For the said purposes the prescribed dimensions of refuge holes are—

- (a) in width, three feet as nearly as may be;
- (b) in depth, not less than three feet; and
- (c) in height, not less than the height of the road at that place or six feet, whichever is the less.

(3) Where in any length of road there is a continuous clear space not less than two feet in width between vehicles running therein and one side of the road, every refuge hole therein shall be on that side of the road.

(4) Where in any length of road such clear space is not provided, any refuge holes in a part of the road which curves shall be on the outside of the curve and, so far as is consistent with that requirement, all the refuge holes therein shall be on the same side of the road.

(5) The manager of a mine may permit vehicles to run in a length of road, notwithstanding that refuge holes are not provided therein in accordance with the provisions of section 40 of the Act and the preceding paragraphs of this regulation, if as regards that length of road—

- (a) the aggregate weight of mineral carried therein in any hour does not exceed ten tons; or
- (b) there is a continuous clear space not less than two feet in width between the vehicles and one side of the road.

27.—(1) Where means of transmitting signals are provided in pursuance of section 46 of the Act in relation to rope haulage apparatus or a conveyor installed in a road, the manager of the mine shall determine the signals to be used in connection with the operation of that apparatus or conveyor.

(2) There shall be kept posted at the place at which the apparatus or conveyor is operated and at suitable places along the road a notice specifying the signals determined by the manager for use therein.

28. A sufficient supply of suitable sprags, lockers or drags shall be provided, maintained and used for the purpose of holding vehicles—

- (a) at the top of every incline on which vehicles are moved by gravity operated rope haulage apparatus; and
- (b) at suitable points on any length of road in which the gradient exceeds 1:20.

PART VIII

LIGHTING, LAMPS, EXPLOSIVES, PRECAUTIONS AGAINST FIRE AND INRUSHES

Lighting

29. The manager of every mine shall secure the provision and maintenance of suitable and sufficient lighting at such entrances below ground to each shaft or outlet and at such sidings provided in relation thereto as are regularly used whenever persons are working thereat or walking therethrough.

Lamps

30. The manager of every mine in which or in part of which the use of lamps or lights, other than permitted lights, is unlawful shall make and ensure the efficient carrying out of arrangements to secure that no safety-lamp is taken for use below ground in that mine or part unless it has since last in use been thoroughly examined and found to be in safe working order and unless it is securely locked.

31. No person employed below ground at a mine shall leave his working place without taking his portable lamp or light with him.

Precautions against fire

32. At every building or structure at or adjoining the top of a shaft or outlet and in every engine room, motor room or boiler gallery, being a building, structure, room or gallery in the construction of which timber is used, there shall be provided and maintained suitable and sufficient means of extinguishing any fire thereat.

33.—(1) No inflammable material shall be used in the construction of any room or compartment containing electrical apparatus below ground in any mine, or inside any such room or compartment in proximity to such apparatus, unless the apparatus is so constructed, protected and worked as to obviate the risk of fire.

(2) No oil or other inflammable material shall be stored in any place below ground containing electrical apparatus.

34. At any place below ground in any mine at which electrical apparatus immersed in more than one hundred gallons of oil in the aggregate is installed the manager shall secure the provision of suitable and sufficient means for localising and extinguishing any fire resulting from the ignition of the oil.

35. No loose material which is burning shall be left unattended below ground otherwise than in pursuance of section 79 or section 80 of the Act.

36. No calcium carbide shall be taken below ground otherwise than in a lamp or in a water-tight metal container.

Precautions against inrush of liquid or gas

37. Without prejudice to the obligation imposed by section 77 of the Act, where at any time there is reasonable cause to apprehend that any working in a mine is within one hundred and twenty feet of a place which may contain an accumulation of water or other liquid matter or noxious gas—

- (a) the working shall not be more than eight feet in width or eight feet in height;
- (b) there shall constantly be kept in advance of the face of the working at least one bore hole not less than ten feet in length in igneous rock or fifteen feet in length in other strata; and
- (c) there shall be kept such flank, roof and floor bore-holes of similar length as may be necessary to ensure that any water or other liquid matter or gas in that place will be tapped in the first instance by a bore-hole.

PART IX

MACHINERY AND ROPES

General

- 38.—(1) No person shall clean any machinery which is in motion.
- (2) No person shall oil or grease any machinery which is in motion unless provision is made for the operation to be performed in safety.
- (3) No person shall put any belt on or off a pulley while any machinery of which it forms part is in motion under mechanical power otherwise than by means of a safety contrivance.

39. At every mine a competent person appointed for that purpose by the manager shall at intervals not exceeding seven days examine any machinery and apparatus forming part of the equipment of the mine other than machinery or apparatus the periodical examination of which at more frequent intervals is expressly provided for by regulations (including these regulations) or any winding or haulage apparatus which is in use solely for carrying persons through any shaft, staple-pit or unwalkable outlet but which is not ordinarily so used.

Maintenance of winding and haulage apparatus

40. At every mine a competent person appointed for the purpose by the manager shall examine thoroughly—

- (a) at intervals not exceeding twenty-four hours, the external parts of any winding or haulage apparatus (including any apparatus ancillary thereto) which is in use for carrying persons through any shaft, staple-pit or unwalkable outlet;
- (b) at intervals not exceeding three months and immediately before use for carrying persons on any occasion, any winding or haulage apparatus which is provided for any shaft, staple-pit or unwalkable outlet but which is not ordinarily so used.

41.—(1) At every mine a competent person appointed for the purpose by the manager shall at intervals not exceeding six months thoroughly examine all apparatus (including any detaching hook) provided for attaching to the rope any cage, carriage or kibble ordinarily used in a shaft, staple-pit or unwalkable outlet.

(2) the manager of every mine shall make and secure the efficient carrying out of arrangements whereby any such apparatus so used is at intervals not exceeding six months annealed or subjected to other appropriate heat treatment:

Provided that in relation to any apparatus made of any steel which does not require heat treatment the Ministry may by notice served on the manager of the mine exempt such apparatus from the application of this paragraph.

(3) The manager of every mine shall make and secure the efficient carrying out of arrangements whereby every detaching hook is dismantled, cleaned and refitted at intervals not exceeding three months.

(4) Where the efficient operation of any detaching hook would be affected by wear of any ancillary plate or bell a competent person appointed for the purpose by the manager shall at intervals not exceeding thirty days measure the relevant dimensions by means of calipers or gauges.

Ropes

42.—(1) No spliced rope shall be used for winding in a shaft or staple-pit in which persons are raised or lowered.

(2) No rope shall be so used for more than three and a half years:

Provided that if the Ministry, having regard to the condition of the rope and the extent to which and the circumstances in which it has been used, is satisfied that it can be used for such winding for a further period without danger, it may by notice served on the manager authorise such use of that rope for a further period.

43. No rope shall be used in winding apparatus in which the rope is wound on a drum unless it is of such length that there are at least two rounds of it on the drum when the cage or kibble is at the lowest entrance of the shaft or staple-pit.

44.—(1) A competent person appointed for the purpose by the manager of the mine shall at intervals not exceeding thirty days thoroughly examine each rope used for winding in a shaft or staple-pit.

(2) In the course of any such examination the rope shall be thoroughly cleaned at all places particularly liable to deterioration and at other places not more than three hundred feet apart throughout its length and at each of these places after cleaning examination shall be made of the circumference and surface condition of the rope and for any fractures of the wires.

Capels of winding and haulage ropes

45. No capped rope shall be used in winding or haulage apparatus unless the capping is of a type which has been found to withstand a load of—

- (a) in the case of a rope used in winding apparatus, at least seven times the maximum static load which may be suspended on that rope;
- (b) in the case of a rope used in haulage apparatus, at least sixty per cent. of the breaking strain of rope of that type.

46. No capped rope shall be used in any haulage apparatus by means of which persons are carried or in any winding apparatus unless when the capping was made the work was superintended by a competent person appointed for that purpose by the manager of the mine.

47. No capped rope shall be used at any time for winding in any shaft or staple-pit unless the capping has been made within the period of six months immediately preceding that time.

48.—(1) No rope which has been re-capped shall be used in any haulage apparatus by means of which persons are carried or in any winding apparatus unless on the last occasion on which it was re-capped a part of the rope including the capping not less than six feet in length was cut off: so however that if at the date of any re-capping the preceding capping or re-capping was done not more than three, four or five months previously the part to be cut off need not exceed three, four or five feet respectively.

(2) Any length of rope cut off in pursuance of this regulation shall forthwith be opened up and its internal condition examined by a competent person appointed for the purpose by the manager of the mine.

49. No rope having a capping containing white metal shall be used in any winding or haulage apparatus unless—

- (a) the capping was made with white metal of which the melting point is not higher than 570° Fahr. or 299° Cent. and the temperature of which when poured into the socket of the capel did not exceed 685° Fahr. or 363° Cent.;
- (b) in the length of rope which lies within the tapered part of the socket any fibre core was cut out when the capping was made and the wires were then untwisted and thoroughly cleaned; and
- (c) the temperature of the socket of the capel was as nearly as might be 212° Fahr. or 100° Cent. immediately before the white metal was poured into it.

50. No rope with a form of capping in which the wires at the end of the rope are bent back on the rope itself to form a cone shall be used in any haulage apparatus by means of which persons are carried or in any winding apparatus, unless—

- (a) wedges formed by lapping with soft iron wire are placed between the rope and the wires which are bent back; and
- (b) the length of the tapered portion of the socket of the capel is not less than eight times the diameter of the rope.

51. No round rope to which a capel is attached by rivets passing through the rope shall be used in any haulage apparatus by means of which persons are carried or in any winding apparatus.

Lifting machines

52.—(1) At every mine a competent person appointed for that purpose by the manager shall thoroughly examine at intervals not exceeding fourteen months all parts and working gear whether fixed or moveable including the anchoring and fixing appliances of any crane, crab or winch operated by mechanical power and used as a lifting machine.

(2) No crane, crab or winch operated by mechanical power (other than a new machine) which has been dismantled or out of regular use for a period exceeding two months shall be taken into use as a lifting machine at any mine for the first time at that mine unless immediately prior thereto all parts and working gear thereof, whether fixed or moveable, including the anchoring and fixing appliances have been thoroughly examined by a competent person appointed for that purpose by the manager.

53. Every crane, crab or winch operated by mechanical power and used as a lifting machine at a mine shall be provided with an efficient catch or an efficient brake.

Steam boilers

54.—(1) Every steam boiler at a mine shall be provided with—

- (a) a steam gauge and a water gauge to show respectively the pressure of steam and the height of water in each boiler; and
- (b) unless it is externally fired, a suitable fusible plug or an efficient low water alarm device.

(2) This regulation shall not apply to economisers or superheaters.

55.—(1) Every steam boiler at a mine shall be provided with a suitable safety valve.

(2) No person shall alter the setting of any safety valve attached to any steam boiler except with the authority of an official of the mine under whose direction he works.

56. Every water gauge attached to any steam boiler at a mine shall be provided with a suitable covering or guard unless it is so constructed as to be as safe to persons working or passing near-by as it would be if so protected.

57.—(1) Every steam boiler at a mine and all its fittings and attachments shall—

- (a) be cleaned out and examined internally as far as the construction thereof will permit at intervals not exceeding six months by a competent person appointed for that purpose by the manager; and
- (b) be examined thoroughly at intervals not exceeding fourteen months by a competent person so appointed.

(2) No steam boiler which has been in use at the mine or elsewhere and which has received extensive repairs or been dismantled or been out of regular use for a period exceeding one month shall be taken into use at any mine for the first time at that mine unless immediately prior thereto it and all its fittings and attachments have been examined thoroughly by a competent person appointed for the purpose by the manager.

58. A person who has made an examination of a steam boiler in pursuance of the last preceding regulation shall, within twenty-eight days of the completion of the examination, make and sign in, or make, sign and attach to, a book provided for that purpose by the owner of the mine, a full and accurate report of the result of the examination which shall include the permissible working pressure of the boiler:

Provided that if the person appointed by the manager to make the examination is a boiler inspection company or association the report shall be a report signed by the person making the examination, countersigned by the chief engineer or other officer of similar status of the company or association and delivered to the manager for attachment to the said book within twenty-eight days of the completion of the examination.

59.—(1) No new steam boiler shall be taken into use at a mine unless there has been obtained from the manufacturer thereof or some other competent person a certificate stating the nature of any tests to which the boiler and its fittings and attachments have been submitted and specifying the maximum permissible working pressure thereof and the boiler is so marked as to enable it to be identified as the boiler to which the certificate relates.

(2) Every such certificate shall be preserved until the expiration of three years after the date on which it was given.

Air receivers

60.—(1) Every air receiver at a mine shall—

- (a) have marked upon it so as to be plainly visible the maximum safe working pressure and be fitted with an accurate pressure gauge;
- (b) be fitted with a suitable safety valve so adjusted as to permit the air to escape as soon as the maximum safe working pressure is exceeded; and
- (c) be fitted with a blow-off cock through which any fluid which may accumulate in the receiver may be blown off.

(2) For the purposes of the provisions of the foregoing paragraph relating to pressure gauges and safety valves any set of air receivers supplied with air through a single pipe to which the pressure gauge and safety valve are fitted may be treated as one receiver.

(3) The manager shall make and ensure the carrying out of arrangements whereby any blow-off cock is opened at least once in every working day whilst an air receiver is under pressure.

61.—(1) Every air receiver at a mine shall be thoroughly cleaned and examined at intervals not exceeding twenty-six months by a competent person appointed for the purpose by the manager. If any receiver of solid drawn construction is so made that the internal surface cannot be thoroughly examined a suitable hydraulic test of the receiver shall be carried out instead of internal examination.

(2) A person who has made an examination of an air receiver in pursuance of this regulation shall forthwith make and sign in, or make, sign and attach to, or make, sign and deliver to the manager for attachment to, a book provided for that purpose by the owner of the mine, a full and accurate report of the result of the examination.

(3) If a person who has carried out an examination of an air receiver of solid drawn construction specified in his report that in his opinion further examination is unnecessary for a period so specified being a period exceeding twenty-six months but not exceeding four years, paragraph (1) hereof shall have effect as if it required examination before the expiration of the period so specified instead of twenty-six months.

Lines and sidings

62. No lines of rails of a gauge of or exceeding four feet eight and a half inches (other than a railway line belonging to a railway company) shall be installed or used at any mine except in accordance with regulations applicable to that mine.

PART X

DISCIPLINE

63. No person shall be at a mine in a state of intoxication or without the permission of the manager shall bring any intoxicating liquor to a mine.

64. No person shall travel by means of an aerial rope-way at a mine otherwise than under the authority in writing of the manager of the mine.

65. Except under the authority of an official of the mine, no person employed in any mine shall travel below ground to or from his work by any road other than those notified by the manager for the purpose, or go into any part of the mine which it is not necessary for him to enter for the purpose of his work.

66. Any person who opens any door intended to direct the ventilation in a mine shall secure that it is closed forthwith, and any person who moves any screen or sheet intended for that purpose shall secure that it is replaced forthwith.

67. Except with the authority of an official of the mine, no person shall pass beyond any enclosure or barrier or danger signal or open any locked door.

68.—(1) Every person engaged at any working face (including a place in a road at which ripping or work of repair is in progress) or in setting or withdrawing supports shall make a careful examination of his working place at the beginning of each period of work and at appropriate times during the course of it and in particular after any shot has been fired thereat or near-by and after any other interruption of work. He shall remove or secure any loose part of the roof, face or sides at his working place which might be dangerous.

(2) Every person so engaged shall take any necessary steps to avoid interruption of the ventilation of the mine whether by accumulations of mineral, vehicles or stores.

69. No person shall work on any ledge or other place at a mine which is not fenced and from which he may fall six feet six inches or more unless he has been provided with a rope or other suitable appliance for his protection and he has at the beginning of that period of work satisfied himself of the safety of the rope or appliance and he is secured by it.

70. Except in a shaft or staple-pit in the course of being sunk, no person shall remain underneath anything suspended from winding apparatus or any lifting appliance.

PART XI

WELFARE

First-aid

71.—(1) Without prejudice to the generality of subsection (1) of section 91 of the Act, it shall be the duty of the manager of every mine to secure the provision and maintenance—

- (a) on the surface thereat in a place which is readily accessible, of a first-aid box or cupboard distinctively marked "First-Aid" and containing a copy of the current leaflet giving advice on first-aid treatment issued by the Ministry of Health and Social Services for purposes of Factories legislation but otherwise containing nothing except first-aid requisites and appliances;
- (b) at suitable places below ground thereat, of adequate equipment for rendering first-aid; and
- (c) both on the surface and below ground in readily accessible places suitable stretchers for the safe removal of persons employed at the mine who suffer bodily injury or become ill,

- (2) Every such first-aid box or cupboard shall contain—
- (a) sterilised dressings of large and small sizes including non-medicated burn dressings;
 - (b) cotton wool or other material for padding;
 - (c) roller bandages;
 - (d) splints (four and a half feet, three feet and one foot), the appropriate triangular bandages therefor and splint padding;
 - (e) sterilised cotton wool in half ounce packets and adhesive wound dressings of an approved type;
 - (f) suitable antiseptic;
 - (g) approved eye ointment in a container of an approved type and size, sterilised eye pads in separate sealed packets and a bottle suitable for washing eyes;
 - (h) a rubber bandage or pressure bandage, scissors and safety pins; and
 - (i) a bottle of meat extract, coffee extract or other stimulant and a drinking vessel.

(3) The manager shall appoint responsible persons to be in charge of the first-aid box or cupboard, so that such a person is readily available at all times at which any person is working in the mine. Every person so appointed shall be the holder of a certificate of proficiency in first-aid granted by a body or society which is a training organisation within the meaning of the First Aid (Standard of Training) Order (Northern Ireland) 1960(e).

(4) There shall be provided in the covered accommodation provided in accordance with section 114 of the Act a notice stating the names of the persons for the time being appointed in pursuance of the last preceding paragraph.

(5) It shall be the duty of the manager of every mine to appoint persons who hold such certificates of proficiency and to make arrangements to secure, so far as practicable, that there is in the mine below ground on each shift one such person for each ten persons in the total number of persons wholly or mainly employed therein on that shift.

(6) It shall be the duty of the manager of a mine to secure the provision of a suitable appliance to minimise discomfort and prevent aggravation of any injury—

- (a) at every shaft or unwalkable outlet through which injured persons are raised and in which the cage or carriage is not large enough to permit of a stretcher being laid flat therein;
- (b) at every shaft or unwalkable outlet through which persons are raised otherwise than in a cage or carriage;
- (c) at every shaft or unwalkable outlet in the course of being sunk or driven; and
- (d) in every mine in which workings are steeply inclined.

(7) The owner of every mine shall provide and maintain a suitably constructed ambulance carriage for the conveyance where necessary to hospital or their homes of persons who while employed at the mine suffer bodily injury or become ill, or shall make such arrangements as will provide such a carriage for that purpose promptly from a place within a reasonable distance of the mine.

(8) It shall be the duty of the manager of every mine to make and ensure the efficient carrying out of arrangements whereby he or a competent person appointed by him inspects at intervals not exceeding thirty days all equipment provided at the mine for the purpose of rendering first-aid to ensure that it is in conformity with this regulation.

(9) Where an inspector is of opinion that as regards any mine any of the requirements of this regulation may reasonably be suspended or relaxed, the Ministry may by notice served on the manager of the mine suspend or relax that requirement to such extent as is specified in the notice.

(10) Every dressing provided in pursuance of this regulation and in respect of which a standard is specified in the British Pharmaceutical Codex shall comply in all respects with that standard.

(11) For purposes of this regulation "approved" means approved for the time being for the purposes of the First-Aid Boxes in Factories Order (Northern Ireland) 1960(f).

Changing and messing

72.—(1) There shall be provided and maintained at every mine—

- (a) for the use of all persons employed thereat, suitable accommodation on the surface for changing and drying clothes, not being accommodation in an engine house or boiler house;
- (b) for the use of all persons employed on the surface thereat, suitable accommodation for the taking of meals furnished with facilities for heating food and boiling water.

(2) At any mine at which more than ten persons are employed on the surface on any shift the accommodation provided respectively under sub-paragraphs (a) and (b) of the last preceding paragraph shall be separate.

(3) The accommodation provided under paragraph (1) of this regulation shall be kept clean and the ceilings and all inside walls and partitions of such accommodation shall, unless they are kept painted or have a smooth impervious surface, be whitewashed or colourwashed at intervals not exceeding fourteen months.

(4) If an inspector is of opinion with respect to any mine that it would not be right to require compliance with any provision of this regulation the Ministry may by notice served on the manager exempt that mine from compliance with that provision.

Sanitary conveniences

73. It shall be the duty of the manager of every mine to ensure—

- (a) that all sanitary conveniences provided above ground at the mine are—
 - (i) under cover;
 - (ii) so screened as to secure privacy for persons using them; and
- (b) that every sanitary convenience provided at the mine for the use of females is provided with a door which can be firmly secured on the inside when shut.

PART XII

MISCELLANEOUS PROVISIONS

Ladders

74.—(1) Any fixed ladder ordinarily in use below ground shall be inclined at the most convenient angle which the available space allows and shall not in any case be in a vertical or overhanging position.

(2) Every ladder exceeding thirty feet in length and ordinarily in use below ground shall have substantial platforms at intervals of not more than thirty feet and unless strong hand holds are provided shall project at least three feet above each platform or landing.

Fencing

75. The top of any hopper or kiln shall be kept securely fenced.

76. Any gantry or platform (other than a temporary wheeling plank) shall be securely fenced on any open side if it would otherwise be dangerous to persons working on or passing along it, and any such gantry or platform shall be provided with a continuous skirting board not less than nine inches high on any open side.

77. Any road or way below ground which passes or crosses any sink or stope shall be securely fenced on any open side if it would otherwise be dangerous to persons passing along it.

Clearance of ledges

78. It shall be the duty of the manager of every mine to make and ensure the efficient carrying out of arrangements to secure that loose materials are not allowed to accumulate on ledges or landings from which they might fall and cause injury.

Disused shafts

79. No person shall descend any shaft or staple-pit which is not ordinarily used by any person, unless it has been ascertained, by the lowering of a flame lamp or otherwise, that it does not then contain any dangerous concentration of noxious gas.

Assignment of duties to competent persons

80. It shall be the duty of the manager of every mine to make and ensure the efficient carrying out of arrangements to secure that every inspection, examination or other thing required by these regulations to be carried out or done by a competent person appointed by him is assigned to a competent person so appointed. A manager may in any case appoint himself.

Reports of inspections and examinations

81. Except in the case of any examination of a steam boiler in pursuance of regulation 57 or any inspection of first-aid equipment in pursuance of paragraph (8) of regulation 71, and subject (in the case of any examination of an air receiver) to the provisions of paragraph (2) of regulation 61, any person who has made an inspection or examination required by these regulations to be made by a competent person appointed by the manager of the mine shall forthwith make and sign in a book provided for the purpose by the owner of the mine a full and accurate report of the result of the inspection or examination.

EXPLANATORY NOTE

(This note is not part of the order, but is intended to indicate its general purport.)

This order is made under the Mines Act (Northern Ireland) 1969, section 164, which empowers the Ministry of Commerce to re-enact (to the extent to which they could be enacted in regulations made under the Act and subject to modifications of the kind specified in that section) the provisions of any enactment repealed by section 163 of the Act in so far as that enactment is not re-enacted in the Act and of regulations which will cease to have effect at the commencement of the Act.

The provisions set out as regulations in the schedule to this order relate to the general duties of management and employees in mines, other than mines of coal, stratified ironstone, shale or fireclay, in matters of safety (including the use of machinery, plant and apparatus), health and welfare. These regulations comprise, and will at the commencement of the Act replace, the safety, health and welfare provisions of the Metalliferous Mines (Safety, Health, Welfare and Electricity) Regulations (Northern Ireland) 1969.