



## Noise services

### The challenge

Excessive noise can cause hearing damage to workers, affect wildlife or annoy neighbours.

Noise needs to be considered in many contexts, including: environmental approval, regulatory compliance, management of health and safety, community relations and operational efficiency.

When noise becomes excessive, it requires elimination, mitigation or management.

Effective solutions to noise problems depend on a fundamental understanding of acoustics, industry experience and an appreciation for practical concerns faced by operators and designers.

### Our solution

Our experts conduct noise surveys, monitoring and prediction as well as detailed design and optimisation of engineering noise controls.

We provide you with clear and timely advice you can trust and act upon.

### Our expertise

Our noise management specialists have more than 30 years' experience working at all stages of the project lifecycle, from design through to commissioning and operations.

Our experience has been gained both in the field and through project design. Consequently, we have a valuable first-principles understanding of noise sources and the practical challenges of managing noise, implementing solutions and achieving measurable results.

### Service line:

Asset Performance  
Optimisation

- Vibration, dynamics and noise

We manage industrial noise risks to ensure health, safety and environmental compliance:

- 1. Environmental noise** can cause annoyance and concerns for public and environmental health
- 2. Occupational noise** is a frequent cause of avoidable hearing loss

### Benefits

- Mitigate risk of noise-induced hearing loss (NIHL) for on-site personnel
- Minimize effects of noise pollution on surrounding areas and communities
- Demonstrate compliance with applicable noise regulations and ordinances
- Proactively identify noise issues prior to construction or startup

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Concept select

Environmental impact  
Occupational risk

Design

Facility design  
specification  
and support

Commissioning

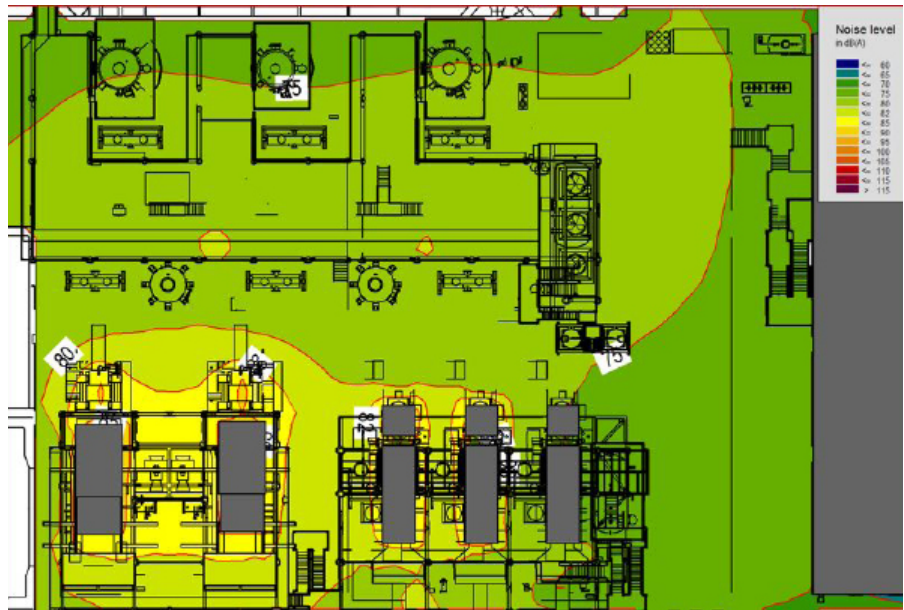
Compliance  
assessment and  
testing

Operations

Surveys and  
monitoring  
Noise control

## Solutions include

- **Noise prediction and modeling** to assess environmental and occupational risk
- **Noise surveys, measurement and monitoring** to quantify levels, performance and compliance of operations
- **Engineering, detailed design and ALARP analysis** ('as low as reasonably practicable') of noise controls and management solutions



## Capabilities

### Occupational noise and vibration

- Noise surveys and mapping
- Human vibration surveys
- Dosimetry
- Noise control planning
- Exposure reduction strategy
- Engineering noise control

### Underwater noise

- Underwater noise modeling
- Noise monitoring and source identification
- Marine fauna impact assessment

### Environmental noise and vibration

- Environmental noise impact assessment
- Noise prediction and contours
- Noise, ground-borne vibration and blast monitoring
- Management plans
- Noise source identification and analysis
- Noise mitigation design

### Design services

- Noise design studies
- Noise modeling (internal and external)
- ALARP (reducing noise to 'as low as reasonably practicable')
- HVAC noise assessment
- PAGA/comms systems
- Vendor data review and specifications
- Acceptance testing

## More information and support

To discuss your noise concerns with an expert, contact us at

[info.vdn@woodplc.com](mailto:info.vdn@woodplc.com)

or visit our vibration, dynamics and noise pages.

[woodplc.com/vdn](http://woodplc.com/vdn)