

# **Consulting Services**

One of the world's leading specialist environmental consultancies



# Acoustics and Vibration

SLR's Acoustics team offers a broad range of services and a wealth of experience in acoustic matters that can be employed in a variety of ways. We provide advice on projects that vary from the provision of simple advice on discrete assessments to carrying out full impact assessments, detailed design recommendations or expert witness evidence.

- Industrial Acoustics
- Rail Acoustics
- Compliance
- Transportation Vibration
   Assessment & Control
- Road Acoustics
- Mining Noise & Vibration
- Environmental Planning Approvals
- Surveys, Complaint Investigations, Licence Condition
- Underwater Acoustics
- Architectural Acoustics
- Structural Dynamics
- OHS Noise Surveys, Noise Control Programs

# AIR QUALITY AND CLIMATE CHANGE

Building on our extensive knowledge and recognised credibility, SLR works in partnership with our clients to advise on regulatory obligations and best practice guidance to provide a comprehensive service.

- Air Quality & Greenhouse Gas Impact Assessment
- Computation Pollution Dispersion Modelling
- Plume Rise Assessments (RPA) & •
   Plume Visibility Studies
- Odour & Dust Monitoring, Modelling & Assessment
- Real-time NATA Accredited Air Quality Monitoring & Reporting
- NATA Accredited Process Emissions Monitoring
- Fugitive Emission Control & Management
- Real-time Meteorology Monitoring
- Expert Witness & Testimony, Peer Review & Nuisance Investigation
- Load Base Licensing (LBL) & National Pollutant Inventory (NPI) Reporting
- Emission Estimation, Inventories
   & BAT/BPM Assessments
- Process Feasibility & Technology Due Diligence Studies



















# CAD / GIS

SLR has a dedicated Spatial Team that employ computer aided drafting (CAD) and Geographic Information Systems (GIS) to leverage locational intelligence by visually representing data for our clients.

- High Quality Plans & Figures
- Visual Impact Assessments
- 3D Surface Modelling & Visualisations
- Surface Water Management Designs
- Spatial Data Integration
- Mechanical Drafting
- Establishment and Management of GIS databases
- Erosion & Sediment Control Engineering Drawings
- Preparation of Statutory Plans
- Conceptual Design
- Desktop & Server GIS Customizations
- Mine Closure Domain Plans & Associated Spatial Calculations

### CFD, WIND & ENERGY

SLR applies advanced technologies and innovation to manage risks, optimise opportunities and enhance the cost effectiveness of project solutions.

- Building Facade Specifications
- BASIX Certification
- Wind Tunnel Testing & Impact Assessments
- Thermal Optimisation of Building's Facades
- Air Change Effectiveness
- Ventilation Design & Modelling
- CFD & Thermal Comfort Modelling Services
- Green Star and NABERS
   Assessment & Certification
- Lighting Studies
- Fire Simulations
- Renewable Energy Studies
  (Cogen/Trigen, Geothermal, Wind Turbine & PV Solar)
- Embodied Energy / Life Cycle Assessments

# Ecology

Our goal is to provide our clients with intelligent and pragmatic solutions for our clients – to achieve outstanding development outcomes and appropriate (and excellent) biodiversity outcomes.

- Flora & Fauna Assessment Reports
- Riparian, Aquatic and Wetland Studies & Assessments
- Species Impact Statements
- Ecological & Bushfire Risk Assessments
- Vegetation & Bushland Management Plans
- Statutory Requirements and Planning Instruments & Policies
- Advice on Urban Design
- Environmental Impact Assessment
- Mining, Infrastructure & Urban Development
- Section 5A Assessments of Significance
- Expert Evidence
- Riparian Ecosystem Assessment

# ENVIRONMENTAL MANAGEMENT, PLANNING & APPROVALS

SLR has a team of experienced and motivated Environmental Planners and Environmental Scientists capable of facilitating statutory approvals and providing a wide range of project management, environmental impact assessment and environmental management services across a range of sectors.

- Project Pre-Feasibility & Constraints Analysis
- Statutory Environmental Reporting
- Mining Operation Plans & Plans of Operations

**Post-Incident Risk Management** 

- Risk Assessments (G2 competent team members)
- Full Range of EIA & Approval Documentation
- Environmental Management Systems & Plans
- Subsidence Management Plans & Extraction Plans
- Government, Stakeholder & Community Consultation
- Environmental / Regulatory Licensing & Policy Advice
- Site Secondments / Environmental Staff Placements
- Due Diligence, Environmental & Compliance Auditing
- Conceptual & Detail Closure Planning & Costing

# HAZMAT

Experienced HAZMAT consultants are available immediately to guide your senior management in addressing all key issues proactively and effectively.

- Inspection Surveys
- Laboratory Analysis
- Project Management
  - Critical Response Capability
  - NATA Accredited to ISO/IEC17025 •
- Air Monitoring
- Asbestos Monitoring
  - Occupational Health & Safety Awareness Training





#### YDROLOGY & WATER QUALITY

SLR's hydrologists and stormwater engineers have extensive experience in flood risk management, water sensitive urban design, strategic catchment studies, water treatment and integrated water cycle management.

- Flood Impact & Mitigation Assessment
- Water Sensitive Urban Design
- Industrial Process Water Quality
- 1D/2D Hydraulic Modelling
- Wetland Design & Creek Stabilisation
- Erosion & Sediment Control
- Stormwater Management Plans
- Medli Modelling

- Groundwater Monitoring & Assessment
- Wastewater Treatment & Disposal
- Catchment Studies
- Expert Witness / Reporting

#### LAND ASSESSMENT, REHABILITATION & CLOSURE

A holistic approach to "land repair" is critical for the successful rehabilitation of mining, energy, and infrastructure developments. The project lifecycle includes thorough baseline studies, detailed final land-use planning, and accurate provisioning for decommissioning and rehabilitation activities.

- Soil Surveying & Management Strategies
- Management of Agricultural Off-set & Agronomic Advice
- Rehabilitation Planning & Execution
- Decommissioning & Closure Planning
- Land Capability / Suitability Assessment
- Waste Characterisation & Disturbance Management
- Rehabilitation Monitoring & Maintenance
- Rehabilitation Security & Financial Assurance Calculation
- Agricultural Impact Studies (BSAL, SCL, GQAL etc)
- · Land-form Design
- Auditing Rehabilitation & Agricultural
- Decommissioning & Rehabilitation Provision/Valuation

#### LAND QUALITY

SLR is a member of the Australian Contaminated Land Consultants Association (ACLCA) and offers a wide range of contaminated land assessment, remediation, validation and hazardous materials expertise.

- Human Health & Environmental Risk Assessment
- Soil & Groundwater Investigation
- Acid Sulfate Soils
- UPSS

- Groundwater & Soil Contaminant Modelling
- Remedial Action Plans
- Radioactive Contaminated Land
- Compliance Help for Businesses
- Due Diligence, Pre-acquisition
  Assessments & Post Use of Land
- Site Validation
- Hazardous Waste Assessment
- Waste Management

#### MINE WASTE ENGINEERING

Our committed professionals have a diverse range of academic backgrounds including civil engineering, geotechnical engineering, hydrogeology, hydrology and environmental science along with overall study and project management.

- Tailings & Waste Rock
   Engineering & Management
- Acid Rock Drainage Assessment & Control
- · Erosion Assessment & Design
- Geotechnical & Geo-environmental Engineering
- Water & Effluent Engineering & Management
- Risk Assessment

- Water & Salt Balance Modelling & Assessment
- Mine Closure Planning & Design
- Risk-based Medication Design

### OCCUPATIONAL HYGIENE

From physical, chemical and biological exposure to workers and the community, from mining, manufacturing or to the military, SLR understands the potential occupational health and safety risks our clients face in both their day to day operations and longer term health safety and hygiene programs.

- Baseline Worker Exposure
   Assessments & Program Development
- Heat Stress Evaluations
- Hazardous Industry Risk Planning & Development
- Occupational Health & Safety Auditing and Advice
- Toxicology & Health Risk & Impact Assessment
- Mould & Biohazard Assessments
- Hazardous Substances & Dangerous Goods
- Clandestine Laboratory Contamination Surveys
- Occupational Noise & Vibration Exposure Assessments
- Indoor Air Quality Assessments
- Dust, Solvent & Chemical Monitoring
- Forensic & Investigative Sampling



### Sustainability

Our team provide expert advice to assist clients in managing environmental risk, meeting compliance requirements, and developing and implementing Environmental Management Systems.

- Strategic Stakeholder Engagement
- Carbon & Energy Management
- Options Analysis
- Project/Corporate Sustainability
- Environmental Auditing (including NGER)
- Environmental Risk Assessment
- Carbon Management & Reporting
- Facilitation & Consultation
- Climate Change Risk & Adaptation
- Environmental Training
- Resource Efficiency
- Sustainability Decision Making

# **V**ALUATIONS

The Valuation team at SLR has an unrivalled depth of experience and retained market knowledge, providing expert valuation advice in all specialist areas of Industrial Minerals, Extractive Industries and Waste Management.

- Quarry, Mine & Waste Asset & Business Valuations
- Property Negotiation (Rent & Royalty)
- Sales Brokerage
- Sale Leaseback Analysis & Negotiation
- Valuations for Funding, Litigation, Financial Reporting, Taxation, Sales, Company Mergers, Acquisition
- Asset Optimisation, Highest & Best Use Analysis
- Financial Modelling
- Joint Venture Analysis & Negotiation
- Due Diligence on Asset & Business Sales, Mergers & Acquisitions
- Identification of Development
   Opportunities (Quarry / Mine/Landfill End Use)
- Investment Strategies
- Feasibility, Market & Planning Analysis

# Waste Management

Waste and resource recovery are core to our business. Our commitment and standing in the industry allows us to attract some of the best waste management professionals globally. Locally, SLR provides advice to a range of clients including waste producers, the waste management industry, regulators as well as investors.

- Energy from Waste
- Closure Plans
- Energy Recovery
- Landfill Gas & Leachate Management
- Advanced Waste Collection
- Feasibility Strategy Studies
- · Process Design
- Construction Support & CQA
   Reporting
- Landfill Design
- Procurement
- Waste Facility Master Planning
- Environmental Assessment

# WATER & LAND ENGINEERING

Our team of Engineering professionals provide a wide range of services to our customers which span the entire project lifecycle.

- · Water Management Planning
- Surface Water Assessments Analysis
- Design of Water Management Systems & Infrastructure
- Preparation of Technical & Contract Documentation
- Hydraulic Modelling & Design
- Catchment Rehabilitation Strategy & Design
- Catchment Rainfall / Runoff Analysis
- Design Verification & On-site Supervision & Management
- Water Balance Modelling & Analysis
- Hydrological Model Calibration, Verification & Design Application
- Erosion & Sediment Control Planning, Design & Auditing
- Asset Condition Inspection, Reporting & Management

#### SLR Consulting Australia Pty Ltd | SLR Consulting NZ Limited