

environmental and social due diligence and auditing

Statement of qualification



 **srk** consulting

Our services

SRK works predominantly within the mining industry, providing multi-disciplinary services from concept through to closure, and has a thorough understanding of environmental and social risks that can affect the value of mining assets

SRK undertakes environmental and social (E&S) reviews as part of due diligence (DD) studies for a range of investment decisions. These reviews are undertaken either independently as standalone environmental and social due diligence (ESDD) projects or alongside SRK's geologists and mining, processing, waste and infrastructure engineers, to provide input into the following reports:

- Technical reports for inclusion in prospectuses and private placement memoranda, produced in accordance with various Internationally Recognized Reporting Standards (IRRS) and technical report guidelines for public reporting of mineral resources and ore reserves (such as the NI 43-101 guideline and the JORC Code, 2012, Table 1).
- Mineral asset valuations for the project development stages from exploration through feasibility study to operations.
- Technical advisory reports in support of mergers and acquisitions, disposal, restructuring and privatization programmes.
- Loan compliance reviews.
- General reviews for various objectives.

These environmental and social reviews generally focus on material risks - that is, risks that can affect authorizations, stop or delay projects and operations, can result in reputational damage, and/or have a modifying effect on the financial value of assets.

Through reviews of hundreds of mining projects and operations, across the world and in a broad variety of ecological, socio-economic, and socio-political context, SRK has developed an applied understanding of environmental and social risks affecting the value of mining assets and the modifying factors that need to be taken into account when converting mineral resources to ore reserves.

In addition to ESDD work, we routinely assist clients with services relevant to:

- Obtaining and maintaining environmental authorizations (primarily environmental approvals and other permits and license's) to meet host country legal requirements and, where, relevant good international industry practice (GIIP)
- Supporting clients in developing and maintaining a social license to operate
- Preparation and implementation of environmental and social management plans
- Development of mine closure planning
- Baseline data collection, analysis and monitoring

SRK considers good international industry practice (GIIP), against which it both assesses and undertakes much of its work, to include:

- The Equator Principles, which require compliance with the International Finance Corporation (IFC) Performance Standards on Social and Environmental Sustainability (2012) and World Bank Group Environmental, Health and Safety (EHS) Guidelines (April 2007) if the financial institution does not have its own standards.
- The guidelines and toolboxes of the International Council on Mining and Metals;
- The guidelines of the International Cyanide Management Institute (if applicable);
- The Voluntary Principles on Human Rights and Security; and
- Extractive Industries Transparency Initiative.

Our core strengths

With more than 40 years in the mining industry and experience across the full life of mine, SRK has a multidisciplinary and global team of experienced and committed staff with expertise across all the disciplines required to undertake due diligence and audit work.

We consider our core strengths to be:

- Our close working relationships with our multi-disciplinary colleagues working almost exclusively in the mining and metals sector and its associated infrastructure sectors (particularly power, water and transport);
- Our ability to call on experts from our practices across the globe and a wide range of specialist associates covering six of the world's seven continents;
- Our experience and understanding of the project finance process, risk, materiality, and how E&S assessments fit into this, enabling

our effective verbal and written communication with technical and financial experts, lawyers, project proponents/sponsors and the project engineers;

- Our efforts to stay up to date with the latest developments in GIIP so that we can provide mining sector with state-of-the-art advisory services on environmental and social management;
- Our applied knowledge of the legislation and socio-political setting of the countries we work in so that we can identify and advise on how to address any challenges associated with these, particularly where there may be gaps between this and GIIP;
- Our extensive experience across a variety of projects in diverse biophysical, geographic, cultural, socio-economic and socio-political contexts.



Our approach

Our approach to E&S reviews is tailored to the nature, scale and setting of the asset, and generally includes:

- Definition of materiality: We reach a definition of materiality on the basis of experience, benchmarking against similar assets in similar settings and through discussions with the client and the broader review team.
- Staffing: We assess our approach to each review on a case-by-case basis to determine the appropriate team based on the expected environmental and social risks. Teams are always led by Principal staff with a minimum of 15 years' experience.
- Integration: We work in an integrated way with other members of the review team in the identification of risks and the determination of costs.
- Review of information: Typically, in an E&S review there can be hundreds of documents to review. SRK is experienced in identifying which documents to focus on and what questions to ask to get to the essence of the risks in the short timeframes generally available.
- Site visits: A site visit is a distinct preference in an E&S review, as it provides a rapid visual reference of the project and its setting and the opportunity to gain further information on E&S management performance that is not recorded in writing. Often it is not essential that the entire technical team visits the site. This is judged on a case-by-case basis.
- Portfolio of evidence: SRK undertakes discussions with the client team and the auditee to identify issues and risks of a material nature. In all instances SRK seeks to develop a portfolio of evidence to verify findings.
- Review standards: Typically reviews of mining projects/operations are undertaken against host-country legal requirements and any other governance frameworks stipulated by the client which could include: company policies, GIIP, and the relevant listing requirements (e.g. NI 43-101, SAMREC, JORC).
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- Reporting and deliverables: Most often, the E&S review forms a section or chapter in a technical report for a mining asset. In addition, we often contribute to:
 - The development of term sheets defining terms and conditions in investor/ loan agreements;
 - Assistance in preparation of environmental and social action plans (ESAP) outlining the commitments that will be addressed to meet lender requirements;
 - Pre and post-financial close monitoring through construction completion, commissioning, and production ramp-up including regular assessment of and reporting against the ESAP and for the duration of the loan facility;
 - Assessment and certification of technical completion documentation.

Based on SRK's experience, the following are key to a successful relationship with the financial institutions and the project sponsor:

- A well thought out ESAP, sufficiently detailed to enable understanding and implementation by the sponsor, including appropriate auditable assessment criteria to enable confirmation of compliance. Realistic timeframes and responsibilities should be included. There should also be some flexibility to adapt the ESAP when project circumstances change.
- Involvement of the independent engineer in development of loan agreement clauses relating to environmental and social performance to ensure these are appropriate and time bound and they reflect risk and materiality.
- A well referenced data room, ideally linking to the ESAP and certification requirements can facilitate a smooth and efficient review process.
- Internal reviews/audits ahead of the independent engineer's environmental and social specialists can facilitate the review process and enable the ESDD team to focus on high risk or potentially material aspects of the projects, with just minor verification of other aspects required.

Our team

(Comprehensive lists and CVs of our staff are available on request)

SRK staffs ESDDs with highly experienced team leads (comprising our Principal and Corporate consultants with generally more than 15 years' relevant experience). Our team leads and technical experts have sufficient diversity of experience in project contexts, project type and commodities, to appropriately assess each project, identify potential issues and risks and draw up a realistic action plan to address any identified gaps between the work done by the proponent and the relevant legislative requirements and international standards.

Senior consultants (generally between 8 and 15 years' experience) are included in the team under close supervision and where the risks do not warrant a greater level of expertise.

Our team works in most jurisdictions (subject to appropriate risk assessments) and is able to mobilise globally at relatively short notice.

Where specific support (in terms of geographical location, language or technical expertise) is required, we form teams across our global corporate practices which are located on six continents and in countries as diverse as South Africa, the UK, Angola, Cameroon, DRC, China, Australia, United States of America, Canada, Chile, Peru, Russia, Kazakhstan and Turkey.



Our Clients

SRK's clients are as varied and widespread as the projects in which we have been involved in. Examples of key clients, and the typical services provided to each client group, are provided below.

<p>Government institutions:</p> <p>Advice to national, provincial and local government departments on strategies relating to sustainable development, strategic planning, stakeholder engagement, environmental management, carbon capture and storage, state of environment reporting and bioregional planning.</p>			
<ul style="list-style-type: none"> Cameroon National Government South African Central Energy Fund South African National Government 	<ul style="list-style-type: none"> Provincial and Local Governments South African Biodiversity Institute Swaziland Komati Project Enterprise 	<ul style="list-style-type: none"> Sierra Leone National Government Southern African Development Community 	<ul style="list-style-type: none"> Southern African Power Pool Zambian Environmental Management Agency
<p>Donor Agencies:</p> <p>SRK has assisted in the development of donor support programmes for various areas including urban development, water supply and sanitation as well as evaluated their reach and effectiveness.</p>			
<ul style="list-style-type: none"> Danish International Development Agency European Union 	<ul style="list-style-type: none"> German Gesellschaft für Internationale Zusammenarbeit Japanese International Cooperation Agency 	<ul style="list-style-type: none"> United Kingdom Department of International Development 	<ul style="list-style-type: none"> United States Agency of International Development World Bank
<p>Business (Including corporations):</p> <p>Technical advice and due diligence reviews to private companies and corporates covering a range of issues including mining, resource utilization, water management, engineering, risk management, sustainable development, social development, stakeholder engagement and sustainability reporting.</p>			
<ul style="list-style-type: none"> African Barrick Gold Anglo American Coal Anglo American Platinum Anglogold Ashanti Barrick Gold Corporation BHP Billiton 	<ul style="list-style-type: none"> China Rail CIC Energy Engen Eskom Exxaro FibreCo Telecommunications Freeport/Phelps Dodge 	<ul style="list-style-type: none"> Konkola Copper Mines/Verdanta Mondi Mopani Copper Oji Paper Oromin Petrobras Petroline 	<ul style="list-style-type: none"> PPC Rockgate Capital Sasol Sierra Rutile Shell South African Centre for Carbon Capture and Storage
<p>Financial Institutions:</p> <p>Scoping, reviews and assessments of projects have been conducted for regional and global banking institutions relating to environmental and social issues for mergers and acquisitions, competent persons reports for stock exchange listings and loan review/compliance monitoring</p>			
<ul style="list-style-type: none"> ABSA Capital African Development Bank BOE Private and Merchant Bank 	<ul style="list-style-type: none"> Development Bank of Southern Africa European Investment Bank HSBC Industrial Development Corporation 	<ul style="list-style-type: none"> International Finance Corporation International Fund for Agricultural Development Nedbank Capital 	<ul style="list-style-type: none"> Nedcor Rand Merchant Bank Societe Generale Standard Bank Standard Chartered World Bank
<p>Non-governmental Organisations:</p> <p>SRK advises and conducts technical reviews for non-governmental organisations on issues relating to sustainable management of natural resources.</p>			
<ul style="list-style-type: none"> Endangered Wildlife Trust Group for Environmental Monitoring 	<ul style="list-style-type: none"> The Global Environmental Forum The Mvula Trust 	<ul style="list-style-type: none"> World Resources Institute Worldwide Fund for Nature 	

Our offices and project locations



Contact Us

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If you are interested in our other environmental and social services, please request these brochures:

Statements of qualification:	Service Leaflets
<ul style="list-style-type: none">• Environmental and social impact assessment and management in the energy sector• Biodiversity and ecosystem goods and services• Policy, planning and governance• Social and socio-economic services• Stakeholder engagement	<ul style="list-style-type: none">• Economics and resource economics• Remediation of contaminated sites• Risk assessment and management• Visual impact assessment• Marine and coastal• Climate change• GIS and remote sensing



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www.srk.co.za



Johannesburg office

