FIRST SCHEDULE

THE MISCELLANEOUS MINES (GENERAL) REGULATIONS, 1956, HAVING EFFECT AS IF MADE UNDER SECTION ONE HUNDRED AND FORTY-ONE OF THE MINES AND QUARRIES ACT, 1954

PART IX

Machinery and ropes

General

- **37.**—(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.
- **38.** 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

- **39.** 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.
- **40.**—(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 an inspector 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

- **41.**—(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 Minister, 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, he may by notice served on the manager authorised such use of that rope for a further period.

- **42.** No rope shall be used in winding apparatus in which the rope is wound on a drum unless it is of such a 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.
- **43.**—(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

- **44.** 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.
- **45.** 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.
- **46.** 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.
- 47.—(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 of 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.

- **48.** 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., and the temperature of which when poured into the socket of the capel did not exceed 685° Fahr.;
 - (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. immediately before the white metal was poured into it.
- **49.** 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.
- **50.** 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

- **51.**—(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.
- **52.** 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

- **53.**—(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.
- **54.**—(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.

- **55.** 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.
 - **56.**—(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.
- **57.** 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.

- **58.**—(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

- **59.**—(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.

- **60.**—(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 specifies 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

61. 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.