

## **CHALLENGE**

Occupational noise hazards are detrimental to employees' hearing and productivity, while also a risk assessment under workplace regulations.

## **SOLUTION**

AWN takes a multifaceted approach through acoustic expertise to safeguard employee health by determining the root cause of noise.

## **RESULT**

AWN conducts site noise surveys, produces noise heat maps, and designs an advisory plan combining Hearing Protection Devices with engineering and administrative controls.

In addition to environmental and building acoustics, the Acoustics department at AWN Consulting, a Trinity Consultants team also specialises in occupational noise at work assessments. These assessments are paramount in protecting the hearing of employees and ensuring a safe and healthy working environment for all. In addition, a noise at work risk assessment is a legal requirement under the General Application Regulations 2007, Chapter 1 of Part 5: Control Of Noise at Work for any workplace that regularly exceeds 80 dB (A).



We conduct on-site noise surveys in all types of workplaces including those which have highly mobile staff with complex work-shift patterns and exposures, resulting in a calculation of personal daily noise exposure levels for each category of employee. We can produce noise heat maps to clearly identify which area of your workplace are in excess of the regulatory requirements and require immediate mitigation.

However, mitigating workplace noise requires a multifaceted approach to safeguard employees' hearing and productivity. While hearing protection devices (HPD) such as earplugs and earmuffs may be required as a temporary measure, relying solely on them has limitations and associated costs for companies. These measures, though cost-effective initially, may lead to long-term financial and operational challenges if used without complementary strategies.

HPDs protect individual workers but do not address the root cause of noise. Over time, improper or inconsistent use can result in occupational hearing loss, leading to potential legal liabilities, increased worker compensation claims, and higher insurance premiums. Additionally, prolonged use of HPDs may cause discomfort, reducing compliance and productivity. Employees wearing HPDs may experience communication barriers, increasing the risk of accidents and errors, especially in environments requiring clear auditory signals.

Due to our acoustic expertise, we go further than solely identifying if the exposure action values/limits are exceeded and what actions are legally required to reduce the daily noise exposure. AWN use targeted control measures to reduce the risk so far is as reasonably practical with the selection of hearing protection as a last resort. Effective control measures may include engineering controls, like installing noise barriers around noisy plant items or positioning acoustic panels with specific absorption coefficients. Administrative controls, such as rotating workers and limiting exposure times may be essential. Implementing quiet zones and scheduling noisy tasks during off-peak hours can also further reduce risks. AWN can calculate the potential reduction in noise from these proposed changes long before a client incurs any retrofitting costs.

If hearing protection is required, we will tailor the selection of hearing protection to the frequency of noise in your work environment. AWN can help your business by combining HPDs with engineering and administrative controls, to achieve a safer, more productive workplace while minimising long-term costs and liabilities associated with occupational noise exposure.

## ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.