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If a whole or part of a paragraph has been amended, the date of the amending regulation appears in square brackets at the end of the paragraph. If a whole paragraph or sub-paragraph has been deleted, the date of the deletion appears in square brackets beside the deleted paragraph or sub-paragraph.

Republic of Latvia

Cabinet

Regulation No. 66

Adopted 4 February 2003

**Labour Protection Requirements for Protection of Employees from the Risk Caused by the Noise of the Work Environment**

*Issued pursuant to*

*Section 25, Clauses 13 and 18 of the Labour Protection Law*

**I. General Provisions**

1. The Regulation prescribes the labour protection requirements for the protection of employees from the risk caused by the noise of the work environment especially if hearing impairment of an employee is possible.

2. The Regulation shall apply to employees in all fields of employment in which employees are or may be exposed to the risk caused by noise.

3. The employer shall be liable for compliance with this Regulation.

4. In accordance with the Labour Protection Law, the employer shall consult with employees or trusted representatives thereof in the field of labour protection, including matters related to the noise of the work environment, as well as ensure the participation of employees in the resolution of the relevant matters.

5. The compliance with this Regulation shall be controlled by the State Labour Inspectorate.

**II. Assessment and Measurement of Risk Caused by Noise**

6. An employer shall ensure assessment of the risk caused by noise in conformity with the procedures for internal supervision of the work environment and risk assessment of the work environment of an undertaking involving trusted representatives and employees.

7. If in the inspection of workplaces it has been determined that noise causes or may cause a risk to the safety and health of an employee, the employer shall provide noise measurements and assessment of risk caused by noise.

8. Noise measurements shall first be taken at workplaces in which after the initial (first) inspection of workplaces it has been determined that noise causes or may cause a risk to the safety and health of employees.

9. Methods and measuring equipment utilised in noise measurements shall be adjusted to particular circumstances, most especially to the nature of the noise to be measured, the duration of exposure thereof and factors of the work environment. Methods utilised for noise measurement shall also be adjusted to the special features of measuring equipment.

10. Methods utilised in noise measurements shall include selection of measuring points in conformity with the particular circumstances and situation in which an employee is exposed to noise in daily work (all installations and other work equipment shall be switched on, employees shall be at their workplaces as on a normal working day). Noise shall be measured and assessed in conformity with the noise measuring procedures specified in Annex 1 of this Regulation.

11. When using calibrated acoustic measuring equipment and observing the procedures for noise measurement specified in Annex 1 to this Regulation, noise measurements shall be carried out by specialists certified by institutions that have been accredited in the State agency Latvian National Accreditation Bureau in conformity with the standard LVS EN ISO/IEC 17024:2005 “Conformity assessment – General requirements for bodies operating certification for persons” and regarding which the Ministry of Economics has published a notification in the official gazette *Latvijas Vēstnesis*, or by laboratories that have been accredited in the State agency Latvian National Accreditation Bureau in conformity with the standard LVS EN ISO/IEC 17025:2005 “General requirements for the competence of testing and calibration laboratories” and regarding which the Ministry of Economics has published a notification in the official gazette *Latvijas Vēstnesis* (hereinafter – the performer of noise measurements).

[*8 April 2008*]

12. In order to assess the risk caused by noise to employees, the following shall be determined:

12.1. peak sound pressure (ppeak) – maximum value of the noise “C” frequency curve weighted instantaneous noise pressure (hereinafter – the peak level);

12.2. daily noise exposure level (LEX, 8h) (dB(A) in relation to 20µPa) – time-weighted average value during noise exposure levels in an eight-hour working days (hereinafter – the noise level) in conformity with Sub-paragraph 3.6 of the standard LVS ISO 1999:2007 “Acoustics – Determination of occupational noise exposure and estimation of noise induced hearing impairment”. The abovementioned noise level shall include all the noise in a work environment, including impulse noise.

[*8 April 2008*]

13. If during a working week the noise level at one and the same work place may substantially differ every day, for assessment of the noise level the employer is entitled to substitute the daily noise exposure level by an average daily level of weekly noise exposure (time weighted noise exposure level for a five-day (40 hours) working week in conformity with Sub-paragraph 3.6 of the standard LVS ISO 1999:2007 “Acoustics – Determination of occupational noise exposure and estimation of noise-induced hearing impairment”, observing the following requirements:

13.1. continuous noise level monitoring shall be performed throughout the week, and the weekly noise exposure level shall not exceed the exposure limit value 87 dB(A);

13.2. the employer shall submit results of the noise level monitoring and explanations regarding the necessity of such substitution to the State Labour Inspectorate;

13.3. the employer shall ensure appropriate labour protection measures that reduce to a minimum the risk caused by noise and ensure the safety and health protection of employees.

[*8 April 2008*]

14. After becoming acquainted with the information provided by the employer referred to in Sub-paragraph 13.2 of this Regulation, the State Labour Inspectorate is entitled to prohibit the substitution of a noise exposure level with an average daily noise exposure level for a week if:

14.1. such substitution causes a risk to the safety and health of employees;

14.2. any of the requirements referred to in Paragraph 13 of this Regulation has been violated;

14.3. there is reason to believe that the results of continuous noise level monitoring performed during a week are not precise;

14.4. such working conditions do not exist that support the necessity of such substitution.

15. The following noise exposure limit values and exposure action values shall be determined:

15.1. exposure limit value:

LEX, 8h = 87 dB(A) and ppeak = 200 Pa (Lpeak= 140 dB) respectively;

15.2. upper exposure action value:

LEX, 8h = 85 dB(A) and ppeak = 112 Pa (Lpeak= 135 dB) respectively;

15.3. lower exposure action value:

LEX, 8h = 80 dB(A) and ppeak = 112 Pa (Lpeak= 135 dB) respectively;

16. In determining the noise level and the activity values, the effect of the use of personal hearing protective equipment shall not be taken into consideration. In assessing whether the employee is not exposed to the noise level exceeding noise exposure limit value (87 dB(A)), the effect of the use of personal hearing protective equipment shall be taken into consideration.

[*8 April 2008*]

17. The risk caused by noise shall be assessed not less frequently than once a year, as well as when a new workplace has been created or substantial changes in work environment have occurred (work processes, methods, work equipment, utilisation of substances and products or production thereof change) that may increase the referred to risk.

18. On the basis of the risk assessment and inspection of technical documentation of installations, including maintenance documentation, referred to in Paragraph 17 of this Regulation, the noise level shall be measured if there are grounds to believe that, in comparison with the previous results of workplace inspection, the noise level has increased and causes or may cause risk to the safety and health of the employees, but not less than once every three years.

[*18 December 2012*]

19. The risk caused by noise shall be additionally assessed and noise measurements shall be taken in the following cases:

19.1. after the performance of labour protection measures to ascertain that the risk caused by noise has been prevented or reduced to the permissible level;

19.2. if hearing deterioration of employees has been determined in health surveillance;

19.3. upon the request of employees or trusted representatives if there are grounds to believe that the noise level has increased and the safety and health of employees is endangered;

19.4. if an accident at work has occurred related to the risk caused by noise.

20. In assessing the risk caused by noise, the employer shall take into account:

20.1. noise level, type and duration of exposure, including exposure of impulsive noise;

20.2. noise exposure limit values and exposure action values specified in this Regulation;

20.3. impact of noise on the safety and health of such employees who belong to particularly sensitive risk groups (for example, adolescents, pregnant women, women in the period following childbirth);

20.4. impact of interaction between noise and work-related ototoxic substances (substances toxic to the hearing nerve), as well as noise and vibration to the safety and health of employees;

20.5. direct or indirect effect of the interaction between noise and warning signals or other sounds (that must be observed in order to reduce the risk of accidents) to the safety and health of employees;

20.6. information regarding noise emission provided by the manufacturer of work equipment;

20.7. alternative work equipment having lower noise emission;

20.8. effect of such a noise exposure period on the safety and health of employees that exceeds normal working hours;

20.9. results of health surveillance, and also the available information regarding the effect of noise on the safety and health of employees;

20.10. working conditions (presence of other factors of the work environment) in which employees are daily exposed to noise, and duration of a noise exposure period;

20.11. previous assessment of noise in the work environment and results of measurements.

21. The employer shall document and keep the results of all noise level measurements for at least 45 years, then deposit them in the archives.

22. Employees and trusted representatives have the right to become acquainted with the results of an assessment of the risk caused by noise, including results of measurements and, if necessary, to request explanations for a better understanding thereof provided by the employer or a labour protection specialist assigned by him or her.

23. The employer shall ensure that the results of assessment of the risk caused by noise, including results of measurements, are available to a doctor or the institution responsible for the health care of employees.

**III. Prevention and Reduction of Risk Caused by Noise**

24. The employer shall ensure prevention or reduction to a minimum (lowest actually possible level) of the risk caused by noise, especially at the source of noise and noise distribution routes taking into account technical progress and available measures and means for noise limitation and control.

25. Noise exposure level at workplaces may not exceed the noise exposure limit value (87 dB(A)) specified in this Regulation or the peak level – 140 dB. If the noise exposure limit value is exceeded, labour protection measures shall be immediately taken for reduction of the noise level at least to the exposure limit value (87 dB(A)).

[*8 April 2008*]

26. In order to prevent or reduce the risk caused by noise when taking collective protection measures and providing collective protective equipment, the employer shall:

26.1. utilise other work methods with a lower noise exposure;

26.2. select appropriate work equipment which ensures performance of all necessary functions, but emits the least possible noise;

26.3. take into account the location and fitting-out of workplaces and workstations;

26.4. ensure training and instruction of employees on correct use of work equipment in order to reduce their exposure to noise to a minimum;

26.5. take into account the possibilities to reduce noise by technical means that:

26.5.1. reduce airborne noise (for example, by means of shields, coverings, enclosures, absorbents);

26.5.2. reduce structure-borne noise in constructions (for example, by vibro-isolation);

26.6. select appropriate maintenance programmes for work equipment, workplaces and workplace systems;

26.7. ensure appropriate work organisation:

26.7.1. limit the duration of exposure for the relevant noise level in conformity with the requirements specified in Annex 2 to this Regulation;

26.7.2. develop an appropriate work schedule with adequate rest periods.

27. If it is not possible to implement the requirements specified in Paragraph 26 of this Regulation for technological or other substantiated reasons or they are not adequate to ensure the safety and health protection of employees, the employer shall utilise personal protective equipment for reduction of the risk caused by noise.

28. At workplaces where the noise level exceeds the lower noise exposure action value (80 dB(A)), the employer shall provide:

28.1. employees with personal hearing protective equipment;

28.2. training and instruction of employees and trusted representatives regarding the risk caused by noise, in particular paying attention to:

28.2.1. the nature of the risk caused by noise and the risk to the hearing and other systems of organs of employees which may occur due to the effect of noise;

28.2.2. labour protection measures taken or to be taken for the prevention or reduction of risk caused by noise and conditions under which such measures shall be taken, in particular specifying the measures to be performed by employees themselves;

28.2.3. noise exposure limit values and noise exposure action values specified in this Regulation;

28.2.4. assessment of risk caused by noise, results of measurements and explanations regarding their meaning and potential risks;

28.2.5. correct use of personal hearing protective equipment;

28.2.6. importance of the hearing examination and features of hearing impairment, and also notification of the employer regarding hearing deterioration;

28.2.7. conditions under which employees have the right to health surveillance and the importance of such surveillance;

28.2.8. safe work methods in order to reduce exposure to noise.

29. At workplaces where the noise level exceeds the upper noise exposure action value (85 dB(A)), in addition to the requirements referred to in Paragraph 28 of this Regulation, the employer shall provide:

29.1. placement of the information referred to in Sub-paragraph 28.2 of this Regulation at places accessible to employees (if possible). The information must be written, easily visible and comprehensible;

29.2. development and introduction of the programme for technical and organisational measures necessary for noise level reduction, taking into account the measures referred to in Paragraph 26 of this Regulation;

29.3. use of personal hearing protective equipment;

29.4. placement of safety signs at workplaces in accordance with the requirements of laws and regulations. Safety signs, as far as possible, shall be placed at the entrance of the workplace or room in which the noise level exceeds or may exceed the upper noise exposure action value (85 dB(A));

29.5. demarcation of a danger zone and restricted access to such zones if exposure to noise is substantiated and restrictions are technically possible.

30. If after the labour protection measures have been taken the noise level at workplaces exceeds the noise exposure limit values (87 dB(A) or the peak level exceeds 140 dB), the employer shall:

30.1. immediately take measures in order to prevent exposure of employees to such noise level and to reduce the noise level at least to exposure limit values (87dB(A) and peak level to 140 dB respectively);

30.2. analyse and determine the reasons due to which the noise level exceeds the permissible exposure limit values;

30.3. make changes in labour protection measures in order to prevent exceeding of the permissible noise exposure limit value.

31. [8 April 2008]

32. In taking labour protection measures for the prevention and reduction of the risk caused by noise, the employer shall ensure that the measures are appropriate for the protection of such employees for whom special protection has been specified in accordance with laws and regulations (persons up to 18 years of age, pregnant women, women in the post-natal period, persons with special needs).

33. If rest rooms have been provided in an undertaking for the needs of employees due to the type of activity, the employer shall ensure that the noise level in such rooms is reduced to the level that conforms to the purposes and circumstances of utilisation of the rest rooms.

**IV. Use of Personal Protective Equipment**

34. The employer shall provide employees with an adequate number of personal hearing protective equipment without charge in accordance with the procedures specified in laws and regulations.

35. Personal hearing protective equipment shall be adjusted to the employees and working conditions thereof.

36. Personal hearing protective equipment shall be selected so that correct use thereof prevents or reduces to a minimum the risk to the hearing of employees, ensuring that the hearing of employees is not exposed to noise that exceeds exposure limit values (87 dB(A)).

37. The employer shall examine the effectiveness of the use of personal hearing protective equipment provided to the employees in order to ensure that the safety and health of employees is not exposed to the risk caused by noise.

[*8 April 2008*]

38. If the use of hearing protective equipment may cause a risk of accident (for example, an employee does not hear warning signals, instructions of colleagues), the employer shall take measures for the prevention or reduction of such risk, guaranteeing the safety and health of the employee at work.

**V. Health Surveillance of Employees**

39. If the hearing of employees is exposed to a noise level that exceeds the lower exposure action value (80 dB(A)), the employer shall provide mandatory health surveillance of employees in accordance with the procedures specified in the relevant laws and regulations in order to determine, as soon as possible, any hearing impairment caused by noise and to protect the hearing of employees.

40. The employer shall regularly document the results of the hearing examination of employees. Copies of the results of a hearing examination of employees, if necessary, shall be available to a competent authority and the State Labour Inspectorate.

41. If the hearing impairment of employees has been determined in a hearing examination, a doctor certified in occupational diseases shall evaluate whether the hearing impairment has been caused by the noise of the work environment, and inform the employee of the results of the examination relating directly to the employee.

42. In accordance with the procedures specified in laws and regulations, medical treatment institutions shall provide employees and the employer with information regarding the results of health surveillance, on the necessary medical treatment and the additional examination of the state of health of employees.

43. If the results of the hearing examination of employees indicates that the hearing impairment of an employee has been caused by the noise of the work environment, the employer shall:

43.1. re-examine the results of the assessment of the risk caused by noise;

43.2. review measures provided for the prevention and reduction of the risk caused by noise;

43.3. take into account the recommendations of a doctor certified in occupational diseases or occupational health, a competent specialist or a competent authority in taking measures for the prevention or reduction of the risk caused by noise, and provide a possibility to assign employees to alternative work where they are not exposed to noise;

43.4. ensure systematic health monitoring and organise health surveillance of such employees who were subject to similar exposure of noise.

44. The employer shall take into account the results of health surveillance in planning and specifying labour protection measures for the prevention or reduction of the risk caused by noise to the permissible level.

45. On the basis of the results of the risk assessment and health surveillance, the employer shall specify such employees who require special labour protection measures taking into account the requirements of laws and regulations regarding labour protection.

46. The employer shall keep all the results of the hearing examinations of employees for at least 45 years, then deposit them in the archives in accordance with the procedures prescribed by law. Employees have the right to become acquainted with the results of examinations relating to them.

**Informative Reference to European Union Directive**

[*8 April 2008*]

The Regulation contains legal norms arising from Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).

Prime Minister E. Repše

Minister for Welfare D. Staķe

**Annex 1**

Cabinet Regulation No. 66

4 February 2003

**Procedures for Noise Measurement**

[*8 April 2008*]

1. Noise measurements shall be taken in order to determine the noise level in the environment, and also to determine the effect of noise on a person and the hearing thereof. In taking noise measurements, the noise level characteristics appropriate to the environment shall be utilised.

2. This Annex prescribes the procedures for measuring:

2.1. noise level;

2.2. noise exposure;

2.3. equivalent continuous A-weighted sound pressure level.

3. Noise measurements shall be carried out in conformity with:

3.1. the standard LVS ISO 1996/1:2004 “Acoustics – Description and measurement of environmental noise – Part 1: Basic quantities and assessment procedures”;

3.3. the standard LVS ISO 9612:2007 “Acoustics – Determination of occupational noise exposure and estimation of noise-induced hearing impairment”;

3.3. the standard LVS ISO 1999:2007 “Acoustics – Determination of occupational noise exposure and estimation of noise-induced hearing impairment”;

3.4. technical documentation from the manufacturers of noise measuring equipment (descriptions of measuring equipment operation).

4. All the requirements specified in laws and regulations regarding labour protection relating to a particular environment shall be complied with in noise measurements. The performer of noise measurements shall be responsible for the accuracy of the measurements.

5. Prior to the commencement of work, the performer of noise measurements shall ascertain that the measuring equipment used is calibrated.

6. Noise shall be measured with calibrated measuring equipment – a sound level meter (sound analyser).

7. The performer of noise measurements shall take the following preparatory measures prior to the noise measuring:

7.1. after receipt of a relevant order, the performer of noise measurements shall become acquainted with the nature of the work to be performed, measurement object (place) and technical state thereof, clarify organisational matters (time of measurement, access to the object, preparatory measures necessary for taking measurements) and, if necessary, cooperate with the responsible employee (contact person) assigned by the commissioning party (employer);

7.2. setting of measuring equipment shall be performed, including an acoustic test of microphones;

7.3. reports necessary for the performance of measurements shall be prepared providing a space for writing the information therein.

8. The following requirements shall be complied with in noise measurements:

8.1. setting of measurement equipment and an acoustic test of microphones shall be performed before and after each series of measurements;

8.2. equipment utilised in measurement and the environmental conditions dominating during measurement shall be recorded in a measurement report. The report shall be kept for two years;

8.3. the duration of measurement shall be adequate to take necessary noise measurements and determine the effects of noise on persons;

8.4. a time interval for the measurement of changeable noise shall cover at least one full work cycle characteristic to the noise source, but not less than 20 minutes;

8.5. duration, place and type of measurements shall be determined taking into account the recommendations of the relevant standard. During measurement, the changes in the environmental conditions (side noise and wind direction) and the characteristics of the noise shall be considered;

8.6. if there is suspicion of a tonal or impulse nature of the noise to be measured, it is necessary to perform additional investigations utilising third octave and impulse analysis.

9. In determining noise measuring points, the following requirements shall be taken into account:

9.1. measuring points shall be determined in conformity with the recommendations of the measurement method utilised so that the surrounding objects do not cause measurement errors;

9.2. measurements in premises and territories shall be taken at not less than three measuring points in compliance with the requirements specified in Paragraphs 10, 11 and 12 of this Annex.

10. In determining noise measuring points in territories, the following requirements shall be taken into account:

10.1. if it is necessary to minimise the effect of reflection on the results of measurements, the measurements, if possible, shall be taken at a distance of at least 3.5 meters from any reflective surfaces, except the ground surface;

10.2. a microphone shall be located at the height of 1.2–1.5 m above the ground.

11. In determining noise measuring points near buildings, the following requirements shall be taken into account:

11.1. measurements shall be taken in close proximity of the buildings exposed to noise;

11.2. measurements shall be taken at a distance of 1–2 m from the facade of a building and 1.2–1.5 m above the level of the storey to be investigated of a building.

12. In determining noise measuring points in premises, the following requirements shall be taken into account:

12.1. measurements shall be taken in premises in which noise may cause a risk to the safety and health of a person, in particular to hearing, or in which it has been requested by the commissioning party of the noise measuring (employer);

12.2. measurements shall be taken at a distance of at least 1 m from walls and other large reflecting surfaces, 1.2–1.5 m above the floor and approximately 1.5 m from windows;

12.3. if there are no other instructions, the number of measuring points (NM) in the premises shall be selected using the following formula:

|  |  |
| --- | --- |
|  | where |

V – room volume (m3);

NM – number of measuring points rounded to a whole number;

12.4. measuring points in proximity to the noise source, if possible, shall not be selected in an area that is nearer than twice the larger dimension thereof;

12.5. if the spread of the results of measurements between different measuring points exceeds 7 dB (LpA), an average sound level of a room shall not be utilised in the assessment of the acoustic situation;

12.6. in symmetric rooms none of the measuring points may be located symmetrically to any other measuring point in relation to the axis or centre of the room.

13. During the performance of measurements of the noise, the following requirements shall be complied with:

13.1. the requirements specified in the standards referred to in Paragraph 3 of this Annex shall be complied with regarding the location of a microphone, values to be measured, width of bands to be analysed, duration of measurements and other characteristic requirements;

13.2. the scale of measurements and site parameters shall be specified in a work programme coordinated with the employer;

13.3. a report of measurements shall specify, as precisely as possible, what noise sources operated during the performance of measurement, their locations, the location of measuring equipment and the direction of the microphone, and also the distances to noise sources. Background noise shall be measured at the same measuring points at which the noise to be investigated has been measured;

13.4. if undesirable (non-characteristic to a noise source to be investigated) side noise occurs, the measuring shall be suspended;

13.5. the results of measurements, names of measurements and measurement locations, if necessary, shall be recorded in a report of measurements which, if necessary, shall be supplemented with outline drawings or photographs;

13.6. measurements shall be suspended if the conditions provided for the performance of measurements or underlying principles for selection of a measurement location have not been fulfilled. If the presence of persons is necessary or measurements are taken during the movement of persons, the microphone shall be located at a distance of 0.10–0.01 m from the ear of a person exposed to the higher A-weighted sound exposure or an equivalent continual A-weighted sound pressure level.

14. At the measurement locations where the impact of meteorological conditions on the noise level is possible, it shall be measured in compliance with the following requirements:

14.1. in measuring a long-term average sound level, time intervals shall be selected so that they cover the actual meteorological conditions at the measurement location;

14.2. in special meteorological conditions the measurement time intervals shall cover carefully selected meteorological conditions. The conditions selected shall correspond to the case when the direction of dominating winds is the same as the spread direction of the noise to be measured.

15. The noise measurement report shall include the following information:

15.1. given name, surname or name, address and telephone of the performer of noise measurements;

15.2. an indication of the measurement environment and place;

15.3. registration data of the report (number or name);

15.4. name and address of the commissioning party of the noise measurement (employer);

15.5. starting time of measurements;

15.6. ending time of measurements;

15.7. deviations from measuring procedures (if any occur);

15.8. information regarding measurement procedures:

15.8.1. distribution of measurement time according to measuring points (duration of measuring and measuring time interval);

15.8.2. description of measurement locations (schemes, drawings, and photographs), including conditions when the arrangement of a room or territory differs from the normal or provided for arrangement;

15.9. description of measurement circumstances:

15.9.1. characterisation of surface (between a noise source and measuring points);

15.9.2. particular nature of noise source emission (radiation);

15.9.3. if measurements have been taken outdoors and the climatic conditions, wind speed and direction, precipitation affect them;

15.10. the following indicators:

15.10.1. possibility to identify the noise source and determine the origin thereof;

15.10.2. characterisation of noise;

15.10.3. measurements and notes of side (background) noise;

15.11. other data affecting the measurement results or ordered by the employer;

15.12. data obtained in the processing of measurements and data;

15.13. parameters of the measurement environment and place during measuring;

15.14. information on measuring equipment utilised (name, type, information on calibration);

15.15. other notes of the performer of measurements.

Minister for Welfare D. Staķe

**Annex 2**

Cabinet Regulation No. 66

4 February 2003

**Permissible Duration of Noise Exposure in Conformity with Noise Exposure Levels Exceeding Exposure Level Limit Value 87 dB(A)**

|  |  |  |  |
| --- | --- | --- | --- |
| Noise exposure level\* | Permissible duration of noise exposure | | |
| h | min | s |
| 87 dB(A) (0.447 Pa) | 8 h 00 min | 480 | 28800 |
| 88 dB(A) (0.502 Pa) | 6 h 21 min | 381 | 22860 |
| 89 dB(A) (0.564 Pa) | 5 h 02 min | 302 | 18120 |
| 90 dB(A) (0.632 Pa) | 4 h 00 min | 240 | 14400 |
| 91 dB(A) (0.710 Pa) | 3 h 10 min | 190 | 11400 |
| 92 dB(A) (0.796 Pa) | 2 h 32 min | 152 | 9120 |
| 93 dB(A) (0.893 Pa) | 2 h 00 min | 120 | 7200 |
| 94 dB(A) (1.002 Pa) | 1 h 36 min | 96 | 5760 |
| 95 dB(A) (1.125 Pa) | 1 h 16 min | 76 | 4560 |
| 96 dB(A) (1.262 Pa) | 1 h 00 min | 60 | 3600 |
| 97 dB(A) (1.416 Pa) | - | 48 | 2880 |
| 98 dB(A) (1.589 Pa) | - | 38 | 2280 |
| 99 dB(A) (1.782 Pa) | - | 30 | 1800 |
| 100 dB(A) (2.000 Pa) | - | 24 | 1440 |
| 101 dB(A) (2.244 Pa) | - | 19 | 1140 |
| 102 dB(A) (2.518 Pa) | - | 15 | 900 |
| 103 dB(A) (2.825 Pa) | - | 12 | 720 |
| 104 dB(A) (3.170 Pa) | - | 10 | 600 |
| 105 dB(A) (3.557 Pa) | - | 8 | 480 |

Note.

\*If employees use personal hearing protective equipment, the noise attenuation provided for in the technical specifications of personal hearing protective equipment shall be taken into account.

Minister for Welfare D. Staķe