



Noise and Vibration at Work Assessments

In Ireland 2007 Regulations transposed Directive 2002/44/EC of the European Parliament and of the Council of 25 June 2002 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise and vibration).

In order to comply with these Directives, companies need to assess noise and vibration levels and provide necessary protection for their employees. They are also required to monitor and if necessary reduce noise and vibration risks.

The aim of the Regulations is to ensure that risk from the exposure of employees to noise is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable.

Our expertise comprises:

- Noise and Vibration at work assessments
- Environmental noise
- Noise modelling
- Building Acoustics
- Post construction noise evaluation
- Production of noise guideline

Key Clients include:

- Local Authorities
- National Roads Authority
- Private Developers
- Dublin Airport Authority
- Dublin Regional Authority
- Department of Transport

Recent Experience

Between August 2007 and December 2008 Atkins completed the Noise and Vibration Workplace Assessments for Louth County Council. Assessments were carried out on all employees exposed to noise and vibration when using equipment, vehicles and machinery.

The Regulations specifies action values and exposure limit values for daily personal noise exposure (or weekly personal noise exposure) and peak sound level which includes:

- The lower exposure action values are; 80dB (A) LEP,d or 80dB (A) LEP,w- i.e. a daily or weekly personal noise exposure of 80dB (A);
- The upper exposure action values are; 85 dB (A) LEP,d or 85 dB (A) LEP,w – i.e. a daily or weekly personal noise exposure of 85dB;

In order to complete this assessment, CEL 360 noise dosimeters conforming to BS EN 61252: 1997 were issued to council staff and B&K 2250 sound level meter were used to undertake direct measurements of noise levels at positions representative of the likely noise exposure that employees would receive in accordance with the Regulations. An estimated maximum daily exposure time was determined from site interviews with the staff, and using the Health Service Executive calculator, the total exposure time of each noise source was calculated.

Vibration measurements were undertaken in accordance with ISO 5349-1 and ISO 2631-1. A Larson Davis HVM Vibration Meter was used to undertake direct measurements of vibration at positions representative of the likely Whole Body Vibration and (WBV) and Hand Arm Vibration (HAV) exposure in accordance with the Regulations.

Workplace assessment were carried out on all employees exposed to noise and vibration such as construction works and all general operators.

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