

Mining Services



Jeremy Pola
Lead Environmental Scientist



Jeremy has 15 yrs experience in environmental management; environmental assessment; air, noise & water monitoring; and

compliance reporting within mining and heavy industry. He is responsible for the line of SentineX environmental monitoring products.

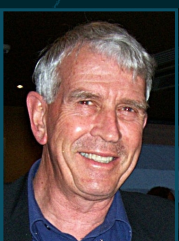
Colin Barker
Lead Engineer - Sustainable Devt



Colin is an industry experienced engineer who is responsible for our team of process and environmental engineers. He specialises in

process engineering, resource efficiency and sustainability.

Michael Taylor
Senior Engineer



Mike is an electrical engineer with strong risk management skills. He has experience in risk assessment facilitation, HAZOP and FMEA, and

specialises in Safety Integrity Level (SIL) determinations, particularly within the mining industry.

Advitech Mining Services provides a wide range of engineering and technical services to mining and mine services companies throughout Australia, such as Xstrata, Centennial Coal, Peabody, Orica, Inbye Mining Services and Port Waratah Coal Services.

Advitech is an innovative professional services organisation, providing engineering, environmental, management and technology services to a broad customer base. We employ a team of over 50 professional engineers, drafters, scientists, technical and support staff, and have been providing services to the mining industry since 1988.

Environmental Services

Advitech's experienced environmental scientists provide a range of mining services:

- Environmental monitoring - noise, air/dust, water, meteorological, odour
- Noise modelling and assessment - static and dynamic machine testing, compliance reporting
- Noise and air modelling and assessment - Ausplume, Calpuff
- Development planning and compliance management
- National Pollutant Inventory (NPI), National Greenhouse and Energy Reporting System (NGERS) and State of the Environment reporting
- Statutory reporting - EPL, project approval, AEMR

Noise
Monitoring
Case Study

Dust
Monitoring
Case Study

NPI
Reporting
Case Study

ResourceWise® Sustainable Business Program

Our ResourceWise® team combines Advitech's skills and experience in environmental engineering, process optimisation, resource efficiency and energy management. The team provides services to industrial and mining operations in:

- **Resource efficiency** - Working in conjunction with NSW DECC and other state and local government departments, we have assisted over 100 companies to undertake Resource Efficiency programs. Aggregate annual savings of \$8.3 million have been achieved with an average payback of 5 months. Mining company examples include Sandvik Voest Alpine and Tunnelling and Orica Mining Services.
- **Energy auditing** - We have conducted Level 2 and 3 energy audits or Energy Saving Action Plans for companies such as Donaldson Coal, Felix Resources and Bradken Mining Services. Potential savings opportunities over \$1 million p.a. were identified, with a payback period of 4 years or less.
- **Greenhouse emissions reduction** - The best way to reduce greenhouse emissions and reduce your company's carbon footprint is to undertake cost effective energy saving projects. An energy audit will identify these opportunities.
- **Carbon footprint calculation** - Larger companies will be required to report greenhouse gas emissions annually. Both small and large companies can benefit from understanding where there emissions come from and take steps to reduce them. Energy consumption is usually the largest contributor to the carbon footprint.

Resource
Efficiency
Case Study

Gordon Paterson
Lead Engineer - Projects



Gordon has 14 yrs experience in project management and mechanical engineering, with recent experience in industrial projects such as foundry upgrades.

Michael Neville
Manager - Engineering



Michael is a mechanical engineer and Director of Advitech. He is experienced in engineering design, quality and risk management, and is responsible for our team of mechanical, civil & structural engineers and drafters.

Advitech Pty Limited

Head Office

1 Elizabeth Street, Tighes Hill
(Newcastle) NSW 2297

PO Box 207
Mayfield NSW 2304

Telephone: 02 4961 6544

Sydney Office

Suite 17, Level 6, 91 Phillip St
Parramatta NSW 2150

Telephone: 0438 832 403

Email

mail@advitech.com.au

Website

www.advitech.com.au

Risk Management

Advitech's experienced engineers and facilitators provide specialised risk assessment services to the mining industry:

- Failure Modes and Effects Analysis (FMEA) for electrical and hydraulic systems
- Fault tree and event tree analysis
- Facilitation of workshops to determine Safety Integrity Level (SIL) requirements for safety functions
- Reliability engineering calculations applied to third part design proposals
- Verification of third party designs as part of registration for powered winding systems
- Facilitation of operational, safety and environmental risk assessments
- Hazard and Operability (HAZOP) studies
- Dangerous goods auditing, risk assessment and hazardous areas classification

Safety Integrity Level Case Study

Machine Safety Case Study

Project Management

Advitech assists mining and mine services clients with a variety of project engineering and project management tasks:

- Project management
- Project planning and scheduling
- Shutdown and maintenance planning
- Requirements analysis and engineering studies
- Procurement management, capital expenditure proposals and technical specifications

Project Management Capabilities

Project Planning Case Study

Engineering Services

Advitech provides engineering design and drafting solutions to mining and mine services organisations:

- Process and environmental engineering and modelling
- Mechanical engineering design
- Structural engineering design
- Structural analysis, finite element analysis
- Structural auditing, condition audits, asset management
- Drafting and solid modelling

Process Engineering Case Study

Mechanical & Structural Capabilities

Structural Assessment Case Study

Why Choose Advitech?

- You will benefit from our broad experience in both mining and industrial sectors.
- We pride ourselves on our responsiveness, and will be there when you need us.
- We promote a culture of mutual respect, efficiency, teamwork and innovation.

Additional information on Advitech's mining services are provided in our online case studies. These can be accessed by clicking on the relevant arrow buttons above, which will direct you to Advitech's website.