



## Company Background - Noise And Vibration Capabilities

Noise and Vibration are the founding disciplines for SLR Heggies. Established in 1978, SLR Heggies consulting engineers and scientists have been providing services in Noise and Vibration for over 30 years.

In the field of Noise and Vibration, SLR Heggies has been providing the following services:

- **Industrial Acoustics**
  - Noise & Vibration Assessment & Control
  - Noise Modelling, Noise Source Ranking, Sound Intensity Measurements
  - Concept & Detail Design of Mitigation Strategies
- **Road Acoustics**
  - 3D Noise Modeling
  - Barrier Optimisation, Architectural Noise Treatment, Road Treatments
  - Noise Surveys, Vehicle Pass-by's, Environmental Management Plans
  - Construction and Operational Assessments
- **Bridge Dynamics**
  - Fatigue Life Assessments, Radiated Noise from Elevated Structures
- **Transportation Vibration Assessment and Control**
  - Regenerated Noise & Vibration
- **Aircraft and Helicopter Acoustics**
  - Noise Modelling, Measurements & Assessments
- **Mining Noise & Vibration**
  - Surveys, Complaint Investigations, Licence Condition Compliance
  - 3D Noise Modelling, Environmental Management Plans
  - Planning Approvals
  - OHS Noise Surveys, Noise Control Programs
  - Hearing Protection Assessments
- **Rail Acoustics**
  - Rail Noise & Vibration, Rail Vehicle Compliance Testing
  - Wheel Squeal Studies, Floating Slab Design, Vibration Isolation Studies
- **Building Acoustics**
  - Design Services throughout the Design Process, Computer Modelling
  - Mechanical Services – Noise & Vibration Assessment & Control
  - Design Services for Special Spaces (Auditoria, Theatres)
- **Ecoacoustics**
  - Noise & Vibration Assessments onto the Natural Environment
- **Defence Noise & Vibration**
  - Firing Ranges, Production Facilities, N&V Assessments for Facilities
  - Design, Testing and Certification of rooms and facilities requiring high level acoustic security
- **Occupational Hygiene**
  - Noise Dosimetry, Noise Contours
- **Structural Dynamics**
  - Experimental Modal Analysis
  - Strain Gauging
  - Dynamic Finite Element Analysis, Modal Response Modelling



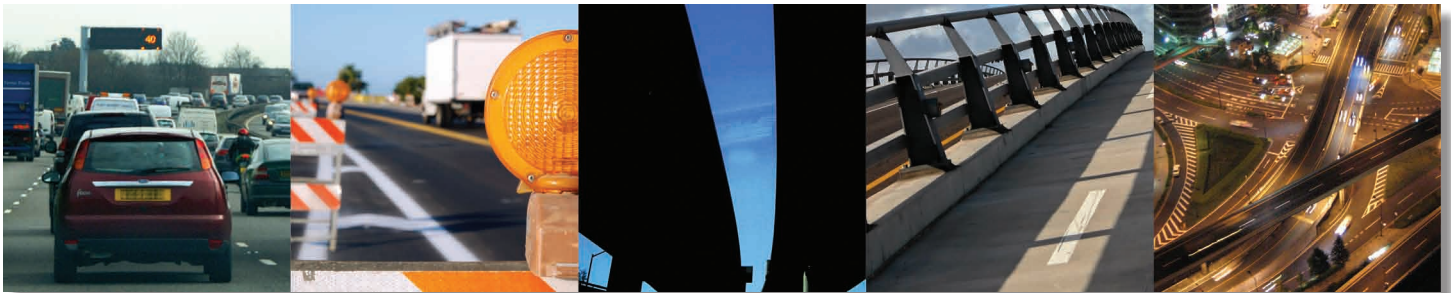
# NOISE AND VIBRATION - OVERVIEW

Our consultants apply advanced technologies and innovation to manage risks, optimise opportunities and enhance the cost effectiveness of project solutions. Guidance is provided from planning and design through to compliance assessment and the ongoing operational stages of transportation, architectural, construction, industrial, minerals extraction and infrastructure development projects.

Since the company was incorporated in 1978, services have grown to embrace acoustics, vibration, air quality, noise and vibration control, blast design and monitoring, modal analysis, structural dynamics, wind engineering, solar and energy/ESD studies. The company achieved a significant milestone in 2004 with the acquisition of New Environment Management and Technology, augmenting the company's environmental, hazardous materials, land contamination, water quality and OHS services.

SLR Heggies operates under a Quality Management System fully certified to AS/NZS ISO 9001:2008 (SAI Global Licence No. 3236) and has NATA-accreditation for its laboratory (to ISO 17025) and for air volume measurement and asbestos fibre counting.

With approximately 140 staff and offices in Sydney, Brisbane, Newcastle, Wollongong, Canberra, Melbourne, Perth, Townsville and Singapore, SLR Heggies is able to provide specialist resources for both large and small projects in all states of Australia, New Zealand, Papua New Guinea and South East Asia. Whether the project is large or small, our consultants pride themselves on providing a high standard of service and technical expertise.



## SLR Heggies Technical Expertise

- Acoustics, Noise & Vibration
- Air Quality – Ambient & Indoor
- Water Quality – Surface & Ground Water
- Land Quality – Contamination and Ecology
- Hazardous Materials - Asbestos, PCBs, Lead, Chemicals & Explosivity
- Occupational Health & Safety (OHS)
- Finite Element Analysis & Solid Modelling
- Mechanical and Structural Dynamic Analysis
- CFD – Computational Fluid Dynamics
- Wind Engineering & Fire Propagation
- Solar, Light, Reflectivity and Overshadowing
- ESD Sustainability & Energy Efficiency

## SLR Heggies Services

- Mechanical Design
- Advanced Systems Engineering
- Real Time Web Based Air & Noise Monitoring
- Blast Design & Emissions Impact Assessments
- Surveys - Noise & Vibration, EMR, Air & Water Quality
- Condition Surveys, Reporting & Web-based Management
- HAZMAT CRMS – Critical Response Management Service
- Ground Contamination & Site Remediation Services
- Health Risk & Toxicology Management
- OHS & Occupational Hygiene Assessments
- Environmental Management Plans & Sub Plans
- ISO 14001 Environmental Management Systems
- Statements of Environmental Effects
- Ecological Studies & Bush Fire Impact Assessments
- Expert Witness Evidence & Reports
- Corporate Social Responsibility Technical Services
- Green Star, BASIX, ABGR, BCA Section J & Energy Audits
- Web & Video Media Services
- Wind Tunnel Testing
- NATA Laboratory

Visit us at [www.heggies.com](http://www.heggies.com) or call **1 300 434 443** to find out more.

Heggies Pty Ltd is a member of the International SLR Group  
[www.slrconsulting.com](http://www.slrconsulting.com)