

No. R. 307

7 March 2003

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993****NOISE-INDUCED HEARING LOSS REGULATIONS**

The Minister of Labour has under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule.

**SCHEDULE****Definitions**

1. In these regulations, any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the context otherwise indicates—

**“approved noise inspection authority”** means an approved inspection authority for the monitoring of noise in the workplace;

**“assessment”** means a programme to determine any risk from exposure to noise associated with the workplace in order to identify the steps that need to be taken to remove, reduce or control such hazard;

**“attenuation-of-hearing protectors”** means hearing protectors with the proven capability of reducing the sound exposure to which the wearer thereof is exposed;

**“audiogram”** means a chart, graph or table indicating the hearing threshold levels of an individual as a function of frequency, (namely 0,5, 1, 2, 3, 4, 6 and 8 kilohertz), as determined during a measurement of a person's hearing threshold levels by means of a monaural, pure-tone, air-conduction threshold test;

**“Compensation Commissioner”** means the Compensation Commissioner appointed under section 2(1)(a) of the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);

**“competent person”** means—

(a) a person registered in terms of the Health Professions Act, 1974 (Act No. 56 of 1974), with the Health Professions Council of South Africa in any of the following three categories:

- (i) Otorhinolaryngologist (ear, nose and throat specialist);
- (ii) speech therapist and audiologist; or
- (iii) occupational medicine practitioner; or

(b) a person with a qualification in audiometric techniques obtained from an institution registered with the South African Qualification Authority or any of its structures in terms of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), and registered with the South African Society for Occupational Health Nursing (SASOHN);

**“exposed”** means exposed to noise while at a workplace and **“exposure”** has a corresponding meaning;

**“equivalent continuous rating level”** means the equivalent continuous A-weighted sound pressure level during a specified time interval, plus a specified adjustment for impulsiveness of the sound, as contemplated in SABS 083;

**“General Administrative Regulations”** means the General Administrative Regulations published under section 43 of the Act in Government Notice No. R.1449 of 6 September 1996;

**“health and safety standards”** means the health and safety standards that have been incorporated in these regulations under section 44 of the Act;

**“hearing protective equipment”** means ear-muffs or ear-plugs which are of a type, or conform to a standard, approved by the Minister;

**“Instruction No. 171”** means the Compensation Commissioner’s Circular Instruction No. 171 and Supplement entitled Determination of Permanent Disablement Resulting from Noise Induced Hearing Loss and Trauma;

**“noise-rating limit”** means the value of the 8-hour rating level, 85 dBA at and above which hearing impairment is likely to result;

**“SABS 083”** means the Code of Practice for the Measurement and Assessment of Occupational Noise for Hearing Conservation Purposes, SABS 083, published by the South African Bureau of Standards;

**“the Act”** means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

**“8-hour rating level”** means the rating level normalized to a nominal 8-hour working day as indicated in SABS 083.

### **Scope of application**

2. These regulations shall apply to an employer or self-employed person who, at any workplace under his or her control, carries out work that may expose any person at that workplace to noise at or above the noise-rating limit.

### **Exposure to noise**

3. Subject to regulations 9 and 10, no employer or self-employed person shall require or permit any person to enter any workplace under his or her control where such person will be exposed to noise at or above the 85 dBA noise-rating limit.

### **Information and training**

4.(1) An employer shall, after consultation with the health and safety committee established in respect of a workplace under his or her control and the health and safety representative designated for that workplace or for different sections thereof, establish for all employees

who may be exposed to noise at or above the noise-rating limit a training programme that incorporates the following—

- (a) The content and scope of these regulations;
- (b) the potential sources of exposure to noise;
- (c) the potential risks to health and safety caused by exposure to noise;
- (d) the measures taken by the employer to protect an employee against the detrimental effects of exposure to noise;
- (e) the precautions to be taken by the employees to protect themselves against the health risks associated with the exposure, including the wearing and use of earplugs and earmuffs;
- (f) the necessity, correct use, maintenance and limitations of hearing protectors, facilities and engineering control measures provided;
- (g) the assessment of exposure, the purpose of noise monitoring, the necessity for medical surveillance and the long-term benefits and limitations of undergoing such surveillance;
- (h) the noise-rating limit for hearing conservation and its meaning;
- (i) the procedures for reporting, correcting and replacing defective personal hearing protectors and for engineering noise control measures; and
- (j) the matters contemplated in regulation 5.

(2) The training contemplated in subregulation (1) shall be conducted prior to the placement of the relevant employee.

(3) Refresher training shall be conducted annually or at intervals that may be recommended by the health and safety committee and the health and safety representative.

(4) The training contemplated in subregulation (1) shall be provided by a person who is competent to do so and who has adequate personal practical experience and theoretical knowledge of all aspects of the work carried out by the employee.

(5) An employer or self-employed person shall ensure as far as is reasonably practicable that his or her mandatories or persons other than employees who may be affected by noise exposure at the workplace are given adequate information, instruction and training.

(6) An employer shall keep a record of any training that is given to an employee in terms of this regulation.

### **Duties of persons who may be exposed to noise**

5. Any person who is or may be exposed to noise at or above the noise-rating limit shall obey any lawful order given to him or her by the employer or self-employed person or by anyone authorized thereto by the employer or self-employed person, regarding—

- (a) the use of measures adopted for noise control;
- (b) the immediate reporting of defective, damaged or lost noise control equipment to the health and safety representative or the employer;
- (c) the use of personal hearing protectors where provided;
- (d) a prohibition to enter or remain in an area where personal hearing protectors are required unless the person is authorized to do so and is wearing the required hearing protectors;
- (e) co-operation with the employer in his or her task of determining the employee's noise exposure, which may include the wearing of personal sound exposure meters;
- (f) the reporting for medical surveillance as required by regulation 8; and
- (g) information and training received as contemplated in regulation 4.

### **Assessment of potential noise exposure**

6.(1) An employer or self-employed person shall—

- (a) in respect of a workplace under his or her control cause an assessment to be done within six months after the commencement of these regulations and thereafter at intervals not exceeding two years, to determine if any person may be exposed to noise which is at or above the noise-rating limit, regardless of whether any personal hearing protectors are used; and
- (b) cause the results of the assessments to be entered into the records as required by regulation 11.

(2) An employer contemplated in subregulation (1) shall, before causing an assessment to be made, consult with the relevant health and safety representative or the relevant health and safety committee and thereafter inform them in writing of the arrangements made for the assessment, allow them reasonable time to comment thereon and ensure that the results of the assessment are made available to them for comment.

(3) When making an assessment contemplated in subregulation (1), an employer or self-employed person shall take into account and keep a record of relevant factors, including the following—

- (a) The noise sources to which a person may be exposed;

- (b) adverse health effects that the excessive noise may have on persons;
- (c) the extent to which a person may be exposed; and
- (d) the nature of the work process and any reasonable deterioration in or failure of any control measures.

(4) If an assessment made in accordance with subregulation (1) or a review of such assessment made in accordance with subregulation (5) indicates that any person may be exposed to noise at or above the noise-rating limit, the employer or self-employed person shall ensure that such exposure is adequately controlled as contemplated in regulation 10(1).

(5) An employer or self-employed person shall forthwith review an assessment made in accordance with subregulation (1) if—

- (a) there is reason to believe that such assessment is no longer valid;
- (b) control measures are no longer efficient;
- (c) technological or scientific advances allow for more efficient control methods; or
- (d) there has been a significant change in—
  - (i) work methods;
  - (ii) the type of work carried out; or
  - (iii) the type of equipment used to control exposure,

and subregulations (2) and (3) shall apply for such review assessment.

### **Noise monitoring**

7.(1) Where an assessment of noise exposure or a review of such assessment indicates that any employee may be exposed to noise at or above the noise-rating limit, an employer contemplated in regulation 2 shall ensure that a measurement programme of noise exposure at that workplace is—

- (a) carried out in accordance with the provisions of these regulations;
- (b) carried out only after the relevant health and safety representative or relevant health and safety committee has been informed thereof and given a reasonable period, as mutually agreed upon, to comment thereon;
- (c) carried out by an approved noise inspection authority; and
- (d) representative of the employees' exposure to noise, in accordance with subregulation (2).

- (2) In order to comply with subregulation (1)(d), an employer shall ensure—
- (a) that the measurement programme, in the case where a number of employees work in an area of approximately equal noise level, makes provision for the selection of not less than three locations which are representative of the positions occupied by employees well distributed over the area under investigation, and for the taking of measurements at each position as contemplated in SABS 083;
  - (b) that the measurement programme, in the case of an employee working at an approximately fixed location relative to the noise source, makes provision for the measurement to be taken at the approximate position of the person's ear that receives the higher noise level as contemplated in SABS 083; and
  - (c) that representative measurements are carried out at least every 24 months: Provided that whenever the noise is at or above the noise-rating limit, the provisions of regulation 10(1) shall apply.

(3) An employer shall ensure that the results of measurements as contemplated in subregulation (2)(c) are recorded in the record required by regulation 11.

#### **Medical surveillance**

8.(1) An employer shall establish and maintain a system of medical surveillance for all employees exposed to noise at or above the noise-rating limit.

(2) An employer shall ensure that the medical surveillance contemplated in subregulation (1)—

- (a) consists of a baseline audiogram which is recorded—
  - (i) in the case of a new employee, before the employee commences employment or within 30 days of commencement of such employment; or
  - (ii) in the case of all other employees in the employment of the employer, before 16 November 2003; and
  - (iii) in accordance with the requirements of Instruction No. 171: Provided that the baseline audiogram conducted in terms of that instruction applies to that employee for the rest of his or her working career;
- (b) consists of a periodic audiogram which is conducted in accordance with SABS 083 and which, during the first three years of employment, is obtained at least annually and thereafter at intervals which may be extended to a maximum period of two years if no referral threshold shift is evident: Provided that—
  - (i) employees working in, or required to enter, noise zones where the noise exposure equals or exceeds an 8-hour rating level of 105 dBA shall undergo audiometric testing at 6-monthly intervals until it is established

that no referral threshold shift is evident and thereafter the interval between tests may be extended to a maximum interval of one year; and

- (ii) employees who are regularly exposed to gunshots or other explosive events during their working day shall undergo audiometric tests at time intervals in accordance with subparagraph (i);
  - (c) consists of an exit audiogram, conducted in accordance with SABS 083, which is obtained for every employee whose employment is terminated or who is permanently transferred to another workplace in respect of which audiometric tests are not required: Provided that an audiogram conducted within six months prior to termination of employment or transfer shall meet this requirement; and
  - (d) is performed by a competent person: Provided that if it is impossible for the competent person to establish a baseline audiogram for an employee as contemplated in paragraph (a), the employee must be referred to an audiologist who may establish baseline-hearing levels by using other techniques, such as speech reception thresholds.
- (3) An employer shall ensure that—
- (a) copies of the audiograms contemplated in subparagraphs (2)(a), (b) and (c) are entered into the employee's record of medical surveillance;
  - (b) a copy of each audiogram contemplated in subparagraphs (2)(a) and (c) is given to the employee when he or she leaves the employment of that employer;
  - (c) new employees provide him or her with their baseline audiograms, exit audiograms or most recent audiograms and the percentage of loss of hearing calculated in accordance with Instruction No. 171; and
  - (d) in the case of an employee whose percentage loss of hearing has deteriorated by 10% or more since the baseline audiogram was recorded or an employee for whom no baseline audiogram is available but who has a 10% or more loss of hearing that is not obviously due to medical causes, and that has been confirmed by a repeat audiogram—
    - (i) the relevant health and safety committee or the relevant health and safety representative is informed of the finding;
    - (ii) the employee is retrained and re-instructed as contemplated in regulations 4 and 5;
    - (iii) noise control measures are reassessed; and
    - (iv) such hearing loss is reported to the provincial director, on form WCL1/2, as contemplated in regulation 6 of the General Administrative Regulations.

**Noise zone**

9. An employer or self-employed person shall ensure that—
- (a) in any workplace or part of such workplace under his or her control, where the exposure to noise is at or above the noise-rating limit, that workplace or part thereof is zoned as a noise zone;
  - (b) a noise zone is clearly demarcated and identified by a notice indicating that the relevant area is a noise zone and that hearing protective equipment as contemplated in regulation 12 must be worn;
  - (c) no person enters or remains in a noise zone unless he or she wears the required hearing protective equipment; and
  - (d) the reason why noise exposure is at or above the noise-rating limit is identified and that action is taken, as soon as is reasonably practicable, by means other than the use of hearing protective equipment, to lower the noise level so that it is not at or above the noise-rating limit.

**Control of noise exposure**

10. (1) An employer or self-employed person shall ensure that the exposure of a person to noise is either prevented or, where this is not reasonably practicable, adequately controlled: Provided that the control of the exposure shall be regarded as adequate if the exposure is below the noise-rating limit, or if the exposure is at or above the noise-rating limit but the reason has been identified and action is taken as soon as is reasonably practicable, by means other than the use of hearing protective equipment, to lower exposure so that it does not exceed the noise-rating limit.

(2) In order to comply with subregulation (1) an employer or self-employed person shall, as far as is reasonably practicable, reduce exposure to noise by implementing noise control measures in the following order of priority:

- (a) Engineering control measures to eliminate or reduce noise at its source, or the modification of the routes by which noise reaches workplaces;
- (b) administrative control measures to limit the number of persons exposed and the duration of exposure; and
- (c) the use of hearing protective equipment if engineering and administrative control measures fail to reduce exposure below the noise-rating limit.

**Record**

11. An employer or self-employed person shall—
- (a) keep records of the results of all assessments, noise monitoring and medical surveillance reports and of maintenance of control measures required by these regulations;



- (b) subject to the provisions of paragraph (c), make the records contemplated in paragraph (a) available for inspection by an inspector;
- (c) subject to the formal written consent of an employee, allow any person to peruse the records with respect to that particular employee;
- (d) make the records of all assessments and noise monitoring available for perusal by the relevant health and safety representative or relevant health and safety committee;
- (e) keep all records of assessments and noise monitoring for a minimum period of 40 years;
- (f) keep all medical surveillance records, including the baseline audiogram of every employee, for a minimum period of 40 years and if the employer ceases activities, hand over or forward by registered post all those records to the relevant provincial director: Provided that those records shall contain at least the following information:
  - (i) An employee's surname, forenames, gender, date of birth, name of spouse or closest relative and, where available, permanent address and postal code;
  - (ii) a record of the types of work carried out that caused noise exposure and, where relevant, their location, with starting and finishing dates and with average duration of exposure in hours per week;
  - (iii) a record of any previous work-related noise exposure prior to an employee's current employment; and
  - (iv) the dates of medical surveillance and results of all audiograms; and
- (g) keep a record of training given to an employee in terms of regulation 4(6) for as long as the employee remains employed at the workplace in which he or she is being exposed to noise.

### **Hearing protective equipment**

12.(1) Where hearing protective equipment is provided, an employer or self-employed person shall ensure that—

- (a) the equipment is capable of keeping the exposure below the noise-rating limit;
- (b) the equipment is correctly selected and properly used;
- (c) employees receive the information, instruction, training and supervision that are necessary with regard to the use of the equipment; and
- (d) the equipment is kept in good condition and efficient working order.

- (2) An employer or self-employed person shall, as far as is reasonably practicable—
- (a) issue no reusable hearing protective equipment to any person, unless the hearing protective equipment is properly decontaminated and, where appropriate, sterilised;
  - (b) provide separate containers or storage facilities for hearing protective equipment when not in use; and
  - (c) ensure that all hearing protective equipment not in use is stored only in the place provided for it.

#### **Maintenance of control measures**

13. Every employer or self-employed person shall ensure that anything that he or she provides for the benefit of employees in compliance with his or her duties under these regulations—

- (a) is fully and properly used; and
- (b) is maintained in an efficient state, in good working order and in good repair and cleanliness.

#### **Offences and penalties**

14. Any person who contravenes or fails to comply with any provision of regulation 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 or 13 shall be guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding six months and, in the case of a continuous offence, to an additional fine of R200 for each day on which the offence continues or to additional imprisonment of one day for each day on which the offence continues: Provided that the period of such additional imprisonment shall in no case exceed 90 days.

#### **Withdrawal of regulations**

15. Regulation 7 of the Environmental Regulations for Workplaces as published in Government Notice No. R. 2281 of 16 October 1987, and amended by Government Notice No. R. 489 of 18 March 1994, is hereby repealed.