

Workplace Safety and Health (Noise) Regulations 2011

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WORKPLACE SAFETY AND HEALTH ACT
(CHAPTER 354A)

WORKPLACE SAFETY AND HEALTH (NOISE)
REGULATIONS 2011

In exercise of the powers conferred by section 65 of the Workplace Safety and Health Act, the Minister for Manpower hereby makes the following Regulations:

PART I

PRELIMINARY

Citation and commencement

1. These Regulations may be cited as the Workplace Safety and Health (Noise) Regulations 2011 and shall come into operation on 1st September 2011.

Definitions

2.—(1) In these Regulations, unless the context otherwise requires —

“competent person”, in relation to any work to be carried out, means a person who has sufficient experience and training to perform the work;

“dB(A)” means decibels of A-weighted sound pressure level measured by an instrument with an electrical network having the characteristics specified by the International Electrotechnical Commission;

“dB(C)” means decibels of C-weighted sound pressure level measured by an instrument with an electrical network having the characteristics specified by the International Electrotechnical Commission;

“equivalent sound pressure level”, in relation to a fluctuating sound pressure level, means a constant sound pressure level measured over a duration of time which has the same cumulative acoustic energy as the fluctuating sound pressure level measured over the same duration;

“peak sound pressure level” means the absolute maximum or highest C-weighted sound pressure level of any continuous, intermittent, instantaneous or impact noise;

“relevant person” means a person at work in a workplace who is exposed or is likely to be exposed to excessive noise;

“responsible person”, in relation to a relevant person, means —

- (a) his employer; or
- (b) the principal under whose direction the relevant person carries out the work in the workplace.

(2) For the purposes of these Regulations —

- (a) a person shall be deemed to be exposed to excessive noise, if the noise that he would be exposed to, when not wearing any hearing protector, exceeds —
 - (i) the permissible exposure limit for noise specified in the Schedule;
 - (ii) an equivalent sound pressure level of 85 dB(A) over an 8-hour work day, in any case where the noise is at a fluctuating sound pressure level; or
 - (iii) a peak sound pressure level exceeding 140 dB(C); and
- (b) sound pressure level shall be calculated according to the following formula:

$$SPL = 10 \log \left(\frac{P}{P_o} \right)^2$$

where SPL is the sound pressure level;

log is the common logarithm;

P is the sound pressure; and

P_o is the standard reference pressure of 20 microPascals

Application

3. These Regulations shall apply to every workplace where a person is exposed or is likely to be exposed to excessive noise caused by —

- (a) any machinery or equipment used in the workplace; or
- (b) any process, operation or work carried out in the workplace.

PART II

NOISE CONTROL

Measures to reduce or control noise

4.—(1) It shall be the duty of the occupier of a workplace to take, so far as is reasonably practicable, such measures to reduce or control the noise from any machinery or equipment used, so that no person at work in the workplace is exposed or is likely to be exposed to excessive noise.

(2) It shall be the duty of the responsible person to take, so far as is reasonably practicable, such measures to reduce or control the noise from any process, operation or work carried on by him in a workplace, so that no person at work in the workplace is exposed or is likely to be exposed to excessive noise.

(3) The measures referred to in paragraphs (1) and (2) may include one or more of the following:

- (a) replacing noisy machinery, equipment, processes, operation or work with less noisy machinery, equipment, processes, operation or work;
- (b) locating noise sources away from hard walls or corners;
- (c) isolating noise sources, so as to minimise the number of persons at work in the workplace who are exposed to the noise;
- (d) constructing suitable acoustic enclosures to contain noise emitted by machinery, equipment, processes, operation or work;
- (e) erecting an effective noise barrier larger in size than the noise source to provide acoustic shielding;
- (f) operating pneumatic machinery, equipment or tools at optimum air pressure to minimise noise emission and installing suitable pneumatic silencers at pneumatic line outlets;
- (g) installing mufflers at intake and exhaust openings that emit noise;
- (h) mounting vibrating machinery on vibration isolators or separate foundations;
- (i) isolating persons at work in the workplace in an acoustically shielded room or enclosure, where reduction of noise at the noise source is not practicable;
- (j) lining hard surfaces with acoustically absorbent materials to reduce noise reverberation;

- (k) isolating or reducing the size and vibration of vibrating surfaces or applying damping materials to vibrating surfaces;
- (l) reducing the height from which objects are allowed to fall or applying a resilient material at the point of impact or at the point of interaction of moving objects;
- (m) maintaining machinery and equipment at regular intervals to reduce noise emission.

(4) Where it is not practicable to reduce the noise, it shall be the duty of the occupier of a workplace or the responsible person to limit the duration of time persons at work in the workplace are exposed to the noise so that such persons are not exposed to excessive noise.

(5) Any person who contravenes paragraph (1), (2) or (4) shall be guilty of an offence and shall be liable —

- (a) on conviction, to a fine not exceeding \$10,000; and
- (b) in the case of a second or subsequent conviction, to a fine not exceeding \$20,000 or to imprisonment for a term not exceeding 6 months or to both.

Appointment of competent person to advise on noise control

5.—(1) Where there are 50 or more relevant persons employed or working in a workplace, it shall be the duty of the occupier of the workplace to appoint a competent person to advise on all proper noise control measures.

(2) It shall be the duty of the competent person to take, so far as is reasonably practicable, such measures as are necessary to ensure that his advice on the noise control measures is adequate, suitable and effective.

(3) It shall be the duty of the occupier of a workplace to, so far as is reasonably practicable, implement such measures as advised by the competent person.

(4) Any person who contravenes paragraph (1) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000 and, in the case of a second or subsequent conviction, to a fine not exceeding \$10,000.

(5) Any competent person who contravenes paragraph (2) shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$2,000 and, in the case of a second or subsequent conviction, to a fine not exceeding \$5,000.

(6) Any person who contravenes paragraph (3) shall be guilty of an offence and shall be liable —