MINE WASTE ENGINEERING

“decades of mine residue disposal and specialist environmental experience covering virtually all phases of mine life.”

Our comprehensive experience allows us to identify economical and environmentally acceptable solutions which take cognizance of long term liability, through the careful integration of site specific conditions, geotechnical and geochemical characteristics of the tailings, various possible disposal strategies, closure objectives and constraints and risk management.

Our senior personnel have been involved in a wide range of minerals including gold, uranium, diamonds, coal, platinum, copper, nickel, chrome, vanadium, mineral sands projects, oil and natural gas.

HOW SLR CAN HELP

Our team has experience in the design, construction and management of tailings storage facilities, waste rock dumps, heap leach pads and associated infrastructure, water management and impoundment facilities, mine wide water balances, water quality and geochemistry.

Our projects have been in vastly different environments around the world (Australasia, Africa, North America and South America) in terms of minerals processed, geology, topography, climate, seismicity, construction materials, tailings rheology, geochemistry, and water availability.

OUR SERVICES

ENGINEERING
- Tailings and Waste Rock Engineering and Management
- Geotechnical and Geo-Environmental Engineering
- Water and Salt Balance Development and Assessment
- Acid Rock Drainage Assessment and Control
- Water and Effluent Engineering and Management
- Mine Closure Planning and Design
- Erosion Assessment and Design

ENVIRONMENTAL
- Environmental Management Programs and Plans
- Environmental Management Systems
- Strategic Environmental Management
- Environmental Impact Assessments
- Environmental Due Diligence
- Corporate Environmental Reporting

global environmental and advisory solutions
TECHNICAL SERVICE

MINE WASTE ENGINEERING

OUR EXPERIENCE

• Barrick Gold Australia
• Goldfields Limited
• Extract Resources
• Newmont Gold Australia
• St Barbara Ltd
• AngloGold Ashanti (Ghana)
• Antofagasta PLC (Chile)
• Ivanhoe Australia Pty Ltd
• Rio Tinto
• Paladin Energy Pty Ltd
• Anglo Platinum
• Bannerman Resources
• Whitehaven Coal
• Chinova Resources Pty Ltd
• Hanson Construction Materials Pty Ltd
• Carpentaria Gold Pty Ltd
• Argyle Diamonds Limited
• Rossing Uranium Ltd

RELATED SERVICES

WASTE ENGINEERING AND MANAGEMENT

• Tailings characterisation and engineering
• Hydraulic disposal engineering
• Waste rock engineering
• Municipal Waste engineering
• Industrial Waste characterisation and engineering

CONTAMINATION MITIGATION

• Cut-off design and collection
• ARD engineering

GEOTECHNICAL SITE INVESTIGATION AND FOUNDATION DESIGN

• Plant site investigations
• Tailings and water dam
• Waste rock dumps
• Infrastructure investigations
• Construction supervision

MINE CLOSURE ASSESSMENT, COSTING AND IMPLEMENTATION

• Mine Closure prescriptions
• Mine Closure engineering
• Mine Closure cost estimation

WATER ENGINEERING AND MANAGEMENT

• Water balances
• Salt balances
• Containment design
• Reticulation

CONTAMINATION PREVENTION

• Sustainability drivers
• Process input

THE SLR DIFFERENCE

Our comprehensive experience allows us to identify economical and environmentally acceptable solutions which take cognizance of long term liability, through the careful integration of site specific conditions, geotechnical and geochemical characteristics of the tailings, various possible disposal strategies, closure objectives and constraints and risk management.

Danielle O’Toole
T: +61 421 376 627
dotoole@slrconsulting.com

Trent Collins
T: +61 403 056 034
tcollins@slrconsulting.com

www.slrconsulting.com

global environmental and advisory solutions