



Big five - Tough social issues in mining

Many of SRK's mining clients are active in developing countries. These are often difficult investment environments, where risks include complex political and social issues.

Banks that uphold Equator Principles are demanding a more robust approach to social matters, and the Performance Standards of the International Finance Corporation emphasize the effective management of social impacts and the enhancement of development opportunities. SRK's team of social issues specialists has helped clients adopt and implement responsible social practice in challenging circumstances. For developing country miners, this has involved navigating one or more of the "big five" social issues below:

- *Involuntary resettlement.* Economic and physical displacement of communities often accompanies mining projects. Resettlement is an emotional issue, with human rights a prominent concern. When resettlement processes are badly managed, reputations can be severely damaged, and the process is difficult to reverse. In the Democratic Republic of Congo (DRC), Zambia and South Africa, SRK has helped clients develop best-practice Resettlement Frameworks and Action Plans, incorporating provisions to restore livelihoods and to improve quality of life.
- *Indigenous peoples.* Indigenous peoples have strong links with the natural environment, and especially with land. Miners seeking to work in areas where land and other traditional rights are in play face complex issues, and sometimes get limited help from governments reluctant to deal with traditional rights. SRK advises clients about the requirements to engage with indigenous peoples; for example, SRK assisted a mining company in Suriname to plan and undertake appropriate consultation with local indigenous communities.

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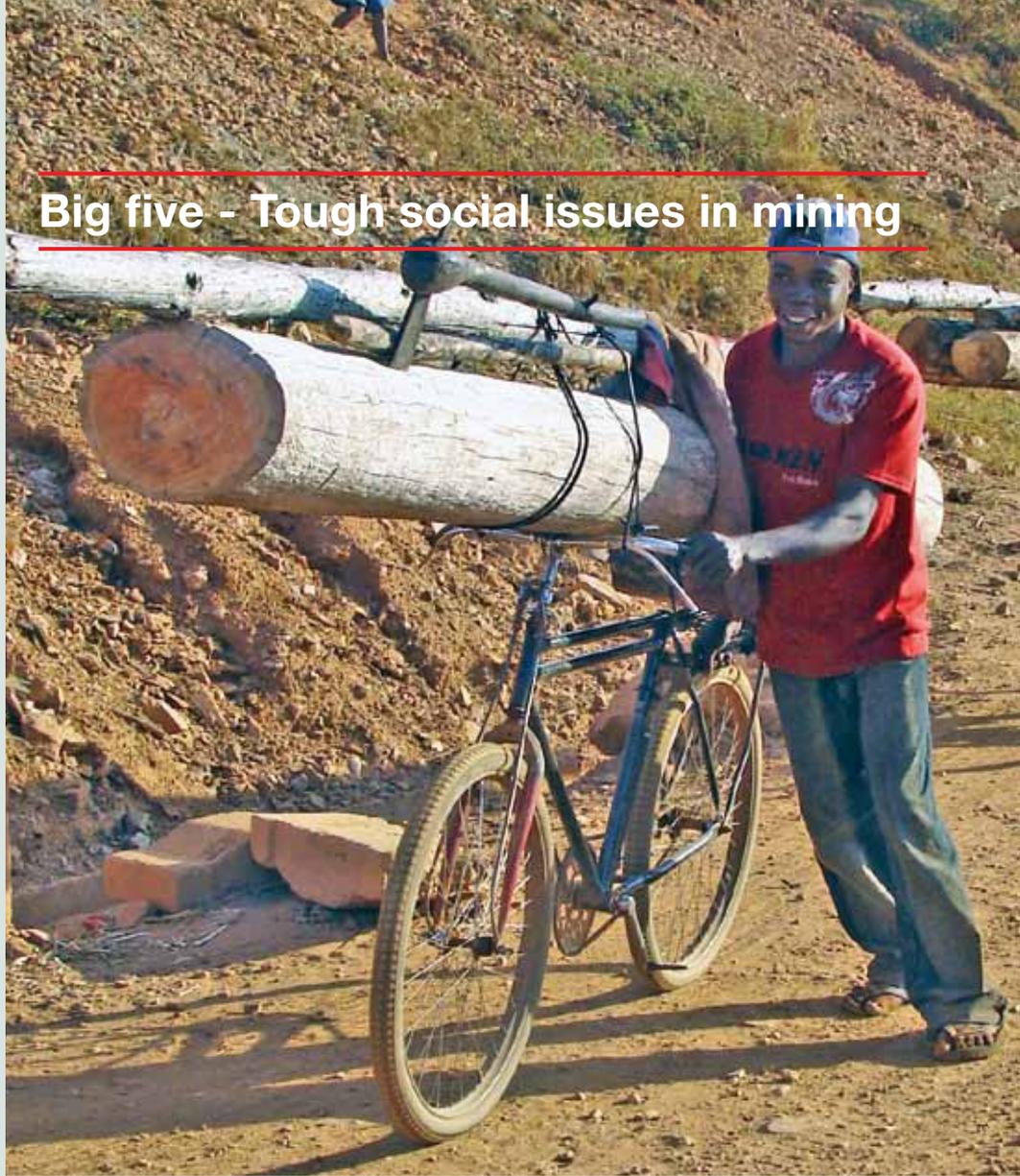
Tim Hart

Tim Hart (MA, University of the Witwatersrand) is a social issues specialist of international standing, with 35 years of experience in the fields of human resources and social development. He is a Partner and Corporate Consultant with SRK, based in Johannesburg. Tim's areas of expertise are social impact assessment, socio-economic development planning, institutional organisation and stakeholder engagement. In the mining field, he has taken on many projects in developing countries, especially in Africa. The application of international standards is central to his work, and along with colleagues involved in environmental issues, he has championed the use of these standards, often in difficult circumstances. Tim has led the development and implementation of many social management plans, including plans dealing with resettlement, community development, artisanal and small scale mining, stakeholder engagement and community health and safety.



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Big five - Tough social issues in mining



Informal logger, Kolwezi, DRC

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- **Artisanal mining.** Artisanal mining provides a living for many poor people in resource-rich developing countries. The sector is often unregulated, with formal miners having to compete with artisanal diggers for their own resources. Governments often deal erratically with artisanal miners, and some companies that have taken strong action have been accused of rights abuses. Artisanal mining is especially prolific in the DRC, and the SRK social issues team has helped several companies there to develop Strategies and Action Plans to address volatile artisanal mining situations.
- **Corporate governance and standards.** Many developing countries have weak legislation on the management of mining impacts, and the use of tax and royalty revenues. This may allow some officials to adopt corrupt practices, and some miners to dodge responsibilities. The SRK social issues team has advised

many clients operating in African countries on the use of international instruments that promote financial transparency (for example, the Extractive Industries Transparency Initiative), and on internal arrangements to promote and entrench best-practice governance.

- **Corporate social investment (CSI).** Mining contributes to the economies of many developing countries; however, the wealth may not reach local communities. Responsible miners often seek to contribute to local development, but they face a number of challenges, including unrealistic expectations and a plethora of deserving projects. The social issues team has assisted clients to pursue CSI strategies that are defensible and sustainable. In several situations, the team has helped to plan the establishment of Development Foundations, based on a partnership between mines and communities.

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Consultation towards a social license

The prospect of resource development can promise economic benefits to a community. However, that same development may also raise concerns, particularly about potential negative impacts to environmental or traditional considerations of value. Securing a 'social license' through community consultation has become as significant as securing regulatory licenses in most mining jurisdictions.

Recognising the importance of effective discussion of community issues and concerns in relation to mining activities, SRK has developed many tools to facilitate informed dialogue with communities potentially impacted by developments. Success using these tools is based on fundamental principles that guide community consultations.

- Communicate activities clearly, in plain language
- Encourage informed discussion of issues
- Establish realistic timetables for submissions
- Be sensitive to resource limitations of stakeholder groups; provide logistical support to encourage involvement

- Respond to requests fully and quickly
- Consult in local languages, using local translators as needed
- Provide feedback addressing key recommendations
- Stimulate constructive exchange of views; genuinely try to address the major issues without prejudice
- Evaluate your consultation program at each stage of the project
- Share the consultation responsibility with the community

One tool SRK has employed for securing a social license is Stakeholder Mapping. Stakeholder maps are developed to chart socio-economic and environmental themes. The support or level of concern of stakeholder groups is tracked on the maps throughout the project life. Regularly updating the maps identifies project support and highlights what messages need to be addressed during future consultations.

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Social Consulting in SRK

SRK's social consultants add value to mining and major infrastructural projects in many ways. The essence of their work is to advise clients on the optimisation of relationships between projects and people through all phases of the project cycle. Consultation processes are a key tool in this context, but SRK also conducts social assessments, develops socially-related management plans (including Social Development Plans), advises on institutional arrangements at the industry-stakeholder interface, proposes strategies to address and resolve difficult social and political risks, and mediates in conflict situations. The major hub of social expertise is located at the SRK office in Johannesburg, South Africa, but social consultancy services are available worldwide. This newsletter shows the challenging array of projects undertaken in recent years, including many in impoverished but resource-rich developing countries like the Democratic Republic of Congo.



Don Hovdebo engaging a community stakeholder group, to establish their criteria for evaluating design concepts for a new tailings management facility.

Mark Liskowich

Mark Liskowich is an SRK Principal based in our Saskatoon, Saskatchewan office. He has been involved with a variety of mining projects throughout Canada's north for 20 years. Initially, he served as an exploration geologist and later as a provincial (Saskatchewan) environmental mine inspector, and manager of a community/mining industry/government liaison office with Saskatchewan Northern Affairs. Prior to joining SRK, Mark was a manager, with the Federal Government, of all technical and environmental aspects of the large multi-disciplinary mine closure project at Giant Mine, Northwest Territories. There, his duties included the design and implementation of a detailed communications plan, focused on one non-Aboriginal community and two Aboriginal communities.



As manager of the Northern Mines Monitoring Secretariat, Mark was responsible for technical, financial and logistical support for the northern Saskatchewan Environmental Quality Committee, which consisted of one representative from the 33 different communities considered "impact" communities of Saskatchewan's uranium mining industry. Mark also gave communication advice and support to exploration companies about their duty to consult with northern Aboriginal communities in Canada's Northwest Territories.

In addition, he conducted a number of educational workshops for northern schools and community representatives, focusing on exploration, mining practices, and industry regulations associated with environmental protection.

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Strategies large-scale mining operations may



Gold miners

Artisanal and small-scale mining (ASM) is widely practiced all over Africa. Although subject to different definitions, ASM is generally understood to be small-scale, informal mining based on manual labour and hand tools. This form of mining has mushroomed in the Democratic Republic of the Congo (DRC) in recent years, driven by high commodity prices and demand on one hand, and poverty and the need to secure livelihoods on the other. Large-scale mining operations and artisanal miners are often competing to exploit the same mineral resources, resulting in violent clashes and a disruption of mine/community relations.

Formal miners face a dilemma. It is legally and reputationally risky to get involved with artisanal miners. But it is a reputational and humanitarian risk to remove them using overly coercive methods, and without some negotiated solution. Removal also raises the possibility of reprisal.

SRK has worked with several mining companies in the DRC, assisting them in developing a strategy towards ASM, especially in the Katanga Province. ASM plays an important role in livelihoods and household survival strategies here; it is estimated that around 30,000 artisanal miners operate illegally in the Kolwezi area, including several thousand women and around 4,000 children.

Overall, there are four strategic options:

First: Removing artisanal miners from the concession. This removes the legal issue of unauthorised miners, and possible ongoing conflicts of interest. It involves serious reputational and backlash risks associated with disturbance to and/or removal of livelihood generating activities.

Second: Working side-by-side with artisanal mining. This avoids removal, while ensuring an arms-length relationship. It limits control over artisanal mining on site, exposing the company to

employ in dealing with artisanal mining

association with unsafe and unscrupulous practices. It does not deal with the legality of artisanal miners on the concession.

Third: Cooperating with or incorporating artisanal mining. This also avoids removal. It offers the possibility of a measure of control, but with associated management, supervision and security costs. Given the nature of artisanal mining, this option cannot guarantee good practice. It also does not deal with legality.

And last: Transforming artisanal miners. This can be done by employing miners, contracting them to do mining-related

activities (such as sorting), or facilitating other livelihoods (for example, farming). This option optimises control, and deals with legality. In practice, it may not be possible to transform all miners on site. Mines may also find themselves taking on non-core commitments (for example, agriculture).

The options are not necessarily exclusive. They might be deployed in combination (using transformation and an element of removal), or in sequence (working side-by-side while negotiating other solutions).

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Don Hovdebo

As a Principal Consultant in SRK's Saskatoon office, Don Hovdebo has successfully concluded various projects with a particular focus on the uranium and gold mining industries in western



and northern Canada. The projects range from collecting required baseline environmental and socio-economic data, preparing permit and license applications, environmental protection plans, environmental management systems, and environmental impact assessments to conducting audits and preparing annual compliance reports. Don served as an advisor to a federal/provincial public review panel on environmental assessment that was appointed to review the development of nine uranium deposits in northern Saskatchewan. In addition, he recently led a team of five government departments in developing a policy and management framework for the institutional control of mineral properties, including nuclear sites, which have been successfully decommissioned and reached a "closed site" status.

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Washing soil for gold



Vuyo Matshikiza

Vuyo Matshikiza is a Socio-economic Consultant with SRK Johannesburg and has three years business and marketing and two and a half years socio-economic consulting experience.

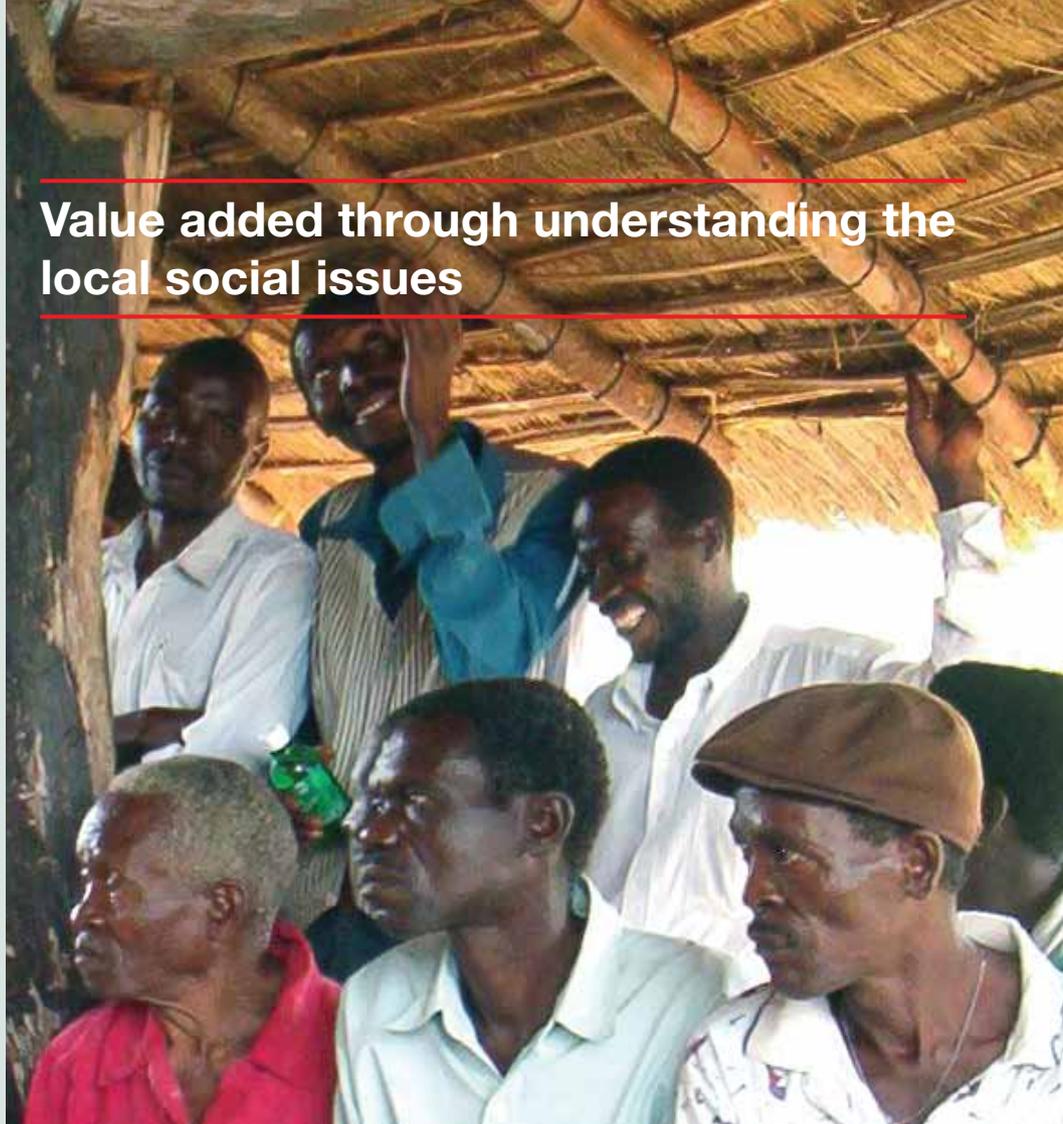


Vuyo Matshikiza

Vuyo has been engaged in project coordination, public involvement exercises, socio-economic analyses and in compiling basic environmental assessment reports on international projects undertaken to meet the World Bank Group and International Finance Corporation standards.

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Value added through understanding the local social issues



Local people participating in an information gathering meeting

Towards the end of 2007, SRK Consulting was commissioned to assist with the preparation of an Environmental and Social Impact Assessment (ESIA), as well as a suite of Environmental and Social Management Plans (ESMPs) that would allow the client to secure funding from Equator Principles Financial Institutions. The project took place in the once prosperous Katanga Province, Democratic Republic of Congo, which is an area

renowned for its vast mineral wealth – particularly in copper and cobalt. Due to the country's turbulent past, limited data on the local socioeconomic environment was available for use in the ESIA.

SRK, under the field leadership of Congolese-born Vuyo Matshikiza and supported by a local non-governmental organisation, Ecodev, undertook a household survey to record and understand the socioeconomic environment of the project area. Ten local field workers specifically trained for this task completed 560 questionnaires by randomly sampling households in 10 villages over a period of 14 days. The questionnaires provided invaluable primary data on the social aspects of life in the villages surrounding the town of Kolwezi. This data, together with the information gathered at a series of information gathering meetings, formed a comprehensive social baseline from which the impact assessment was undertaken.

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Tracking local skills in support of a commitment to employ locally

Skills Registration is a tool that can be used to compile an inventory of the skills of the people living in the vicinity of a greenfields project. This knowledge, especially when obtained ahead of employment, is of value to developers who seek to employ locally as well as develop the capacity of local people.

SRK included a Skills Registration process as part of an Environmental and Social Impact Assessment for a new mine in Botswana. The survey was supported by a questionnaire designed to establish the educational qualifications and work experience of locals. People were invited to participate in the survey by way of advertisements in the local newspaper. The community members were required to provide their identity documents and certified copies of formal education qualifications and a trained

facilitator was available to assist them in completing the forms where necessary. The initial period of a week was extended to allow for the high numbers of people who came to register from the four local villages and nearby urban area. SRK captured the survey data in a database and provided this to the developer in support of labour planning.

Communication around the registration process must be well managed to ensure that expectations of employment and capacity development are matched with those of the intentions of the developer. Like any other type of research, the results depend on the survey design and delivery.

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Kelebogile Mogajane

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Skills registration for a greenfields project in Botswana



Raoul de Villiers

Raoul de Villiers is a Senior Socio-economic Consultant with SRK Johannesburg and has been involved in economic and social research, industry development and project management for the past seven



Raoul de Villiers

years. His diverse consulting activities for businesses, non-profit organisations and government in the past have resulted in strong competencies in economic baseline research, socio-economic impact assessment, quantitative economic modelling and cost-benefit analysis. Having worked in the banking sector, he also has experience in evaluating development projects for financing purposes.

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Replacement structures as a result of resettlement

Calculating resettlement costs

What should we consider when calculating relocation and resettlement costs from a best-practices point of view?

Numerous considerations are applicable in answering this question, specifically because the IFC performance standards indicate that resettlement must leave all parties with equal or better circumstances than before. In order to highlight the total effort and cost implications of a resettlement, SRK recommends a comprehensive accounting investigation with the purpose of identifying all possible cost implications of resettlement.

During such an exercise, information could be gathered through a range of investigative methods, such as:

- Analysis of aerial photos showing structures and land use
- Detailed on-site asset surveys and inventories
- Interviews with specialists to determine costs
- Interviews with residents to determine income generating activities

Investigation activities could be pursued to reveal a wide range of costs relevant to relocation. They include:

Structures including

- Houses and additional structures
- Schools and clinics
- Churches, sites of worship, cemeteries and graves
- Commercial buildings

Landscapes including

- Fields
- Gardens, parks and playgrounds
- Sports fields and halls

Utilities including

- Electricity, waterworks and sewage
- Roads, sidewalks and signage
- Development and integration efforts
- Transport and setup costs

Project including

- Coordination site offices, staff and equipment
- Overall project management costs
- Independent review costs

Business including

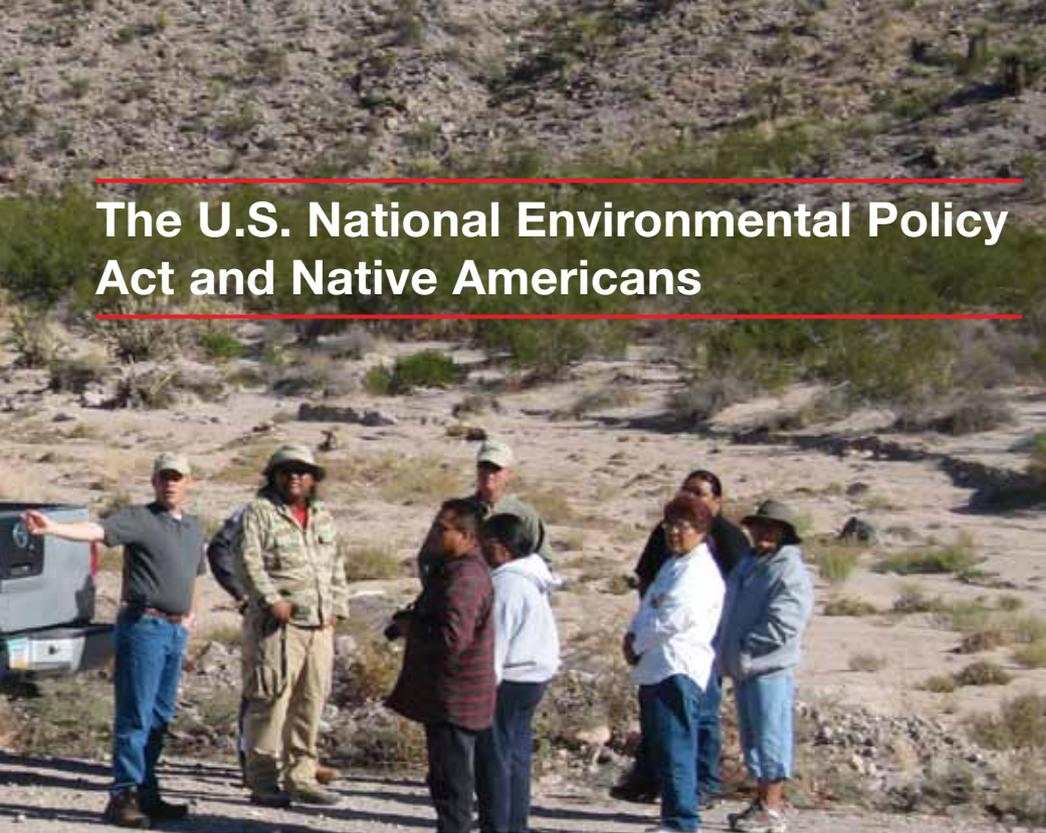
- Entrepreneurial compensation for lost business
- Inventory replacement
- Shop or office fittings and furniture

Specialists in each area are essential in validating local prices and costs associated with resettlement items. However, in cases where specialists are difficult to locate, estimations can be made from national figures with an allowance for uncertainty. Previous projects of a similar nature also provide essential information on costing and its accuracy. For example, SRK Johannesburg has strong competency in resettlement costs in Africa, and personnel evaluating new projects are able to draw information and calculate costs with reduced effort and research.

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The U.S. National Environmental Policy Act and Native Americans



Site visit with Native Americans

The successful engagement and consultation with Native American Tribes for major federal actions, under the U.S. National Environmental Policy Act (NEPA) and other laws, requires using both formal and informal facilitation processes to resolve possible conflicts.

SRK is involved worldwide meeting impact and consultation requirements at the international, national and local level. In the United States, the NEPA is the guiding force for public disclosure and consultation on environmental and social impacts involving federal actions. The Act mandates that impacts to environmental, social and cultural resources are evaluated and made known.

For the past four years, Bill Morrill, Principal Consultant for SRK Reno has been the contract Project Manager for the U.S. Department of the Interior's Bureau of Land Management (BLM), overseeing the preparation and completion of a NEPA Environmental Impact Statement for constructing and operating Toquop, a proposed coal-fired, electric-generating power plant and rail line in southeastern Nevada. Concerns over predicted greenhouse gas emissions and other air and water issues from the plant generated significant public interest.

Prominent stakeholders in the consultation process were the Moapa Paiute and Kaibab Paiute Tribes, descendents of the peoples

living on the North American continent before the arrival of European settlers. In addition to their environmental concerns, the Tribes expressed very strong preference for avoiding potential impacts to historical and cultural properties. Since the Tribes hold "governmental" status, in some ways independent from the U.S. Government, a separate consultation path was required.

Recognising this, it was by adhering to the formal, and informal, consultation process that a climate of resolution resulted. Throughout the project, all potentially affected Tribes were invited to meetings and consultations including: scoping the issues before collecting baseline information; attending regular briefings on the project; site visits; establishing collateral cooperation between cultural officers; and addressing sociological and cultural issues raised by the Tribes.

A critical issue for both Paiute Tribes was the discovery of rock drawings and ceremonial circles that would be impacted by the project. Through consultation, the issue was resolved with agreement to examine, catalogue and most importantly, preserve the artifacts by the BLM, if the project was approved. It was the process of consultation through communication that resolved possible conflicts.

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Bill Morrill

Dr. Bill Morrill joined SRK US in 2005, bringing a varied international background in solving natural resource problems through the management of multidisciplinary teams. He is known for meeting program goals and completing projects. For over 25 years, he has used his facilitating and interpersonal skills, coupled with his recognised expertise in environmental sciences, to produce results, whether for impact analysis, stakeholder recognition, community development or the sustainable use of natural resources.



Bill Morrill

Most recently, Bill has been an SRK project manager for large, and often complex, projects in both the US and Russia. He has led teams for environmental and social impact assessments (ESIAs), as well as participating in environmental due diligence evaluations.

With his experience in biodiversity, ecosystem management (he is a member of the International Union for Conservation of Nature Commission on Ecosystem Management), resource economics and sustainable use at the community level, he works with SRK's environmental and social impact assessment teams in Africa, Asia and North America.

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Tandi Reilly

Tandi Reilly has completed a Masters degree in sociology and has five years of consulting experience. As a Sociologist with SRK Johannesburg her areas of specialisation include social impact assessments, resettlement, compensation, public participation and socio-economic baseline studies. Tandi's academic research focused on the development effectiveness of ESIA's in large dam projects. For the past five years Tandi has been involved in various research studies in the Democratic Republic of the Congo, Lesotho, Senegal, South Africa, and Zambia.



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Stakeholder engagement: A key ingredient for project success



Maguga dam, Swaziland

Prior to the late 1970s, the environmental and social impacts of large dam developments were not considered a priority in the decision-making and implementation processes of developers constructing dams. Through Environmental and Social Impact Assessments (ESIAs), the voices of sociologists and environmentalists, as well as Non-Governmental Organisations (NGOs) and community members now inform the construction of large dams. This change has ensured a fuller knowledge and understanding of the benefits, impacts and risks associated with constructing large dams.

Although ESIA's in Africa, and in large dam projects in particular, face numerous institutional and ideological challenges, there are examples of successful ESIA implementation. One such example is the ESIA undertaken for Maguga Dam in Swaziland between 1997 and 2002. The project is a bi-national water development project between the Republic of South Africa and the Kingdom of Swaziland. According to the Komati Basin Water Authority (KOBWA), the ultimate aim of Maguga Dam is to reduce poverty and unemployment through commercial agricultural development that targets rural areas.

SRK was part of a consortium which undertook the ESIA for the construction of the Maguga main dam, including the coordination of specialist studies, public involvement, and liaison with the relevant authorities. In the Maguga Dam Project, affected people received water and energy assistance to establish farm cooperatives, health and sports facilities. On completion of the dam, workers' homes were sold to the local population to help alleviate the housing shortage in the area. An independent dispute resolution process was established to assist KOBWA in addressing project affected peoples complaints. Added to this, the Maguga communities were able to build their own homes and they were encouraged and assisted to use part of their compensation to develop businesses. These initiatives were supported by an effective stakeholder engagement process, which meant that the opinions and concerns of Maguga communities were incorporated into the project design and implementation.

Effective stakeholder engagement was a key ingredient in the success of Maguga Dam. It ensured local communities benefited directly from the project.

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Community input into Red Dog mine closure plan

The Red Dog mine in northwest Alaska was developed under an innovative operating agreement between Teck Alaska and the NANA Regional Corporation, a Native corporation owned by the local Inupiat people. The operation has injected more than a half billion dollars into the local economy, and over 50% of its current employees are NANA shareholders.

Although mining at Red Dog is expected to continue for another 20 years or more, State of Alaska law requires the operation to develop and fund a comprehensive closure plan. Teck and NANA asked SRK's Vancouver and Anchorage offices to help develop the plan.

In addition to providing closure engineering and cost estimating, SRK worked with Teck and NANA to get stakeholder input. That effort began with the development of reports describing the technically viable closure options. The options were presented at a series of public meetings, and an Inupiat-language DVD was produced and provided to all of the homes in the directly affected communities.

SRK and Teck then facilitated two multi-stakeholder workshops that systematically reviewed the options and provided clear

feedback on stakeholder preferences. About 65 people attended the first workshop, and 45 attended the second. The participants included representatives of the communities of Noatak and Kivalina, a subsistence harvesting committee comprised of elder hunters from the region, Teck and NANA staff, State regulators, NGOs and technical specialists.

The workshops applied a number of innovations designed to help participants provide considered and clear feedback. Participants were grouped according to their primary interests, and each group was asked a series of questions that reflected their own perspective. For example, the elder hunters were asked "will this option protect subsistence uses of the area?", whilst the regulators were asked "will this option protect downstream water quality?". Answers were gathered from each group and compiled to show group preferences. Individuals were also polled and their preferences compiled. The group and individual results showed clear preferences that became the basis of a Closure and Reclamation Plan filed in 2008, and accepted by the State in mid-2009.

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Daryl Hockley

Daryl is a Principal in the GeoEnvironmental Engineering Division of SRK Canada. He is a civil engineer with a Master's degree in environmental engineering. He provides senior review of multi-disciplinary mining and environmental projects, as well as specialist consulting in mine closure and mine waste management.



Daryl Hockley

In his senior review role, Daryl leads multi-disciplinary workshops through the phases of project definition, option identification and method selection. Recent examples include a workshop to define development options for the Galore Creek Project in northern British Columbia, and a workshop to identify tailings management options for uranium mines in northern Saskatchewan. He also leads stakeholder workshops, a recent example being a multi-day 65-person workshop to evaluate closure options for the Red Dog mine.

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Red Dog operations and NANA lands, Northwest Alaska



Lalit Kumar

Lalit Kumar is a Senior Social Scientist with SRK UK. He has over 12 years of experience in the areas of social due diligence, impact assessment, resettlement, and stakeholder engagement on large infrastructure projects, mainly mining. For the past few years he has focused on reviews, auditing and due diligence for international financial institutions concerned with Equator Principles, IFC Performance Standards and other industry standards.



Prior to joining SRK, he worked with ERM India as a Social Consultant on infrastructure projects. He has studied Development Planning and Administration and is skilled in participatory assessment methods. Lalit is experienced in designing research studies and conducting training in social surveys and stakeholder consultations. He has worked in South Asia, the Middle East, Russia/CIS, South America, Europe, Africa and United Kingdom.

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Recent SRK experiences with stakeholder



Breakaway stakeholder groups lead to increased participation

Stakeholder consultations are generally considered an essential part of the impact assessment process, as the environmental policies in many countries have been influenced by internationally-accepted best practice, particularly the standards of the World Bank Group. Nevertheless, in practice, implementing the stakeholder consultation process can vary significantly from country to country. Some selected experiences are presented here. While the first three cases illustrate the constraints affecting the consultation process, the last one shows a constructive approach to improve the quality of stakeholder involvement.

Kazakhstan is characterised by bureaucratic controls and a society caught between the communist standards of the Soviet era and the choices presented by a free economy. When SRK began consulting with community groups there in 2006, the community showed lack of interest and

faith in the consultation process. SRK was informed that this was the first time a sponsor of a mining project had asked stakeholders for their opinions. Hence, SRK's first challenge was to convince the community that they had a right to information about the project and that the sponsor would fully address their concerns about the project. The response changed from thinly-attended meetings in the scoping phase to well-attended meetings in the final round of consultations, reflecting the gradual social change occurring in the community.

In Saudi Arabia, SRK's experience showed how government requirements might diverge from widely accepted consultation practices. In 2007, accompanied by a representative of the project, SRK consulted with the Saudi Environmental Protection Agency (EPA) as part of an environmental scoping phase for a new mining project. The

engagement processes

meeting was held to learn about Saudi national EIA requirements, the licensing process, and to seek permission to consult with the potential project stakeholders for the study. SRK was informed that the government's Mining Department, responsible for issuing the licence, would require clearances from other relevant governmental departments, such as land, agriculture, water and forestry. SRK was further informed that the Land Department itself would meet with affected communities to get their consent, before providing a 'no objection' to the Mining Department. Thereafter, the Land Department would be involved in any negotiations with the community. SRK was asked not to engage directly with community-based stakeholders until the government process was completed, as it might jeopardise potential negotiations. The project sponsor accepted the EPA's recommendation, and SRK was not able to engage community stakeholders early, or to ensure independent and informed consultation in line with best practice.

SRK's experience in Brazil shows how the EPA can enhance stakeholder participation in the ESIA process. During 2008, SRK was invited by the client to monitor the scoping phase consultations that local consultants were holding. Potential project stakeholders were invited to attend a day-long workshop. Three workshops were held at different locations, each attended by up to 40 people. A four-member team of consultation experts from the Brazilian EPA facilitated the workshops. In the morning session, participants were given a preliminary project description and asked to identify potential issues. In the afternoon session, the participants were divided into sub-groups to review the terms of reference for the EIA and prepare their recommendations. The workshop format prescribed by the EPA is now standard in the Bahia State of Brazil. Although it requires a day-long commitment from stakeholders, the emphasis is on quality feedback and building a relationship between the project sponsors and the stakeholders. A relatively strong and forthcoming civil society in Brazil contributes to the demand for such extensive procedures.

The first two experiences illustrate how a country's social and political situation can pose challenges to stakeholder consultation principles, not just in terms of international practice, but possibly also in the context of host-country laws. On the other hand, the Brazil experience shows how strong stakeholders and regulatory authorities can raise the standard of consultations by working together.

SRK seeks to optimise consultation, even with constraints. Where constraining factors can be overcome, SRK has seen that the effectiveness of the consultation process depends on three key factors – the project sponsor's willingness to disclose information, the stakeholders' capacity to understand the process, and the government's ability to enforce its own policy. As an independent consultant, SRK continues to make efforts to influence participants and promote internationally-accepted stakeholder engagement practices.

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Project sponsor and civil society groups – start of a relationship



Darryll Kilian

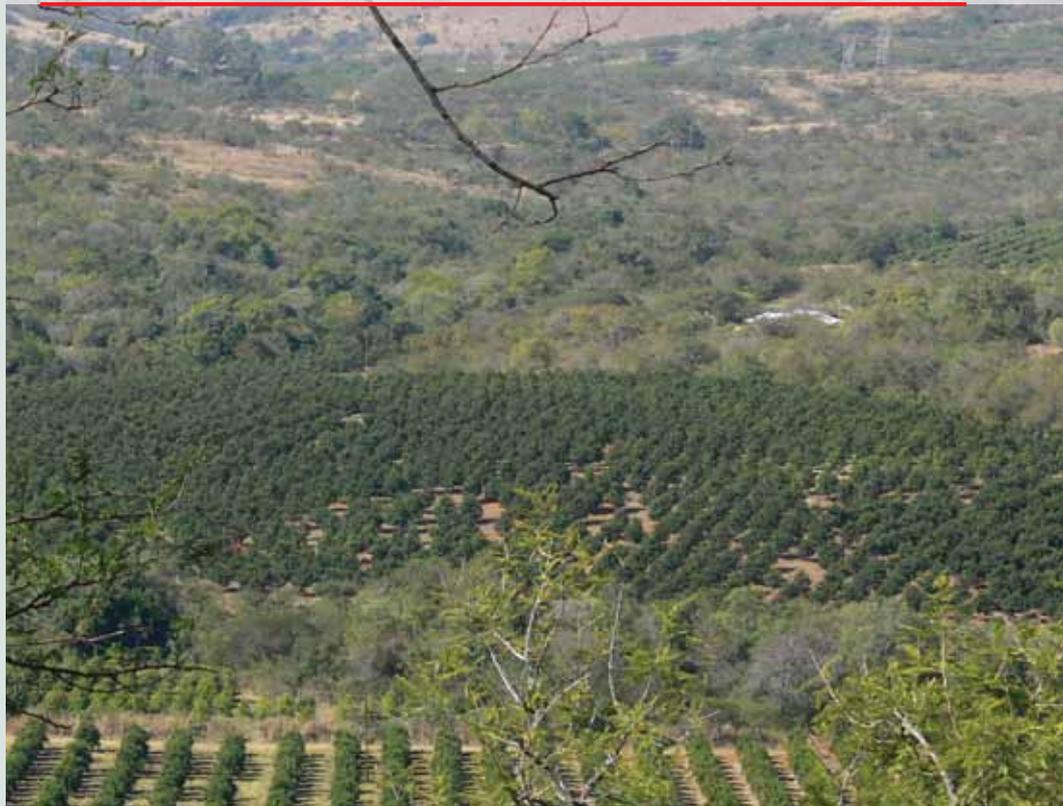
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Stakeholders strengthen pipeline EIA



The pipeline will cross high value farmland

Lyn Brown

Lyn Brown is a Senior Environmental Scientist with SRK Johannesburg and has worked in the field of environmental management for 14 years, both in the environmental consulting and non-governmental organisation sectors. Lyn is highly regarded for her contributions to sustainability and social justice in southern Africa.



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SRK Consulting completed the Environmental Impact Assessment (EIA) for the South African component of a petroleum pipeline proposed by Petroline Holdings Ltd. Because this 380km linear development crosses from Matola in Mozambique through Mpumalanga to Kendal in South Africa, an extensive public participation process was needed to ensure representative stakeholder involvement. The pipeline represents the first private petroleum development of its kind in South Africa. SRK's specialist team selected the proposed corridor to minimise hydrological, ecological, economic and social impacts from a number of alternative routes initially identified by Petroline.

A great deal of comment was received from stakeholders in the Lowveld and Escarpment regions, who were apprehensive about the proposed pipeline development. In particular, stakeholders were concerned about damage to scarce water resources from potential petroleum leaks and spills, ecological impacts from constructing and operating the pipeline,

about loss of production on high-value farmland and devaluation of the land.

The comments received proved valuable to the EIA process. As a result, SRK recognised the critical importance of adopting effective safety and engineering design measures to prevent leaks and spills and, in the EIA report, stipulated comprehensive measures to avoid and mitigate such impacts. The EIA also specified the precise alignment of the final routing of the pipeline to minimise impacts on sensitive natural habitats, including wetlands, grasslands and scarp forests. Guidelines on the process for compensating landowners within the pipeline right-of-way were also presented. Further, in response to landowners' requests, a resource economist was appointed to compare the suitability of two route alternatives up the escarpment, and to present the findings to the Department of Environment Affairs and Tourism for their consideration during authorisation.

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SRK adds socio-economic value to project investments

In terms of current international standards and in the regulatory requirements of many countries, many mining and industrial projects require a full Environmental and Social Impact Assessment (ESIA) and Management Plan (ESMP). While an ESIA is critical for identifying and assessing project-related impacts, it is the management plan that shows how the impacts should be addressed. Without appropriate management planning and the systems and capacity to implement it, an impact assessment is an academic exercise.

The social elements of management planning are especially important where project investments can improve the social and economic circumstances of communities and promote human development. The orthodox approach to company-supported community development is through Corporate Social Investment (CSI). In line with modern best practice, SRK's team of social and economic experts has developed an extended view of social management that seeks to plan and secure social and economic benefits for a community in several contexts:

Social engagement

A social engagement approach moves

beyond orthodox ESIA consultation to life-of-project engagement between companies and stakeholders. This approach seeks to promote trust and partnership, laying a foundation for other areas of social interaction. SRK has assisted many clients to develop stakeholder engagement plans, including the establishment of permanent liaison forums.

Social development

Companies often see social development as a series of good deeds. SRK believes that development must be owned by communities, and has worked with clients to formulate social development plans that transfer decision making to communities, as company-community trust builds. The final outcome is usually a cooperative development foundation or trust, with provision for other benefactors to become involved.

Community health and safety

Mining and industrial projects have the potential to threaten community health and safety. In the past, these impacts were addressed through discrete mitigating measures. SRK's approach is to encourage community participation in health and safety planning, thereby

agreeing to the mitigation approach, and finding ways to extend company health and safety initiatives to neighbouring communities.

Resettlement and compensation

Resettlement sometimes accompanies mining and industrial projects. The best practice is to avoid it, where possible. However, where there is no alternative, the resettlement process can be used as a vehicle to improve the quality of life of those involved. In this context, SRK has advised clients on the restoration of livelihoods and on enhancement programs to accompany resettlement.

Closure

The socio-economic consequences of closure can be catastrophic. SRK advocates a multi-level social planning process well ahead of closure, with a focus on opportunities. Among the topics considered are retraining workers with new skills, small business training for workers, the dissemination of a skills register to other employers, discussions on economic diversification with local business leaders, and planning for the orderly transfer of assets that are of value to the local community.

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Artisanal miners



Amina Ismail

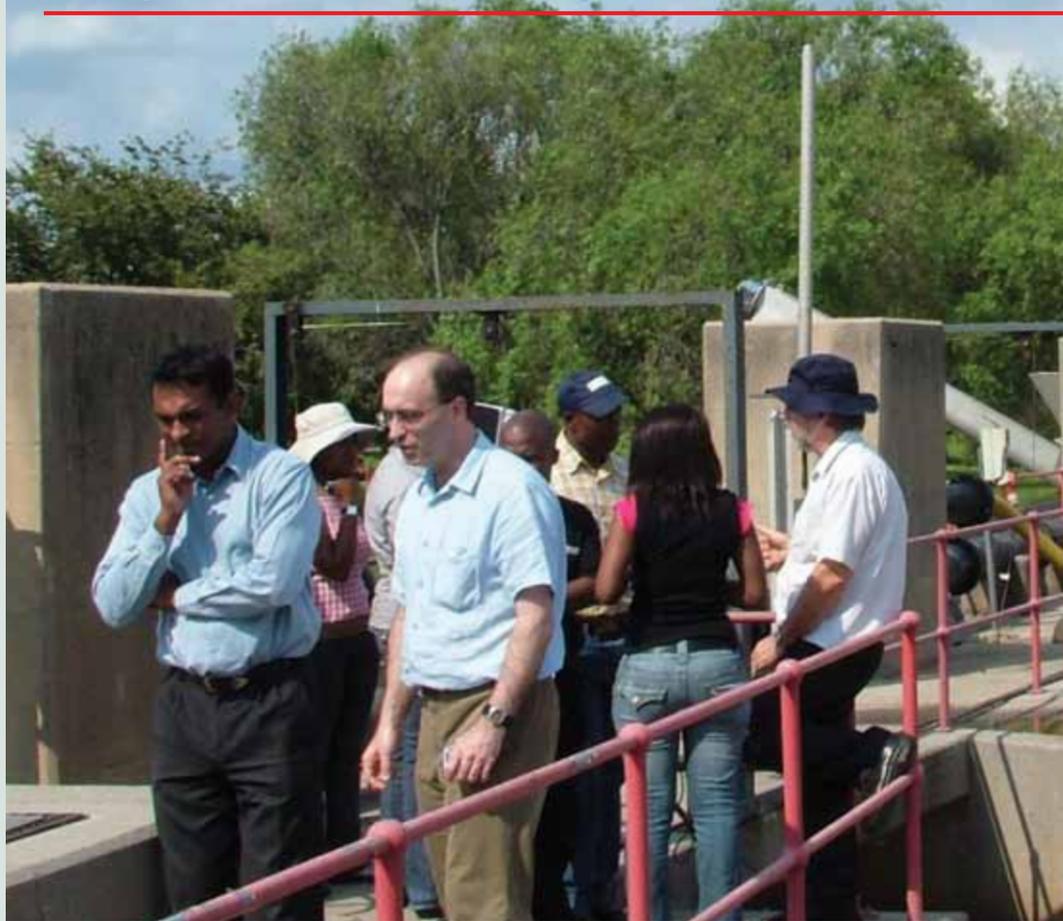
Amina Ismail is a science graduate with 20 years of experience in public and environmental health, and environmental planning in the NGO, government and private sectors. Her area of specialisation is sustainable development and her assignments at SRK have included working on the National Framework for Sustainable Development and leading the preparation of a discussion paper for the Department of Provincial and Local Government on the status, challenges and opportunities for sustainable development in local government. Amina is currently seconded to PAWS – Partners for Water and Sanitation – and is the program’s full time Country Manager for South Africa.



Amina Ismail

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UK partners building skills in South African



UK Partners and young South African professionals assessing wastewater treatment works

Partners for Water and Sanitation (PAWS) was established at the World Summit for Sustainable Development held in Johannesburg in 2002. PAWS mobilises support from the private sector, the government and non-governmental organisations in the UK to help developing countries meet their Millennium goals for water and sanitation. The program is strictly demand-driven and currently operational in South Africa (SA), Ethiopia and Nigeria. Over 40 PAWS UK partner organisations offer technical, management and legal expertise by releasing relevant staff to contribute their skills within specific terms of reference. UK organisations and companies cover their staff costs, and PAWS manages the projects and funds travel and related expenses.

Previously, PAWS engaged directly with municipalities, and was advised by a PAWS- SA Steering Committee. In general, a municipality was selected for support if

it lacked skills, or if it was willing to accept PAWS support. Since this support was different from traditional forms of funding, in-country organisations were not always able to take advantage of the opportunities to receive support. They were consequently dependent on UK partners to assist with scoping their needs for support. Many projects also relied on individuals as champions, and support efforts were not sustained when these individuals left their organisations. One of the first tasks that Amina Ismail faced when she joined the PAWS as Acting Country Manager in October 2007 was to review this strategy.

In early 2008 a review of the PAWS approach showed that their capacity-building efforts were more sustainable where:

- Support was provided at strategic times and specific points to help established and funded in-country projects and programs

water sector



- In-country partners were able to identify where and when support could benefit their programs and projects
- Municipalities and government departments had the staff to absorb the support, and build on the skills transferred by developing their projects independently at the end of the support period

A major opportunity for PAWS support was the launch in 2008 of the Water Services Provider Support program within the Department of Water Affairs and Forestry (DWAF). The DWAF support program is working in four test municipalities to define the support requirements and provide targeted capacity-building. It also provides a learning mechanism to disseminate lessons to other municipalities.

In addition to responding to direct requests from water sector organisations, the revised PAWS strategy now aligns itself

with the national support program. As a result, PAWS benefits from the identifiable opportunities and mechanisms provided by DWAF to support municipalities and replicate lessons within local government. In 2009, PAWS provided expertise to Ugu District Municipality within the DWAF national support program, and on the advice of the Kwa-Zulu Natal provincial DWAF office it continued support to the Zululand District Municipality.

In February 2009, senior UK regulators met with DWAF top management, and currently wastewater treatment specialists are working with the Gauteng Department of Local Government and regional DWAF officials on the provincial wastewater treatment assessment program. In addition, PAWS has been talking to water and sanitation NGOs funded by Irish Aid to identify their needs for capacity building.

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Mark Vendrig

Mark Vendrig, MSc University of the Witwatersrand, is a Principal Consultant at SRK Canada with 18 years of experience working in operations and as a consultant in the exploration, mining and oil



Mark Vendrig

and gas industries. He specialises in environmental and social impact assessment (ESIA), public consultation, risk assessment, development and auditing of integrated health, safety and environmental management systems, climate change strategy, and carbon capture and storage developments.

Mark has developed risk-based ESIA methodologies for the International Energy Agency and governments in Europe, the Middle East and Africa. The projects required a blending of engineering, environmental and risk disciplines to create ESIA processes which operate efficiently for developers and withstand the close scrutiny of regulators and pressure groups. Mark has trained various governments and companies in risk and environmental impact assessment methodologies to help implement and manage more refined ESIA processes. Recently he has been working on ESIA's for the proposed Pebble mine in Alaska, Copper Mountain mine in British Columbia, Canada, Newmont's exploration and proposed mining activities in Nunavut, Canada, and Oromin's exploration and potential mine in Senegal.

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Building early community relationships



Maki Madena village, Sabodala – Public consultation and information sharing

Community consultation is a key part of the Environmental and Social Impact Assessment (ESIA) process. On behalf of Oromin Joint Venture Group (Oromin), SRK Consulting Canada recently initiated a public consultation program as part of the ESIA process for Oromin's potential new mine at Sabodala in Senegal. The Oromin Sabodala project is currently in the prefeasibility phase.

During exploration, Oromin followed a program of not excluding people from the land, allowing artisanal miners to cohabit and allowing foraging to continue in areas away from active exploration operations. Oromin set up a social program, as legally required, focused on education and clean water supply, as well as local employment,

where possible. The company has also provided medical assistance and health training to local communities and engaged in open communication. As a result, Oromin is highly regarded by local communities and seen as a responsible operator, and SRK was able to initiate public consultation with a significant level of favorable interaction already in place. This positive beginning made public consultation less expensive and far more effective as the potentially affected people felt comfortable expressing their issues and concerns very quickly in the process.

SRK started the ESIA process early, before prefeasibility, bringing continuity to the community programs that Oromin started. This allowed SRK to share

information and involve potentially affected parties in influencing decisions from the start. The interaction is purposefully two-way; SRK provides information about the proposed mine while listening for the priorities, concerns and preferences that reflect what is important to the affected parties. The interaction helps build the relationship with the mining company and create the trust required for future interaction. The most critical time to obtain community approval of the process is the first few months of public consultation. During this time, the community is testing the consultation process itself to see how it represents their concerns.

Early feedback also helps the prefeasibility team make better project decisions for a mutually acceptable mine plan. As an integral part of the project,

public consultation allows for an iterative exchange between the community, government and engineering. Through this exchange the stakeholders affirm their influence and develop trust in the relationship. This continuing feedback process leads to a mine plan that affected parties are more likely to support. It may also relieve some of the decision burden later, during regulatory review and permitting.

Oromin has prepared the way for efficient public consultation by creating open discussion with and by setting up their social program and operations to include local villages. The efforts to build relationships and trust with the affected parties, government and community have created confidence in Oromin and the Sabodala Project. The mine's team will continue consultations through the

stages of mine development, operations and closure to ensure that the affected parties' concerns are considered in the mine decisions.

The SRK Canada team, led by Mark Vendrig, includes specialists in socioeconomics and biophysical environment studies. SRK's continual presence on site includes a locally employed and trained assistant, who conducts monthly visits to all local villages to maintain contact and obtain feedback.

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Public consultation with leaders from a local village on the Oromin concession, Senegal



Allison Burger

Allison Burger is a Principal Consultant in SRK Consulting's Johannesburg office with 18 years of experience as a social and environmental specialist. Allison obtained her Bachelor of Arts Honours in Environmental and Geographical Science from the University of Cape Town, where she was involved in South Africa's first course on Integrated Environmental Management. She was a Director of SRK Consulting for several years and has made notable contributions to environmental law reform and the development of industry standards. Allison has worked extensively in the mining sector in southern and central Africa and undertaken assignments, including assessments, management systems, due diligence audits, stakeholder engagement and training. At present, she runs Nedbank Capital's Green Mining Awards, undertakes due diligence audits for Equator Principles Financial Institutions, and advises several clients in the mining industry in Africa on complex social and environmental assessments.



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Enhanced social impact management



Villagers in Kolwezi

After almost a century of copper and cobalt mining and post-colonial civil war, Kolwezi, located in the Katanga Province of the Democratic Republic of Congo (DRC), was left with a degraded environment and a quarter of a million people subsisting on artisanal mining and agriculture.

SRK Consulting's environmental and social team based in Johannesburg has been involved in mining rejuvenation projects in Kolwezi since 2002, including the completion of three environmental and social impact assessments (ESIA) in accordance with international good practice guidelines.

Because of their proximity, the three projects largely affected the same resources (rivers, groundwater, air quality, etc.) and receptors (local communities). The affected communities reside in the town of Kolwezi, the townships associated with the previous mining era and the surrounding rural villages. In addition, the three mining companies shared a desire to operate to the

standard of international good practice embodied in the International Finance Corporation Performance Standards for Social and Environmental Management (IFC Performance Standards). The projects' proximity, together with their common development schedules and the mining companies' cooperation, enabled SRK to facilitate the development of a baseline data-sharing agreement among the companies.

With this agreement, SRK was able to complete the ESIA's for the different projects by gathering a comprehensive social and environmental baseline over several years. The process included over 150 stakeholder engagement meetings and around 770 household surveys.

While the environmental impacts of the individual projects differ as a result of the technical approaches to the projects, the social impacts are not dissimilar. The social impacts include, but are not limited to, employment opportunities, stimulation of the local and national economies

through the payment of taxes and wages, economic displacement of artisanal miners and to a lesser extent subsistence farming, resettlement of communities whose land is taken for mine infrastructure development, exposure of communities to health and safety risks, and the influx of job seekers into Kolwezi.

SRK followed a consistent approach to the proposed management of the negative social impacts and the enhancement of the positive impacts. In support of a social licence to operate, a series of social management plans was prepared for each operation, based on the identified impacts, the sustainability policies of the respective companies and the IFC

Performance Standards. Each set of social management plans includes the following:

- Social management plan
- Framework resettlement action plan
- Security plan
- Social development plan
- Artisanal mining strategy
- Labour and working conditions plan
- Influx management strategy
- Community health and safety plan
- Stakeholder engagement plan

In addition to promoting consistency in the management of impacts among the three companies, the robustness of the shared

data sets has reinforced the integrity of the cumulative assessment of social and environmental impacts. This has enabled recommendations to be made for a regional approach to the management of impacts by a range of private and public sector partners.

If the recommendations are put into effect, the data-sharing agreement and inter-company cooperation will provide a basis for synergies and efficiencies, which would benefit the affected communities, the regional environment and the mining companies.

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Subsistence farmer



Dan lle Fourie

Dan lle Fourie, a Senior Environmental Scientist with SRK South Africa's Cape Town office, has been with SRK since April 2006. Dan lle has eight years of experience in environmental consulting and environmental management. She has worked on a wide range of development projects, specifically in offshore oil and gas projects in Southern Africa and road projects in the Western Cape. In that time she has been involved in several large, multi-disciplinary Environmental Impact Assessments (EIAs), as well as in the compilation and implementation of Environmental Management Plans (EMPs) and public participation plans and processes to meet World Bank Group standards. More recently she worked extensively on Environmental and Social Impact Assessment (ESIA) processes for a bauxite project in Suriname, South America.



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Consultation for a major Bauxite project in



Meeting with Trio representatives, Sandlanding

SRK South Africa undertook a comprehensive Environmental and Social Impact Assessment (ESIA) of a major bauxite project in Suriname, between 2005 and 2008. The client proposed to mine bauxite in the mountains of western Suriname, and to transport it by train and barge to a refinery in the north-east of the country. The project entailed two ESIA processes, for mining and transport. The ESIAs were guided by the Performance Standards of the International Finance Corporation (IFC).

A comprehensive consultation process was an element of the ESIA assignments. Among others, the consultation involved communities of indigenous Amerindian people: in particular three neighbouring villages of Arowak Amerindians and a nearby community of Trio Amerindians, located some 75km from the exploration area

and along the proposed transportation route.

In recognition of good practices for consultation and disclosure, and of the particular requirements of consultation with indigenous peoples, SRK implemented a process with the following characteristics:

- Consultation and disclosure was carefully planned, and guided by detailed Public Consultation and Disclosure Plans (PCDPs), which were regularly updated.
- To ensure community access to ESIA reports, the documents were produced in English and Dutch (Suriname's official language). Non-technical summaries and Background Information Documents (BIDs) with minimal text and many pictures and graphics were prepared and widely circulated. A BID was also produced in

Suriname, South America

Trio. Over 12 000 copies of some 28 project documents were distributed, the majority being summaries.

- An overview document setting out the interrelationships between all of the documents was produced and distributed. In addition, a document review roadmap was circulated to assist readers to review the ESIA documents by indicating where the important information would be found.
- The ESIA process allowed the communities a preview period of 30 days prior to consultation meetings and 30-day comment periods after the meetings. Comment boxes were placed in the affected communities to facilitate the submission of written comments.
- Capacity building for consultation was undertaken where appropriate. When key ESIA documents were distributed, meetings were held with community leaders to explain their content. Local community members were trained to distribute non-technical summaries to households and to ensure that the information was understood. Translated posters summarising consultation presentations complemented the technical ESIA documents distributed.
- In one of the consultation rounds, after draft ESIRs and management plans were distributed, information workshops were held in the villages to explain the technical content of the reports. The objective was to optimise engagement at the forthcoming consultation meetings.
- More than 60 meetings were held with the leaders and/or inhabitants of the Amerindian villages. These comprised information meetings, planning discussions and consultations. Interpreters were present at meetings to translate between English and Sranan Tongo (the local lingua franca) and, where required, between Sranan Tongo and Trio.

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Amerindian village, Suriname



Andrew Hart

Andrew Hart has two years experience as a Consultant on social issues and is currently working in the Environment department at SRK Johannesburg. Having completed his studies in international relations at the University of the Witwatersrand, he became involved in the research and compilation of an International Standards and Guidelines handbook, and has since progressed to applying these standards in several projects, both in South Africa and the Democratic Republic of Congo.



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Intricacies and application of international standards and principles

Over the past two decades, the mining industry has been increasingly moving towards environmental and social sustainability, and companies are taking into account the clear benefits of being perceived as good socio-environmental performers, building good stakeholder relations and securing a social license to operate. In recent years this change has become a more structured and clearly defined path to follow, as numerous international environmental and social standards, guidelines, benchmarks and best practice principles have been developed.

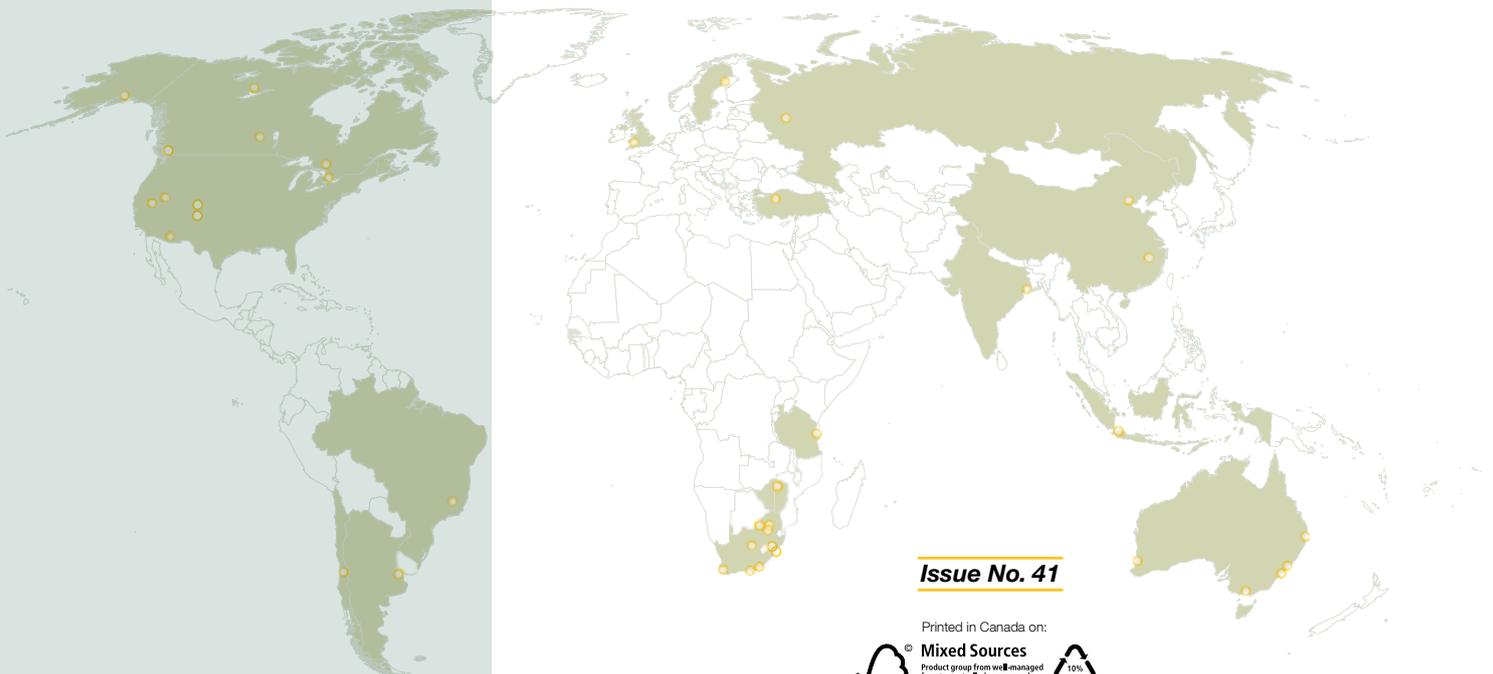
The standards and principles cover a range of topics from resettlement and biodiversity all the way to indigenous people and transparency. Many of the standards are voluntary, simply providing guidance and benchmarks, while others are more stringent and are required to gain financing from banks and international institutions, such as the International Finance Corporation (IFC). SRK is fortunate to have worked with numerous clients throughout Africa and beyond, who have decided to adopt these

standards and principles in their policies and procedures, with the guidance and advice of SRK, potentially creating a more sustainable and optimistic outlook for both the environment and communities surrounding these operations.

Arriving at an understanding of both the scope and applicability of the standards and guidelines can be a daunting task. Therefore, SRK undertook to develop an easy-to-use handbook on international, regional and country policies, standards and guidelines that are relevant to environmental and social work in the context of mining and industrial projects. The handbook identifies a myriad of policies, standards, safeguards, reviews and guidelines and summarizes the most frequently used ones. While the handbook will always be a work in progress, due to the dynamic nature of international standards and guidelines, it does provide a useful tool for anyone interested in developing knowledge on the topic or applying the standards to a specific project.

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