Health, Safety and Welfare

Blasting

SPECIAL REGULATIONS, DATED 10TH NOVEMBER, 1950, MADE BY THE MINISTRY OF LABOUR AND NATIONAL INSURANCE UNDER SECTION 65 OF THE FACTORIES ACT (NORTHERN IRELAND), 1938, AND SECTION 8 OF THE FACTORIES ACT (NORTHERN IRELAND), 1949.

1950. No. 205

The Ministry of Labour and National Insurance for Northern Ireland by virtue of the powers conferred by Section 65 of the Factories Act (Northern Ireland), 1938, (**a**) (hereinafter referred to as " the principal Act "), Section 8 of the Factories Act (Northern Ireland), 1949, (**b**) and of all other powers in that behalf, hereby makes the following Special Regulations :—

PART I — GENERAL

Short title, commencement and revocation

1.—(1) These Regulations may be cited as the Blasting (Castings and Other Articles) Special Regulations (Northern Ireland), 1950, and shall come into operation on the 1st day of January, 1951.

(2) Regulation 17 of the Grinding of Metals Special Regulations (Northern Ireland), 1950 (**c**), shall not apply to ventilating plant to which Regulation 11 of these Regulations applies.

Interpretation

2.—(1) The Interpretation Act, 1889 (**d**), applies to the interpretation of these Regulations as it applies to the interpretation of an Act of the Parliament of Northern Ireland.

(2) These Regulations are in addition to and not in derogation of the provisions imposing requirements as to health or safety contained in Parts I, II and IV of the principal Act.

(3) In these Regulations, unless the context otherwise requires, the following expressions have the meanings hereby assigned to them respectively, that is to say :—

" Blasting " means the cleaning, smoothing, roughening, or removing of part of the surface of any article by the use as an abrasive of a jet of sand, metal shot, or grit or other material, propelled by a blast of compressed air or steam or by a wheel.

" Blasting enclosure " means a chamber, barrel, cabinet or other similar enclosure designed for the performance of blasting therein.

(a) 2 Geo. 6. c.23 (b) 13 Geo. 6. c.6
(c) S. R. & O. of N.I., 1950, No. 203 (d) 52 & 53 Vict. c.63

" Blasting chamber " means a blasting enclosure into which persons enter.

" Chief Inspector " has the same meaning as in the principal Act.

" Cleaning of castings " means, where done as an incidental or supplemental process in connection with the making of metal castings, the freeing of the castings from adherent sand or other substance and includes the removal of cores and the general smoothing of the castings where such freeing is done, but does not include the freeing of castings from scale formed during annealing or heat treatment.

Application of Regulations

3. Subject to the provisions of Regulation 4 of these Regulations :

(1) Part II of these Regulations shall apply to all factories in which blasting is done ; and

(2) Part III of these Regulations shall apply as respects blasting in any factory in or incidental to the cleaning of castings.

Exemptions

4.—(1) If the Chief Inspector is satisfied that in any factory, or in factories of any specified class or description, the use of sand or other substance containing free silica as an abrasive in blasting is necessary for a particular manufacture or process (other than a process incidental or supplemental to the making of metal castings), he may by certificate in writing (which he may in his discretion revoke at any time), as respects that manufacture or process, exempt that factory, or factories of that class or description, from the application of Part II of these Regulations either absolutely or subject to such conditions as may be specified in the certificate.

(2) If the Chief Inspector is satisfied in respect of any factory, or in respect of factories of any specified class or description, that owing to the special conditions or special methods of work or otherwise any requirement of these Regulations can be suspended or relaxed without danger to the health of the persons employed, or that the application of any such requirement is for any reason impracticable or inappropriate, he may by certificate in writing (which he may in his discretion revoke at any time) exempt that factory, or factories of that class or description, from the application of that requirement either absolutely or subject to such conditions as may be specified in the certificate.

(3) Where any certificate is issued under this Regulation a legible copy thereof, showing the conditions (if any) subject to which it has been granted, shall be kept posted up in every factory to which the exemption applies in a position where it may conveniently be read by the persons employed.

PART II — PROHIBITION OF SANDBLASTING

Abrasives in blasting apparatus

5. No sand or other substance containing free silica shall be introduced as an abrasive into any blasting apparatus.

PART III — PRECAUTIONS IN CONNECTION WITH BLASTING IN THE CLEANING OF CASTINGS

Blasting to be done in blasting enclosure

6. Blasting shall not be done except in a blasting enclosure, and no work shall be performed in a blasting enclosure except blasting and work immediately incidental thereto and the cleaning and repairing of the enclosure and of plant and appliances situated therein. Every door of a blasting enclosure shall be kept closed while blasting is being done therein.

Maintenance of blasting enclosure

7. Blasting enclosures shall be constantly maintained in good condition and all practicable measures shall be taken to prevent dust escaping from such enclosures, and from any apparatus connected therewith, into the air of any room.

Provision of separating apparatus

8. There shall be provided and maintained in connection with every blasting enclosure efficient apparatus for separating, so far as practicable, abrasive which has been used in blasting apparatus, and which is to be used again as an abrasive, from dust or particles of other material arising from blasting, and no such abrasive shall again be introduced into blasting apparatus until it has been so separated :

Provided that this Regulation shall not apply (except in the case of blasting chambers) to blasting enclosures constructed before the making of these Regulations and in connection with which it is not reasonably practicable to provide apparatus in accordance with this Regulation.

Provision of ventilating plant

9. There shall be provided and maintained in connection with every blasting enclosure efficient ventilating plant to extract, by exhaust draught effected by mechanical means, dust produced in the enclosure and to remove and dispose of such dust so that it shall not escape into the air of any room ; and every bag used for filtering the dust and every other filtering or settling device situated in a room in which persons, other than persons attending to such bag or other filtering or settling device, are employed shall be completely separated from the general air of that room in an enclosure ventilated to the open air.

Operation of ventilating plant

10. The ventilating plant provided for the purposes of Regulation 9 of these Regulations shall be kept in continuous operation whenever

the blasting enclosure is in use whether or not blasting is actually taking place therein, and in the case of a blasting chamber shall be in operation when any person is inside the chamber for the purpose of cleaning or repair work.

Inspection and examination of blasting enclosures, apparatus and ventilating plant

11.—(1) In every week in which it is used for blasting, every blasting enclosure shall be specially inspected by a person competent for the purpose. At least once in every month, every blasting enclosure, the apparatus connected therewith and the ventilating plant provided in connection with the enclosure shall be thoroughly examined and, in the case of ventilating plant, tested by a person competent for the purpose.

(2) Particulars of the result of every such inspection, examination and test shall forthwith be entered in a register which shall be kept in a form approved by the Chief Inspector and shall be available for inspection by any workman employed in or in connection with blasting in the factory. Any defect found on any such inspection, examination or test shall be immediately reported by the person carrying out the inspection, examination or test to the occupier, manager or other appropriate person and, without prejudice to the foregoing requirements of these Regulations, shall be remedied without avoidable delay.

Provision of protective helmets, gauntlets and overalls

12.—(1) There shall be provided and maintained for the use of all persons who are employed in a blasting chamber, whether in blasting or in any work connected therewith or in cleaning inside such a chamber, protective helmets of a type approved by certificate of the Chief Inspector ; and every such person shall wear the helmet provided for his use whilst he is in the chamber and shall not remove it until he is outside the chamber.

(2) Each protective helmet shall carry a distinguishing mark indicating the person by whom it is intended to be used, and no person shall wear or be allowed or required to wear a helmet not carrying his mark, or a helmet which has been worn by another person and has not since been thoroughly disinfected.

(3) Each protective helmet when in use shall be supplied with clean and not unreasonably cold air at a rate of not less than six cubic feet per minute.

(4) Suitable gauntlets and overalls shall be provided for the use of all persons while performing blasting or assisting at blasting, and every such person shall while so engaged wear the gauntlets and overalls provided.

Precautions in connection with cleaning and other work

13.—(1) Where any person is engaged upon the cleaning of any blasting apparatus or blasting enclosure, or of any apparatus or ventilating plant connected therewith or the surroundings thereof, or upon any

other work in connection with any blasting apparatus or blasting enclosure or with any apparatus or ventilating plant connected therewith, so that he is rendered liable to inhale dust which has arisen from blasting, all practicable measures shall be taken to prevent such inhalation.

(2) In connection with the cleaning operations referred to in the preceding paragraph of this Regulation and with the removal of dust from filtering or settling devices, all practicable measures shall be taken to dispose of the dust in such a manner that it does not enter the air of any room. Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

Storage accommodation for protective wear

14. Adequate and suitable storage accommodation for the helmets, gauntlets, and overalls required by Regulation 12 of these Regulations shall be provided outside and conveniently near to every blasting enclosure and such accommodation shall be kept clean. Helmets, gauntlets and overalls, when not in actual use, shall be kept in this accommodation.

Maintenance and cleaning of protective wear

15. All helmets, gauntlets, overalls and other protective devices or clothing provided and worn for the purposes of these Regulations shall be kept in good condition and freed so far as reasonably practicable from dust on every week-day on which they are used. Where dust arising from the cleaning of such protective clothing or devices is likely to be inhaled, all practicable measures shall be taken to prevent such inhalation. Vacuum cleaners shall wherever practicable be used for removing dust from such clothing, and compressed air shall not be used for removing dust from any clothing.

Maintenance of vacuum cleaning plant

16. Vacuum cleaning plant used for the purposes of these Regulations shall be properly maintained.

Restrictions on employment of young persons

17.—(1) No person under 18 years of age shall be employed in blasting or assisting at blasting or in any blasting chamber or in the cleaning of any blasting apparatus or any blasting enclosure or apparatus or ventilating plant connected therewith, or be employed on maintenance or repair work at such apparatus, enclosure or plant.

(2) No person under 18 years of age shall be employed to work regularly within twenty feet of any blasting enclosure in which blasting is done by means of compressed air or steam, unless the enclosure is in a room and he is outside that room where he is effectively separated from any dust coming from the enclosure.