

The Control of Noise at Work Policy 2024 - 2025

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Control of Noise at Work Policy Statement

The Directors of SG Civil Engineering Ltd ('the Company') recognise that noise in the workplace can pose a serious permanent hazard to an individual's health.

The Company will therefore aim to eliminate noise at source however where that is not possible reduce, as far as is reasonably practicable noise generated to all operatives arising from the use of workplace equipment, this includes others who could be affected by said work activity.

This policy describes the noise related ill health effects associated with long term exposure to excessive noise whilst at work, explains the arrangements for implementation of the requirements of the policy and outlines the responsibilities of both the business and workers.

This policy does not cover the adverse effects on an operative's wellbeing that can arise from 'nuisance' noise that is below the levels likely to cause deafness.

This policy is subsidiary to the Company Health, Safety & Wellbeing Policy and any responsibilities highlighted in that policy are implicitly applied hereafter.

As a Company, we will bring this policy to the attention of all Operatives and other interested parties and will be reviewed on a regular basis, no less frequently than annually.

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1st June 2024

S Gallagher Operations Director SG Civil Engineering Ltd

1.0 Introduction & Scope

- 1.1 The requirements of this policy apply to all levels of management and workers of the Company including sub-contractors, self-employed and agency workers where such are engaged.
- 1.2 This policy applies to the control of noise levels in the workplace to prevent damage to the hearing from noise exposure, by considering the Exposure Action Values and Exposure Limit Values where long-term exposure will cause noise induced hearing loss (NIHL).
- 1.3 The Regulations do not apply to:
 - Members of the public exposed to noise from their non-work activities, or making an informed choice to go to or by a noisy work area.
 - Low-level noise that is a nuisance but causes no risk of hearing damage.
- 1.4 A flow chart on the Management requirements for Noise at Work can be referred to at Annex 1.

Responsibilities

2.0 Directors

- 2.1 The Directors of the Company shall;
 - Have overall responsibility for ensuring the implementation of this policy throughout the Company;
 - Ensure that sufficient funds are made available for the implementation of this policy where so required;
 - Delegate additional responsibility for the implementation of this policy to all management levels including Supervisors when engaged in projects in line with the requirements of the Principal Contractor;
 - Ensure that measures taken to achieve the objectives of this policy are only made by persons trained and competent to do so;
 - Arrange for a programme of health surveillance (through an Occupational Health Professional) for those Company workers potentially being identified as being at risk from hearing loss in the workplace;
 - Ensure accurate records are maintained and kept for a period of no less than forty years.
- 2.2 The Contracts Manager is to ensure an inventory is created of all company owned workplace equipment likely to cause Noise Induced Hearing Loss (NIHL). Where the equipment is hired in, this inventory requires being maintained on site, when 'off-hired' this requires being annotated on the inventory. This includes a program of routine maintenance and servicing is also implemented for all relevant workplace equipment and that records of such maintenance are kept, whether they are company owned or hired.
- 2.3 The following shall apply to all inventories;
 - <u>Company Owned Equipment</u> Inventory centrally held at the Main Office and issued to sites as required.
 - <u>Hired in Equipment</u> Inventory held at site by the appointed Supervisor.

2.4 Ensure this policy is monitored through company management reviews and / or health and safety meetings.

3.0 <u>Contracts & Site Manager</u>

- 3.1 Both the Contracts and Site Manager shall support and assist the Directors in the implementation of this policy as it relates to operatives and / or subcontractors, in addition they shall ensure that, where appropriate;
 - All Supervisors and workers are advised of the risks relating from exposure to noise at work. (Additional Guidance can be sought through the Company appointed Health & Safety Consultant);
 - Ensure that specific risk assessments are conducted prior to work being carried out which will be used to identify hazardous work activities and workers who may be at risk from hearing loss and implement appropriate measures to reduce noise generated by such works;
 - That a programme of routine maintenance and servicing is maintained for all relevant workplace equipment and that records of such maintenance are kept;
 - An inventory is maintained for all hired in equipment.

4.0 Supervisors

- 4.1 The appointed Supervisors shall ensure that, where appropriate;
 - This policy is implemented as it relates to workers within their control;
 - The task specific risk assessments are communicated to all operatives;
 - All operatives under their control are advised of the risks relating from exposure to noise at work;
 - Any operative likely to be exposed to significant noise at work are offered health surveillance and report through to the management team;
- 4.2 All operatives are fully aware of the risks involving noise at work.
- 4.3 The policy will be monitored at the company management / health and safety meetings and specific site inspections.

5.0 Operatives (inc Sub-Contractors, Self Employed & Agency Workers)

- 5.1 It is the duty of every operative to;
 - Use only approved workplace equipment;
 - Wear approved hearing protection (See PPE & RPE Policy) as identified by the task specific risk assessment;
 - Maintain hearing protection and other noise control equipment supplied correctly;
 - Ensure Compliance with any programs of health surveillance;
 - Report any defects or difficulties with hearing protection (PPE) and any other equipment used to control the noise to the appointed supervisor.

<u>General</u>

6.0 III Effects from Excessive Noise

- 6.1 The human ear is a delicate organ, which is highly susceptible to damage, and the working environment can frequently induce this. A list of noise comparators can be found in Annex 2.
- 6.2 One of the major problems associated with hearing loss is that it occurs over time and the sufferer may not be fully aware that it is taking place (NIHL). There are two types of hearing loss associated with damage, namely 'temporary' and 'permanent' threshold shift.
 - 6.2.1 Temporary threshold shift is a temporary dullness in hearing after exposure to loud noises.

- Hearing will subsequently recover; the time taken depends on factors such as loudness and duration of the noise. If hearing does not return after 48 hours, the level of hearing loss that remains can be considered permanent.

6.2.2 Permanent threshold shift can be split into two categories:

- <u>Noise Induced or Occupational Deafness</u> – This results when the sufferer has been gradually exposed to noise over a long period of time. Normally, hearing loss will be similar in both ears and increase with continued exposure to noise.

- <u>Acoustic Trauma</u> - This occurs with exposure to an extremely high sound level over a short period of time. In some cases, resulting in perforation of the eardrum. Hearing losses can be frequently more severe in the ear closest to the sound. Once permanent damage has occurred to the inner ear it is irreversible.

6.3 Hearing loss is not the only potential problem as tinnitus may occur leading to additional issues of disturbed sleep.

Control of Noise at Work

7.0 <u>Reducing Noise Exposure</u>

- 7.1 Conducting a specific noise risk assessment ensures that a valid decision about the hazard's operatives are exposed to have been considered. It also determines what actions / control measures are to be taken to ensure the risk is eliminated or adequately controlled.
- 7.2 In order to carry out a suitable and sufficient risk assessment, it is necessary to know the maximum exposure limit values and action value.

Levels	Lower Action Values	Upper Action Values	Exposure Limit Values
Daily/weekly average exposure level	80dB(A)	85dB(A)	87dB(A)
Peak Sound level	135 dB(C)	137dB(C)	140dB(C)

7.3 Historically, noise measurements concerned with human reaction have been made through various filters, which match human hearing response at different sound pressure levels. The human ear is not equally sensitive to all frequencies and the difference in frequency sensitivity varies with sound level. The filter most commonly used for environmental noise is known as

'A' weighting filter which emulates the human response at low levels of sound by attenuating sound levels at high and low frequencies.

- 7.4 Where the lower action value is reached, steps must be taken to provide information and training to workers and make hearing protection available.
- 7.5 Where the upper exposure value is reached reasonably practicable measures must be taken to reduce the noise exposure. The provision of hearing protection **is** mandatory.
- 7.6 No worker must be exposed to noise above the exposure limit value although hearing protection can be taken into account when reviewing this value.
- 7.7 Measures to reduce noise exposure may include;
 - The use of moveable acoustic screens;
 - Damping adding material to reduce vibration and noise;
 - Isolation separating the tool from its surroundings and supporting structures;
 - Distance increasing the distance between the source of the noise and the operatives;
 - Proper maintenance of workplace equipment (Pre-Planned Maintenance PPM);
 - Reducing exposure time to the noise;
 - Replacing tools and equipment with alternatives that create lower levels of noise;
 - Job rotation.

8.0 <u>Risk Assessment</u>

- 8.1 The Site Manager and Supervisors shall prior to commencing work on site ensure specific risk assessments have been undertaken and communicated to the workforce.
- 8.2 A Noise risk assessment is required wherever it is likely that exposure will occur at or above the lower exposure action value. (See table above & Annex 3).
- 8.3 The decibel scale used to measure noise is logarithmic. An increase in 3dB equates to a doubling of sound; the increase from 80 to 85 dB is almost a four-fold increase in sound level.
- 8.4 Formal, documented risk assessments shall be conducted where any worker is engaged in work in an area exceeding 80dB on a regular basis (e.g. 4 Hours or more, most days) or if noise levels exceed 85dB, even if exposure is infrequent or irregular.
- 8.5 To get a rough assessment of whether a risk assessment is required the following simple tests below should be considered.

Test	Probable Noise Level	A Risk Assessment is Required if the Noise continues like this for more than:
The noise is intrusive but normal conversation is possible	80dB	6 hours
You may have to shout to talk to someone 2m away	85dB	2 hours

You may have to shout to talk to someone 1m away	90dB	45 minutes
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- 8.6 The specific risk assessments shall consider;
 - Assessment of the level and type of noise;
 - Who is likely to be affected and it is important to consider that those NOT using equipment may also be affected by the noise;
 - The estimate of operative exposure, which must be compared with the exposure action values and limit values;
 - Information provided by the manufacturers of workplace equipment;
 - Assessment of indirect risk i.e., the risk of individuals not hearing warning alarms due to excessive noise levels;
 - Health factors of an operative. For example, a worker with a hearing deficiency may be at greater risk of further damage.
- 8.7 Where the risk is thought to be significant a more detailed risk assessment shall be conducted by a competent person. This shall look in detail at the levels of noise that workers are exposed to, the duration and the pattern of exposure.
- 8.8 Risk assessments shall be reviewed regularly, and if there is reason to suspect that the risk assessment is no longer valid or that there has been a significant change in the work to which the assessment relates. As a result of this review, where changes are required, such changes shall be made.

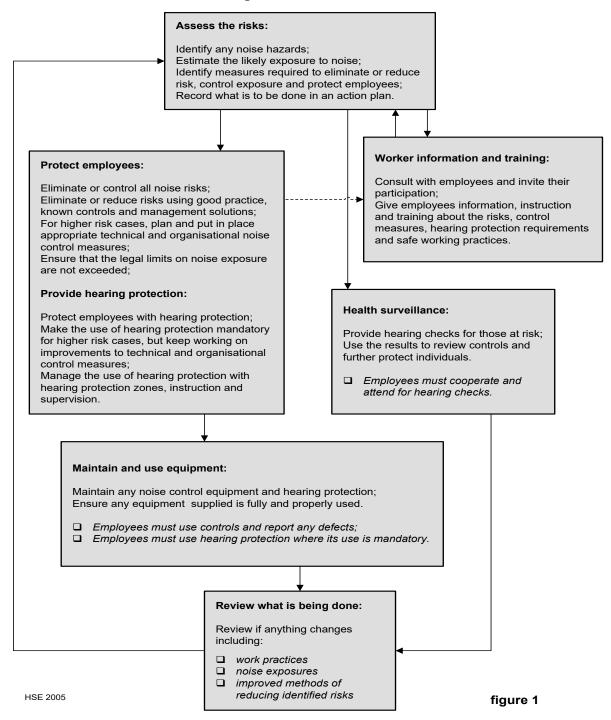
9.0 <u>Health Records</u>

9.1 All health records shall be controlled by the appointed Occupational Health Provider, and all individual records shall be kept for a minimum of 40 years.

Management of Noise Risks

Annex 1

Management of Noise Risks



Note – Where the HSE has quoted 'Employee / Employee's' in the above extract this is deemed as 'Worker / Worker's' for purpose of this Policy.

Example Table of Noise Comparators

Annex 2

Sound Sources (Noise) (Examples with Distance)	Sound pressure Level <i>L</i> p dB SPL	Construction Items Average (Examples with No Distance)
Jet aircraft, 50 m away	140	
Threshold of pain	130	
Threshold of discomfort & pain (125) (Noise e.g. – Thunderclap)	120	Oxygen Torch
	112	Pile Driving
Chainsaw, 1 m distance	110	Jackhammer
	108	Impact Wrench
Nightclub, 1 m from speaker	100	Handheld Drill
	96	Masonry Saw
		Quick Cut Saw
		Power Saw
Diesel truck, 10 m away	90	Crane Operations Loading Shovel / Excavator Arc Welder
	86	Dozer Operations Grinder
Kerbside of busy road, 5 m	80	
Vacuum cleaner, distance 1 m	70	
Conversational speech, 1 m	60	
Average home	50	
Quiet library	40	
Quiet bedroom at night	30	
Background in TV studio	20	
Rustling leaves in the distance	10	
Hearing threshold	0	

Note:

- An increase of 3 dBA is barely perceptible to the human ear

Personal Noise at Work Assessment

Annex	3
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Personal Noise a	at Work Ass	essment		SGCE CIVIL ENGINEERING LTD
Project / Location	of Assessme	ent:		
Name:				
Job Title:				
Date of Assessment:				
Instrument Details:			Serial Numbe	er:
Date of last Verific	cation:		1	
Calibrator Type:			Serial Type:	
Calibrator level:		Date of last cali		
	I	Date of last call		
		Noise Exposu	re Assessme	nts
Noise Sources	Sound level pressure dB(A)	Exposure times (hours/mins)	Distance away from noise	Peak SPL dB(C)
Total Daily Expos	ure LEP, d d	B(A)	•	
Action Level	LEP, d			Peak
Exceeded	80 dB Yes/No	85 dB Yes/No		137 dB (200 Pa)
Remarks				
		Recommenda	ations for Acti	on
Immediate:				
Future:				
Assessed by:				
Signature:			Date:	

Note:

The readings taken are for guidance use only, they will indicate if there is a noise problem within the working area of the worker.

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Definitions

- **A Weighted** A-weighted decibels, abbreviated dBA, or dBa, or dB(a), are an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, compared with unweighted decibels, in which no correction is made for audio frequency. This correction is made because the human ear is less sensitive at low audio frequencies, especially below 1000 Hz, than at high audio frequencies.
- **C Weighted** C Weighting is usually used for Peak measurements and also in some entertainment noise measurement, where the transmission of bass noise can be a problem.
- **Decibel** The decibel (dB) is a logarithmic unit of measurement that expresses the magnitude of a physical quantity (usually power or intensity) relative to a specified or implied reference level. Since it expresses a ratio of two quantities with the same unit, it is a dimensionless unit. A decibel is one tenth of a bel (B).
- **Free Field** An environment in which there are no reflections is called a free field. In a free field, the sound intensity level decreases by 6 dB each time the distance from the source is doubled.
- LAeqT This scale measures the average energy of the noise level. It is the equivalent steady state level of a fluctuating noise level. When considered over a period of time T, this is represented by the scale dB LAeqT.
- LA90T The A weighted noise level exceeded for 90% of the specified measurement period (T).
- **Pascal** It is a measure of perpendicular force per unit area i.e. equivalent to one newton per square meter or one joule per cubic meter. In everyday life, the pascal is perhaps best known from meteorological air-pressure reports, where it occurs in the form of kilopascal (1 kPa = 1000 Pa).