

## 1990 No. 147

**HEALTH AND SAFETY****Noise at Work Regulations (Northern Ireland) 1990**

*Made* . . . . . 12th April 1990

*Coming into operation* . . . . . 11th June 1990

## ARRANGEMENT OF REGULATIONS

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## Schedule—

Part I Daily personal noise exposure of employees.

Part II Weekly average of daily personal noise exposure of employees.

The Department of Agriculture, the Department of Economic Development, the Department of the Environment and the Department of Health and Social Services acting jointly as the Department concerned<sup>(a)</sup> in exercise of the powers conferred by Article 17(1), (2), (3) and (5) of, and paragraphs 1(1) and (2), 5, 6, 7(1), 8, 10, 12(2) and (3), 13, 14(1) and 15 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978<sup>(b)</sup> and of every other power enabling them in that behalf, after consultation in accordance with Article 46(1) of that Order with the Health

(a) See Article 2(2) of S.I. 1978/1039 (N.I. 9)

(b) S.I. 1978/1039 (N.I. 9)

and Safety Agency for Northern Ireland and such other bodies as appeared to them to be appropriate, hereby make the following Regulations:

*Citation and commencement*

1. These Regulations may be cited as the Noise at Work Regulations (Northern Ireland) 1990 and shall come into operation on 11th June 1990.

*Interpretation*

2.—(1) In these Regulations—

“daily personal noise exposure” means the level of daily personal noise exposure of an employee ascertained in accordance with Part I of the Schedule, but taking no account of the effect of any personal ear protector used;

“Department” means the Department of Economic Development;

“exposed” means exposed whilst at work;

“the first action level” means a daily personal noise exposure of 85dB(A);

“the peak action level” means a level of peak sound pressure of 200 pascals;

“the second action level” means a daily personal noise exposure of 90dB(A).

(2) In these Regulations any reference to—

(a) an employer includes a reference to a self-employed person and any duty imposed by these Regulations on an employer in respect of his employees shall extend to a self-employed person in respect of himself;

(b) an employee includes a reference to a self-employed person;

and where any duty is placed by these Regulations on an employer in respect of his employees, that employer shall, so far as is reasonably practicable, be under a like duty in respect of any other person at work who may be affected by the work carried on by him.

(3) Duties under these Regulations imposed upon an employer shall also be imposed upon—

(a) the manager of a mine (within the meaning of section 156 of the Mines Act (Northern Ireland) 1969(a)) in so far as those duties relate to the mine of which he is the manager and to matters under his control, and

(b) the owner, occupier or agent of a quarry in so far as those duties relate to the quarry of which he is the owner, occupier or agent, and to matters under his control.

(4) In paragraph (3)(b) the words “owner”, “occupier”, “agent” and “quarry” have the same meanings as in Article 2 of the Quarries (Northern Ireland) Order 1983(b).

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

(b) S.I. 1983/150 (N.I. 4)

*Disapplication of duties*

3. The duties imposed by these Regulations shall not extend to—

- (a) the master or crew of a sea-going ship or to the employer of such persons, in relation to the normal ship-board activities of a ship's crew under the direction of the master; or
- (b) the crew of any aircraft or hovercraft which is moving under its own power or any other person on board any such aircraft or hovercraft who is at work in connection with its operation.

*Assessment of exposure*

4.—(1) Every employer shall, when any of his employees is likely to be exposed to the first action level or above or to the peak action level or above, ensure that a competent person makes a noise assessment which is adequate for the purposes—

- (a) of identifying which of his employees are so exposed; and
- (b) of providing him with such information with regard to the noise to which those employees may be exposed as will facilitate compliance with his duties under regulations 7, 8, 9 and 11.

(2) The noise assessment required by paragraph (1) shall be reviewed when—

- (a) there is reason to suspect that the assessment is no longer valid; or
- (b) there has been a significant change in the work to which the assessment relates;

and, where as a result of the review changes in the assessment are required, those changes shall be made.

*Assessment records*

5. Following any noise assessment made pursuant to regulation 4(1), the employer shall ensure that an adequate record of that assessment, and of any review thereof carried out pursuant to regulation 4(2), is kept until a further noise assessment is made pursuant to regulation 4(1).

*Reduction of risk of hearing damage*

6. Every employer shall reduce the risk of damage to the hearing of his employees from exposure to noise to the lowest level reasonably practicable.

*Reduction of noise exposure*

7. Every employer shall, when any of his employees is likely to be exposed to the second action level or above or to the peak action level or above, reduce, so far as is reasonably practicable (other than by the provision of personal ear protectors), the exposure to noise of that employee.

*Ear protection*

8.—(1) Every employer shall ensure, so far as is practicable, that when any of his employees is likely to be exposed to the first action level or above in circumstances where the daily personal noise exposure of that employee is likely to be less than 90dB(A), that employee is provided, at his request, with suitable and efficient personal ear protectors.

(2) Every employer shall ensure, so far as is practicable, that when any of his employees is likely to be exposed to the second action level or above or to the peak action level or above, that employee is provided with suitable personal ear protectors which, when properly worn, can reasonably be expected to keep the risk of damage to that employee's hearing to below that arising from exposure to the second action level or, as the case may be, to the peak action level.

#### *Ear protection zones*

9.—(1) Every employer shall, in respect of any premises under his control, ensure, so far as is reasonably practicable, that—

- (a) each ear protection zone is demarcated and identified by means of the sign specified in paragraph A.3.3 of Appendix A to Part I of BS 5378, which sign shall include such text as indicates—
  - (i) that it is an ear protection zone, and
  - (ii) the need for his employees to wear personal ear protectors whilst in any such zone; and
- (b) none of his employees enters any such zone unless that employee is wearing personal ear protectors.

(2) In this regulation, “ear protection zone” means any part of the premises referred to in paragraph (1) where any employee is likely to be exposed to the second action level or above or to the peak action level or above, and “Part I of BS 5378” has the same meaning as in regulation 2 of the Safety Signs Regulations (Northern Ireland) 1981(a).

#### *Maintenance and use of equipment*

10.—(1) Every employer shall—

- (a) ensure, so far as is practicable, that anything provided by him to or for the benefit of an employee in compliance with his duties under these Regulations (other than personal ear protectors provided pursuant to regulation 8(1)) is fully and properly used; and
- (b) ensure, so far as is practicable, that anything provided by him in compliance with his duties under these Regulations is maintained in an efficient state, in efficient working order and in good repair.

(2) Every employee shall, so far as is practicable, fully and properly use personal ear protectors when they are provided by his employer pursuant to regulation 8(2) and any other protective measures provided by his employer in compliance with his duties under these Regulations; and, if the employee discovers any defect therein, he shall report it forthwith to his employer.

#### *Provision of information to employees*

11. Every employer shall, in respect of any premises under his control, provide each of his employees who is likely to be exposed to the first action level or above or to the peak action level or above with adequate information, instruction and training on—

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(a) S.R. 1981 No. 352

- (a) the risk of damage to that employee's hearing that such exposure may cause;
- (b) what steps that employee can take to minimise that risk;
- (c) the steps that that employee must take in order to obtain the personal ear protectors referred to in regulation 8(1); and
- (d) that employee's obligations under these Regulations.

*Modification of duties of manufacturers etc. of articles for use at work and articles of fairground equipment*

12. In the case of articles for use at work or articles of fairground equipment, Article 7 of the Health and Safety at Work (Northern Ireland) Order 1978(a) (which imposes general duties on manufacturers etc. as regards articles for use at work, substances and articles of fairground equipment) shall be modified so that any duty imposed on any person by paragraph (1) of that Article shall include a duty to ensure that, where any such article as is referred to therein is likely to cause any employee to be exposed to the first action level or above or to the peak action level or above, adequate information is provided concerning the noise likely to be generated by that article.

*Exemptions*

13.—(1) Subject to paragraph (2), the Department may, by a certificate in writing, exempt any employer from—

- (a) the requirement in regulation 7, where the daily personal noise exposure of the relevant employee, averaged over a week and ascertained in accordance with Part II of the Schedule, is below 90dB(A) and there are adequate arrangements for ensuring that that average will not be exceeded; or
- (b) the requirement in regulation 8(2), where—
  - (i) the daily personal noise exposure of the relevant employee, averaged over a week and ascertained in accordance with Part II of the Schedule, is below 90dB(A) and there are adequate arrangements for ensuring that that average will not be exceeded,
  - (ii) the full and proper use of the personal ear protectors referred to in that paragraph would be likely to cause risks to the health or safety of the user, or
  - (iii) (subject to the use of personal ear protectors affording the highest degree of personal protection which it is reasonably practicable to achieve in the circumstances) compliance with that requirement is not reasonably practicable;

and any such exemption may be granted subject to conditions and to a limit of time and may be revoked at any time by a certificate in writing.

(2) The Department shall not grant any such exemption unless, having regard to the circumstances of the case and in particular to—

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(a) S.I. 1978/1039 (N.I. 9); Article 7 was amended by S.I. 1987/2049 (N.I. 20) Schedule 2, paragraph 2.

- (a) the conditions, if any, which it proposes to attach to the exemption; and
- (b) any other requirements imposed by or under any statutory provisions which apply to the case,

it is satisfied that the health and safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

*Modifications relating to the Ministry of Defence etc.*

14.—(1) In this regulation any reference to—

- (a) “visiting forces” is a reference to visiting forces within the meaning of any provision of Part I of the Visiting Forces Act 1952(a); and
- (b) “headquarters or organisation” is a reference to a headquarters or organisation designated for the purposes of the International Headquarters and Defence Organisations Act 1964(b).

(2) The Secretary of State for Defence may, in the interests of national security, by a certificate in writing exempt—

- (a) Her Majesty’s Forces;
- (b) visiting forces; or
- (c) any member of a visiting force working in or attached to any headquarters or organisation,

from any requirement imposed by these Regulations and any such exemption may be granted subject to conditions and to a limit of time and may be revoked at any time by a certificate in writing, except that, before any such exemption is granted, the Secretary of State for Defence must be satisfied that suitable arrangements have been made for the assessment of the health risks created by the work involving exposure to noise and for adequately controlling the exposure to noise of persons to whom the exemption relates.

Sealed with the Official Seal of the Department of Agriculture on 10th April 1990.

(L.S.)

*I. C. Henderson*

Assistant Secretary

Sealed with the Official Seal of the Department of Economic Development on 12th April 1990.

(L.S.)

*R. J. Minnis*

Assistant Secretary

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(a) 1952 c. 67  
 (b) 1964 c. 5

Sealed with the Official Seal of the Department of the Environment on  
12th April 1990.

(L.S.)

*R. W. Rogers*

Assistant Secretary

Sealed with the Official Seal of the Department of Health and Social  
Services on 10th April 1990.

(L.S.)

*J. Scott*

Assistant Secretary

## SCHEDULE

Regulations 2(1) and 13(1)

## PART I

## DAILY PERSONAL NOISE EXPOSURE OF EMPLOYEES

The daily personal noise exposure of an employee ( $L_{EP,d}$ ) is expressed in dB(A) and is ascertained using the formula:

$$L_{EP,d} = 10 \log_{10} \left\{ \frac{1}{T_0} \int_0^{T_e} \left[ \frac{p_A(t)}{p_0} \right]^2 dt \right\}$$

where—

$T_e$  = the duration of the person's personal exposure to sound;

$T_0$  = 8 hours = 28,800 seconds;

$p_0$  = 20  $\mu$ Pa; and

$p_A(t)$  = the time-varying value of A-weighted instantaneous sound pressure in pascals in the undisturbed field in air at atmospheric pressure to which the person is exposed (in the locations occupied during the day), or the pressure of the disturbed field adjacent to the person's head adjusted to provide a notional equivalent undisturbed field pressure.

## PART II

## WEEKLY AVERAGE OF DAILY PERSONAL NOISE EXPOSURE OF EMPLOYEES

The weekly average of an employee's daily personal noise exposure ( $L_{EP,w}$ ) is expressed in dB(A) and is ascertained using the formula:

$$L_{EP,w} = 10 \log_{10} \left[ \frac{1}{5} \sum_{k=1}^{k=m} 10^{0.1(L_{EP,d)k}} \right]$$

where—

$(L_{EP,d})_k$  = the values of  $L_{EP,d}$  for each of the  $m$  working days in the week being considered.



## EXPLANATORY NOTE

*(This note is not part of the Regulations.)*

These Regulations together with the Health and Safety at Work (Northern Ireland) Order 1978, the Safety Representatives and Safety Committees Regulations (Northern Ireland) 1979, S.R. 1979 No. 437, and other existing legislation implement Council Directive 86/188/EEC (OJ No. L137, 24.5.86, p.28) on the protection of workers from the risks related to exposure to noise at work.

The Regulations—

- (a) impose requirements on employers with respect to the making and review of noise assessments (regulation 4);
- (b) impose requirements on employers with respect to the keeping of records of noise assessments and reviews thereof (regulation 5);
- (c) impose requirements on employers with respect to the reduction of risk of damage to the hearing of their employees from exposure to noise (regulation 6);
- (d) impose requirements on employers with respect to the reduction of exposure to noise of their employees (regulation 7);
- (e) impose requirements on employers with respect to the provision to their employees of personal ear protectors (regulation 8);
- (f) impose requirements on employers with respect to the marking of, and entry of their employees into, ear protection zones (regulation 9);
- (g) impose requirements on employers and employees with respect to the use and maintenance of equipment provided by employers pursuant to the provisions of the Regulations (regulation 10);
- (h) impose requirements on employers with respect to the provision of information, instruction and training to such of their employees as are likely to be exposed to specified noise levels (regulation 11);
- (i) modify Article 7(1) of the Health and Safety at Work (Northern Ireland) Order 1978 (S.I. 1978/1039 (N.I.9)) (general duties of designers, etc., of articles for use at work and articles of fairground equipment) so that any duty imposed by that paragraph includes in specified circumstances a duty to provide certain information relating to noise generation (regulation 12); and
- (j) provide for the issue of certificates of exemption by the Department of Economic Development and the Secretary of State for Defence (regulations 13 and 14 respectively).

The duties imposed by the Regulations do not (in the circumstances specified in regulation 3(a)) extend to the masters and crews of sea-going ships or to their employers; nor do they (in the circumstances specified in regulation 3(b)) extend to the crews of aircraft and hovercraft or to other persons on board such craft.

A person who contravenes the Regulations is guilty of an offence under Article 31 of the Health and Safety at Work (Northern Ireland) Order 1978, and is liable, on summary conviction to a fine not exceeding £2,000, or, on conviction on indictment, to a fine.

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**1990 Nos. 148–150**

These Orders have been exempted from printing by the Statutory Rules (Northern Ireland) Order 1979. Summaries are given in the List of Statutory Rules of a Local Character under the heading ROADS.