In 1990, SRK began planning to leave downtown Johannesburg. Security, as much as space, was becoming an increasing concern. In April 1991, the Johannesburg offices moved into 265 Oxford Road, Illovo. More than 180 employees of SRK and Gemcom were involved, bringing to fruition months of extensive consultations, planning and effort. The purpose-designed 3,000-square-metre office block was set in garden-like surroundings. By 1997 it was too small, and another 1,600 square metres were added.
Political uncertainty in South Africa during the 1990s and at the turn of the new millennium brought changes to both the South African mining industry and SRK. One of the greatest challenges was the loss of technical skills as uncertainty set in. Many rock mechanics specialists in their thirties and forties, such as Julian Venter and Johan Wesseloo, emigrated to develop their careers in the more stable Australia, Canada, USA and U.K. Paradoxically, this time marked a resurgence in the international mining industry with the concomitant demands for routine project evaluation.

Rock Mechanics

The outflow of engineering skills put more pressure on senior members of staff to deliver thorough studies to meet the rigorous requirements of various mineral resource and reserve evaluation codes. This forced a welcome and necessary change to the demographics of the Johannesburg office. Many young engineering graduates from South Africa and the surrounding countries were employed and coached in “the SRK way.” “Mentoring” and “appraisal” became important terms in the management lexicon and staff members were encouraged to pursue higher degrees and undertake research projects. Teamwork became the norm. William Joughin and Robert Armstrong assumed leadership of the department. After first being offered a post by Steffen in 1981, on the occasion of Allan Moss’s farewell at the Rand Club, Alan Naismith finally succumbed to pressure from Peter Terbrugge and joined the department in 2005, providing a pragmatic industry perspective.

Growth in the mining industry presented the opportunity for SRK’s involvement in projects within South Africa and sub-Saharan Africa. Copper mine development in the DRC saw SRK working with Freeport McMoRan in the design of the Kwatabala pit and ongoing design and construction audits of waste-rock dumps. Growth in the diamond industry in Botswana led to SRK’s involvement with the design of large pit slopes at Jwaneng with Debswana. SRK also handled the design and construction monitoring of a large-diameter concrete, segment-lined decline shaft through deep Kalahari sand, with GEM Diamonds. Zambia remained an active source of large projects, notably the rock-engineering design and construction of a 6-metre-deep shaft system with Konkola Copper Mines. In South Africa, work was ongoing at Gold Fields South Deep Mine to address issues arising from mining wide and multiple reef bands almost 3,000 metres below the surface.

Increasingly important was rock-engineering work associated with mine closure, including investigating the implications associated with backfilling disused open pits with tailings generated from waste-dump re-treatment in the Kimberley area.
Mining

Graham Murray had been recruited by Gordon McPhail and Mike Smith into the tailings department in 1985, and spent about three years doing that work. In 1988, he formed a new department offering mine-planning services and mining feasibility studies. “The large mining houses used to do their own studies in-house with their own expertise,” he explains. “But then they decided that supporting their large technical departments was not a core business. They started to outsource their studies. I was ideally placed with my experience at Shell to pick up the ball. We provided independent mining feasibility studies to mining companies.”

Wally Waldeck joined Murray’s team in 1989 from one of the large gold mining companies, Gold Fields of South Africa (GFSA), where he was specialising in rock engineering. Murray, Waldeck, Clive Seymour (coal mining) and Michel Sauvenier formed the mining group under the guidance of Steffen.

“There were five of us initially,” Waldeck says. “That was the beginning of the permanent mine-planning section in the Johannesburg office. All work was done using SRK’s aging Data General mini-computer — a huge investment in those days. We then started to purchase desktop computers for each person. Those were the days of the 8086 IBMs, and when we purchased an 80386, we thought that was the ultimate. I think it had a 40 megabyte hard drive.”

The department grew steadily, and when joined by Mark Sturgeon (a specialist open-pit planner), Mike Harley (an all-round geology and resource estimation guru) and Victor Simposya (a respected copperbelt geologist), it was open for business in a big way. The market responded positively — the team was flooded with work.

One of the larger initial projects was in Russia, in remote northern Siberia. In 1994, Star Mining, a public company headquartered in Australia with a 37.5 percent interest in the Sukhoi Log (“Dry Creek”) venture, commissioned SRK to conduct a full feasibility study for the development of what was possibly the world’s largest unmined gold deposit. The ore body is about 45 kilometres from the settlement of Bodaibo, where existing alluvial gold recovery operations were under way.

SRK’s brief was to examine every aspect of the proposed open-pit development, including the statement of reserves, and to develop the mining plan, verify the process flow sheet and recommend what infrastructure would be necessary. Environmental assessments were also required.

SRK was responsible for completing the economic evaluations for the deposit and producing the report used to raise capital via a stock exchange share issue and debt financing through international lending institutions. Murray ran the project from Johannesburg, using specialists from SRK offices including those in South Africa, the U.K., Canada and Chile; the metallurgical process and infrastructure aspects were handled by Bateman (South Africa), working as sub-consultants.

The project team established a close working relationship with Lenzoloto (the Russian state gold mining company) and various Russian scientific institutes to ensure the study incorporated the requirements of both the Russian Federation and the Western financing institutions. “We were extremely proud to be involved in this prestigious project, which is one of the largest ever undertaken by the firm,” Murray says.

However, Star ultimately lost its title to the property and the project did not proceed.

The Sukhoi Log feasibility study was the first of many international studies to be done by the mining
PROJECT: SRK House – Design and Supervision
265 Oxford Road, Illovo, Johannesburg

CLIENT: SRK House Trust

SCOPE: In 1989 and 1990, SRK was located on 20 Anderson Street at the southwest end of Johannesburg’s Marshalltown. This was convenient for SRK’s mining clients, but there was an increasing security threat to staff. After much discussion, the company chose a site at the north end of Oxford Road in Illovo and appointed Louis Karol Architects to design a 3,000-square-metre building. The property developer was RMS Syfrets.

The geotechnical investigation showed the site to be on weathered granite with a potential for collapse, which necessitated auger-piled foundations. The project team started work in April 1990 and the first piles were installed in early June. The basement retaining walls, designed to span between the basement floor slab and the ground floor slab, were only constructed after the ground floor was in place, to avoid delays in the tight construction program.

OUTCOME: Construction proceeded smoothly, and on the weekend of April 13–14, 1991, SRK moved into the new building. By 1997, the company had already outgrown the premises and a new 1,600-square-metre wing with its own basement was added.
department, and it also set the tone for other offices in the group as far as multidisciplinary studies were concerned. The demand for feasibility studies and related mine-planning projects for both open-pit and underground mines led to the recruitment of other specialist mining engineers, such as Marcin Wertz, who came from a diamond mining background, and Roger Dixon, who brought a wealth of experience from Anglovaal, the South African mining house. Dixon joined in September 2004 and became chairman of the South African practice in October 2009.

The group grew to more than 40 people from various disciplines. Some of the larger projects handled by the team included full feasibility studies for the Tarkwa and Prestea gold projects in Ghana, Geita in Tanzania, Sukinda chrome in India, Katanga copper in the DRC and the Kroondal and Messina platinum projects in South Africa.

Environmental and Social

Sue Posnik's arrival at SRK in 1991 triggered an expansion of the firm’s environmental services across South Africa. Another Wits graduate who specialised in geography and climatology, she started in Johannesburg under Dave Morrey.

A former lecturer at the University of Natal, Morrey was an expert in biological methods of reclaiming toxic mineral wastes as well as pollution monitoring and control. He was a graduate of the Royal Institute of Biology in London and had completed his MSc and PhD at Sunderland Polytechnic and the University of Sheffield before consulting throughout Europe, the Middle East and the Far East.

But he left SRK within the year to go to North America, and Posnik took over. She had previously run her own company doing environmental impact assessments as well as air quality and waste management work. Within 18 months she had become the first female partner at SRK, and was eventually named the company’s first female director.

“We were doing exciting things in those days — researching and testing the environmental and social impact assessment process and participating in the drafting of the environmental policy for the new South Africa,” Posnik says. “Soon SRK was undertaking some of the first large, controversial environmental impact assessments in South Africa.

We did a lot of work in Africa as well: Mozambique, Zambia, Zimbabwe, Namibia as well as Lesotho, where we did the preliminary environmental and social impact assessment (ESIA) for the Lesotho Highlands Project Further Phases — five very large dams planned along the Senqu River to provide water for the Witwatersrand industrial complex. We were advising clients on the material risk that water pollution was to become and [advising them] that provision for water treatment was really the only option. People didn't want to do it, but 10 years later everyone is considering water treatment as essential. I think those projects were very fulfilling.”

Posnik grew the department during the 1990s from a handful of people to 35 professional staff. In particular, she hired Allison Burger and Tim Hart, integrating stakeholder engagement and social practices into the environmental department, which was still unique in the mid-1990s.

Burger joined SRK in 1994 from the environmental evaluation unit of the University of Cape Town where she had worked as a scientific officer. She brought new social science skills to the department and took the lead in stakeholder engagement and the management aspect of projects. In addition to assisting with environmental decision making and processes, and environmental, social and strategic
assessments, she went on to become a partner and director of the South African practice before moving to an associate role in 2006.

Hart held a master’s in human geography and had been a lecturer of Posnik’s. He joined SRK in 1995 after serving with a variety of research and NGO organisations, and establishing a career as a TV weatherman. With the new global environmental regime, they were at the forefront of the market.

“SRK had a very interesting culture,” Hart says. “I walked in and they said to me, ‘Here you are. This is what we do. Find your space and develop your business.”

He began with a major project involving the Department of Water Affairs in South Africa. That led to more work with international organisations involved in water resources: “Sue taught me a great deal about environmental consulting and what it takes to develop the environmental assessments and management side. She was a dynamic person and pushed us all hard and taught us the tough side of consulting. On many occasions we had to tackle issues with regard to the relationship between a mine and [its] neighbouring communities. This involved engagements with irate communities and frank discussions with mining clients. Over the years we developed and refined our skills in this domain, and demonstrated the role of social services in the planning, operation and closure of mines.”

Jane Joughin, who had joined the department in 1991 just before Posnik arrived, remembers the cultural change as mining clients were told they had to address environmental and social challenges.

“The notion of stakeholder engagement was a new thing,” she says. “It was hard for clients and even for people within the office — the engineers, primarily — to understand. They were very nervous about it. We broke down those barriers. But we had to do impossibly large tasks with tiny little budgets — it was a huge learning curve. Mining companies are today spending much more on impact assessment and management than they did in the early days when we still had to convince them of the value of this.

“Take the Maguga dam project in the late 1990s, for instance. In addition to doing the impact assessment, we were involved with the monitoring of the construction. That is where I learned you had to ensure enough money was put into the budget and enough effort into monitoring and management measures to avoid major problems. There were issues, but the experience taught me to see what could go wrong and how to prevent it.”

The 115-metre-high clay core rockfill-type dam was the second-highest embankment dam in southern Africa. It falls within a catchment that experiences cyclonic rainfall, which was channeled via a large labyrinthine spillway. The structure, 11 kilometres south of Pigg’s Peak in Swaziland, received the South African Institution of Civil Engineering award in 2001 as well as the South African Association of Consulting Engineers Glenrand MIB Golden Jubilee Award for Technical Excellence in 2002.
PROJECT: ESIA and Management Planning in Africa

Zambia and the Democratic Republic of Congo


SCOPE: SRK was appointed to produce numerous environmental and social impact assessments (ESIAs) and related environmental and social management plans (ESMP) in Zambia and the Democratic Republic of Congo, both endowed with considerable natural resource wealth. Required to comply with national and international standards and to incorporate stakeholder engagement, these reports reflect the credit risk management framework set by the Equator Principles for determining, assessing and managing environmental and social project risks.

In the DRC, SRK prepared bankable ESIAs for the Kisanfu Copper Project, the Tenke Fungurume Mine, the Mongwalu Gold Project, the Mbelenge Project, the Ruashi Mine, the Kolwezi Tailings Treatment Project, the Kingamyambo Musonoi Tailings Project, the Nyumba ya Akiba Cement Plant and the PPC Barnet Cement Project. In Zambia, SRK produced ESIAs for the Konkola North Mine and Concentrator, the Mwambashi Copper Project, the Nkana and Mufulira Mines, the Lumwana Copper Mine and the Kansanshi–Solwezi project.

The assessments and management planning involved copper, gold, diamond and cement resources. Most are located in sensitive and complex environments where it is as difficult to address conflict and human rights challenges as it is to protect habitats teeming with rare and threatened species and that function as important carbon sinks and provide essential water sources. Social challenges involving artisanal miners and indigenous peoples are also often prevalent.

OUTCOME: SRK undertook internationally compliant EIA and ESMP processes to meet lender and legal requirements, enabling several clients to obtain financing from Equator Principles Financial Institutions and conditional legal permits for their projects. SRK also helped build and maintain its clients’ social licences to operate through transparent, open and good faith engagement with stakeholders, including communities, governments and non-governmental organisations.

Throughout the processes, SRK ensured proactive risk identification and analysis.

By closely aligning EIA and ESMP processes with the best international industry practices, SRK has made a substantial contribution to the sustainable development of the region.
The water team continued to grow. Richard Connelly left for the U.K. in 1992 and Ian Cameron-Clarke stepped in to assist in running the groundwater team. Brian Middleton became increasingly involved in running the South African practice and the Group, and at the end of 1994 the water and civil departments combined, with Peter Labrum taking on the management of the larger team.

GIS technology was also put to good use in updates to the “Water Resources of South Africa” series of studies, published in 1994 and 2005. Middleton oversaw their production.

As a result of dam-safety regulatory changes made in July 1986, SRK was asked in 1991 to conduct a safety inspection of the Ceres dam, with its syphon spillway, in the Western Cape. The professional team, led by the renowned Henry Olivier, was unable to declare the concrete arch dam safe. As a result, SRK was asked to design a replacement. Middleton was appointed as project director and Alan White as lead engineer for the investigations, design and construction oversight of the new Ceres Koekedouw Dam. The dam was in a seismic area and classed as an extreme hazard dam. Consequently, specialists from the Norwegian Geotechnical Institute, leaders in the field of dam design in seismic regions headed by Dr. Kaare Hoeg, joined the team. Gary Jones, Adriaan Meintjes, Dereck Warwick, John Brown, Graham Howell and Bruce Engelsman all worked on the asphalt-core rockfill dam, the only one of its kind in the southern hemisphere, as it was erected between 1994 and 1998.

The Ceres project had many fascinating features. It was a joint undertaking by private sector agriculture, local government, national government and international funding agencies to provide a multipurpose water supply scheme that would serve the needs of the local community for 30 to 40 years. It
PROJECT: Lebalelo Water Supply Scheme

CLIENT: The Lebalelo Water User Association

SCOPE: The project’s scope was to provide water for developing platinum group metals in the area northwest of Burgersfort in South Africa’s Limpopo Province. In response to the industrial water needs, the South African Department of Water Affairs established a steering committee to co-ordinate the supply of water to a number of mines in the region. This committee, together with six mining houses and the local communities, subsequently evolved into the Lebalelo Water User Association.

In 2000, SRK and Ninham Shand were appointed to carry out an initial feasibility study, prepare an environmental scoping report and detailed designs, and provide contract management. The project entailed supplying 84 megalitres (ML) of raw water per day from the Olifants River, both for mining purposes and to provide 1.3 million people with 65 litres each a day.

The SRK team, managed by Peter Labrum, was responsible for the environmental and geotechnical aspects of the project as well as designing the pipelines, de-silting works, pump stations, housing services and earth dams. SRK was responsible for the construction management, including:

- River off-take weir and pump station
- De-silting facility
- Off-channel storage dam of 570,000 m³
- High-level pump station (320-metre lift) with capacity of 84 Ml/day
- 53 kilometres of mortar-lined, Sintacoat-protected steel pipeline with a nominal diameter of 550–900 mm
- Five smaller earth dams with capacities of 11,000–28,000 m³
- 20 Ml concrete reservoir
- Intermediate pump station (120-metre lift) with capacity of 46–50 Ml/day

OUTCOME: The total project cost was R230 million, which was within 0.5 percent of the budget. The mines’ requirements necessitated a very tight project schedule: construction commenced in April 2001 and water was available for delivery to the mines almost exactly a year later.
was the first privately funded dam in South Africa to provide for in-stream releases so that the inflow back to the river could be managed in an environmentally sensitive way. Meintjes and Jones traveled to the Norwegian Geotechnical Institute to learn their design techniques and dynamic earthquake analysis. While in Norway, Jones also took the time to examine an asphalt-core rockfill dam under construction.

The water department initially comprised four smaller teams that covered water and waste treatment together with surface water, groundwater and civil engineering services. These groups merged into a single unit that grew to about 55 people. Peter Shepherd joined in 1992. “The integration allowed SRK to support people who wanted to grow in more than one professional area of expertise and it allowed the firm to take on bigger and more integrated projects,” he says.

One of the most significant successes of the larger group was a much greater understanding of the complex interactions between groundwater and surface water. Under the guidance of Diana Duthe and John Cowan, the team developed a strong presence in integrated mine-water management in Africa in the early 2000s and enhanced SRK’s understanding of the water management processes and guidelines.

Duthe was also instrumental in developing strong mine hydrogeology expertise, especially in understanding the volumes of excess water that could be expected in a pit or underground workings. “SRK is currently implementing the drilling and testing of a trial dewatering hole some 1,050 metres deep in the Zambian Copperbelt,” says Duthe. “Dewatering the mine before the water gets into the underground workings will reduce ingress to the mine, allowing for safer working conditions, and decrease the potential contamination of the water resources in the area.”

Shepherd adds, “With the platinum mines expanding in arid areas of South Africa, SRK was involved in developing water-supply schemes to service the growth in the Rustenburg area and the eastern limb. We assessed the local water resources and developed water-supply schemes using treated sewage effluent, augmented from water service providers. The work included water balances for each of the mines; assessments of local surface water resources, excess groundwater and water supply from the towns’ municipal sewage works; negotiations to obtain the additional water; and finally assisting with the design and implementation of the water supply system. We needed a strong diverse water team, and our expertise and understanding of the area and mine requirements led to the successful establishment of water supplies for the platinum industry.”

Dr. Andrew Wood joined in 1989. His knowledge of environmental water/waste management and water protection increased the opportunity for the diverse water team to grow in different areas. A highlight of his work was assisting the South African Breweries and Coca-Cola factories around Africa with source water protection planning. “This assists these industries in assessing if they have water of sufficient quantity and acceptable quality to sustain their operations and allows interfacing with other environmental risks that could impact their businesses,” says Wood, whose broad experience included working with Sasol, the “coal to oil” industry started in South Africa some 40 years ago.

Soon after coming to power in 1994, the new government launched its reconstruction and development program, which was specifically targeted at developing the rural areas. SRK saw this as a great opportunity. Carl Bro, a Danish consulting firm, also wished to be in this market, and after talks between
PROFILE: John Cowan

John Cowan was born and grew up in Bulawayo, Southern Rhodesia (now Zimbabwe), the eldest of four children of Scottish parents who had emigrated to take up teaching posts. At school, chemistry was Cowan’s second-worst subject — after Latin — yet he pursued it after graduating with a bachelor of science from the University of Cape Town. He joined the City of Bulawayo’s engineering laboratories and upgraded the city’s water and sewage analysis systems. After taking control of the labs, he expanded into food- and soils analysis.

In 1981, Cowan and his wife, Joan, left Zimbabwe with their two children and moved to Johannesburg, where he joined U.K.-based Binnie & Partners. Cowan focused on desalination applications for the petrochemical and food industries, building a team that consulted on water and effluent issues for a wide range of industries, including brewing.

When the South African Binnie practice merged with SRK in 1988, Cowan set up the water and effluent technology department in the Johannesburg and Cape Town offices. This department continued working for the rapidly expanding South African Breweries Group, known as SABMiller plc from 2002 and eventually the world’s second-largest brewer. “We worked on practically every new brewery developed in Africa,” Cowan recalls, “not just within South Africa, but in a dozen other countries and eventually in Russia, too. We also did a lot of work for South Africa’s Water Research Commission (WRC) and over several years conducted a national survey of water use and effluent production by industry.”

As brewery and WRC projects became scarcer, Cowan used his expertise in new contexts. He took on water quality and geochemical projects for the mining industry as well as liability and due diligence assessments — particularly related to mergers, acquisitions and stock exchange listings — for major South African mining houses.

Cowan retired in 2008, but continues to work for SRK as an independent consultant from his home in England, near his grandchildren.
VENTURE COMPANY: Waste Resources

In 1992, SRK colleagues Graham Murray, John Cowan and Gordon McPhail, along with Dr. Robert Müller, a retired chemist from the chemical company BASF in Germany who had been living in Cape Town, formed Waste Resources (Pty) Ltd. Their concept was to trade or sell waste and by-products from one producer to another — taking waste blood from abattoirs, for instance, and providing it to pet food manufacturers as a source of protein.

Hired in 1993 to help get the business off the ground, Ian Hammond established the firm as a profitable contracting company. Waste Resources won a major contract from Sappi Kraft in Mandeni and subsequently took on waste management for Sappi Tugela and Mondi Richards Bay, as well as for Mondi Piet Retief, until its sale in 1998.

SRK employee Andrew Wood also landed a contract to install, on a turnkey basis, a waste-water treatment plant for Conco, Swaziland, a company producing concentrates for Coca-Cola, Sprite and other soft drinks. For the Conco project, Waste Resources employed SRK as consultants. King Mswati III officially opened the waste-water treatment plant in 1995, which remains in operation.

Filter Solutions (Pty) Ltd. was formed as a subsidiary to Waste Resources in 1996. Grenville Dunn was responsible for the growth of the company, which focused on solid-liquid separation by filtration. A mobile stainless steel filter press test unit was constructed and the firm landed a substantial contract to de-water and remove the waste gypsum slurry at the Kyncoch fertiliser factory in Midrand, Gauteng. Filter presses, pumps and instruments were purchased and a full processing facility was constructed, commissioned and operated.

Filter Solutions was also the agent for various filter plate manufacturers in Germany and the V-Sep vibrating reverse osmosis system from San Francisco. Following the loss of technical skills with the retirement of key staff in 1998, the company’s contract operations were transferred to Waste Resources; the assets and agencies were then sold and Filter Solutions ceased trading.
Middleton and Christian Waarst, director of Carl Bro, a joint-venture company, Resource Development Consultants, was formed with the Danish Industrialisation Fund (IFU) in 1995. Resource Development Consultants focused on social and economic services and established offices in Pietermaritzburg, Pietersburg, Johannesburg and East London. Peter Stone was the first general manager, succeeded by Tim Hart and then Danny Walmsley. Early employees were Peter Hirst, Erich Buhl-Nielson and Ole Simone. However, Hart adds, “the lofty ideals of the government never came to fruition, as more power was centralised and RDC struggled to provide services in the rural areas.”


In 2000, SRK and Ninham Shand were appointed to work on the Lebalelo water supply scheme for the eastern limb platinum mines. Jan Slabbert was employed by Labrum as a resident engineer during the construction phase, which lasted until 2002. He moved to Rustenburg in 2003 to start the SRK office there and to service the platinum mines on the western limb.

1985 – 1999

- **Graham Murray**
  - Joins tailings department in 1985, forms new mine planning & feasibility studies department in 1988

- **Rob McNeill**
  - Joins in 1985 and runs Welkom office from 1991 and Pietermaritzburg office from 1993

- **Matt Braune**
  - Joins in 1985 and further develops stormwater management and risk analysis services

- **Sue Posnik**
  - Joins in 1991 and triggers expansion of environmental services, then becomes SRK’s 1st female partner

- **SRK Pietermaritzburg**
  - Rob McNeill spearheads Pietermaritzburg in 1993 with focus on rural roads and water reticulation

**Tailings**

Although veterans Mike Smith and John Robbertze left in 1991 to form a contracting company to build and operate tailings dams, Gordon McPhail remained, and continued to lead the SRK tailings team into the 1990s. McPhail had started working at SRK in 1978 on the Bafokeng Mine tailings dam project and he always hoped that he would never see a similar disaster. His hopes would be dashed.

On the night of February 22, 1994, the tailings dam at the Harmony Gold Mine in suburban Merriespruit, outside of Virginia in the Free State, collapsed. An afternoon thunderstorm had deposited 50 millimetres of rain in 30 minutes onto the dam surface. It burst, sending 600,000 cubic metres of slurry cascading through the town below. Seventeen people were killed. Eighty homes were destroyed. SRK received a panic phone call from the mine manager in the early hours of the disaster, asking for immediate help. He needed the company to design repairs to the dam that would not only allow operations to resume but also accommodate an investigation into the failure. Brian Middleton was subsequently able to prove that the shape of the dam, coupled with the inadequate freeboard, was unable to handle the excess water,
which over-topped the crest. “I worked with the client on that disaster as a consultant to counsel and it made me realise why you never want to be in court,” McPhail says.

The resulting government inquiry led to the introduction of a new Code of Practice for Mine Residue Deposits. The mine owner, operator and six employees were heavily fined for negligence.

In 1994, McPhail left SRK to establish his own practice. Steve Dorman, Richard Stuart and Dave Williams were charged with the management of the tailings department. Dorman had joined SRK in 1985, Stuart in 1986 and Williams in 1988.

Dorman managed the design of the waste-disposal facility at Mossgas that won a design award from the SA Association of Consulting Engineers. He also led the first heap-leach design carried out by the South African office with the development of the world-class Gold Fields Ghana Tarkwa Mine facility.

“The tailings team had an excellent reputation, and folk who had the privilege of working there were highly regarded,” Williams says. “They now seem to be everywhere, leading successful tailings practices around the globe and presenting papers at pre-eminent conferences. If you wanted to learn and practise tailings-related engineering in the 1980s and 1990s, SRK Johannesburg was the place to be. I worked on the Bafokeng tailings storage scheme, one of the largest in the world, right through my tenure of nearly 10 years at SRK. Other big jobs were for JCI’s Potgietersrust platinum mine, a greenfield development and the expansion at Atok Mine.”


Meintjes arrived at SRK in 1992 from the SA Housing Trust, initially as part of the geomechanics team involved with soil- and rock-engineering projects. He later transferred to the tailings department and was involved with the design, construction and monitoring of waste facilities for a variety of commodities, mainly in Africa.

Although the department went through a brief period of consolidation, it soon grew to roughly 40 staff members. The management team was extended to include Danie Venter, who had joined SRK in 1984. Dr. Gary Jones, Johan Boshoff and Dereck Warwick provided strong support during this period.

<table>
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<tr>
<th>Sukhoi Log</th>
<th>Allison Burger</th>
<th>Ceres Dam</th>
<th>Tim Hart</th>
<th>Vis Reddy</th>
<th>SRK Pretoria</th>
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<td>1st of many international studies – 1994 feasibility for development of one of the world’s largest gold deposits</td>
<td>Joins in 1994 and brings social science skills; becomes partner and director in SA practice</td>
<td>This asphalt core rockfill dam built between 1994 and 1998 is only one of its kind in southern hemisphere</td>
<td>With a master’s in human geography, joins in 1995 and wins major project for Department of Water Affairs</td>
<td>Joins SRK Johannesburg in 1997; drives expansion of air quality services. Becomes Natal’s SBU Partner in 2006</td>
<td>In 1999, the Pretoria office is re-opened by Matt Braune as a subsidiary of the water team in Johannesburg</td>
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The team was commissioned by Ashanti Goldfields to carry out audits of the Bibiani and Obuasi tailings impoundments in Ghana and by the World Bank for an audit of all the copper tailings deposits in Zambia. These projects required multiple teams of highly experienced tailings engineers and support staff. As if the above workload was not enough, ongoing monitoring and reporting of a multitude of gold, platinum, thermal power station ash and base metal tailings impoundments in South Africa and Zimbabwe were carried out monthly. The team was also appointed to provide the commissioning and ongoing operational management of the Minera Alumbrera copper tailings project in Argentina, where 120,000 tonnes of tailings a day were deposited.

A strategic planning meeting in 2007 led Stuart, Meintjes and Venter to anticipate two major changes in tailings disposal in Southern Africa. The first was the requirement that each mine obtain sufficient land to meet long-term tailings disposal requirements. This led to extensive studies by SRK in partnership with various clients. The second was the decline of platinum tailings projects. This resulted in the department focusing more on gold, copper and base metals in Central and Northern Africa and diamonds in Southern Africa. Important commissions in the DRC and Ghana were obtained during the next six years. The Iduapriem project in Ghana resulted in the development of new designs for the impoundment of gold slurries. In 2006, Graham Howell rejoined SRK in a rebranded ENGEIO department, which included geotechnical engineering and engineering geology. Since then, he has been involved in major mining shaft developments and other decline designs, mainly in highly weathered soils or sands that reach down to considerable depths. An interesting project from a tailings perspective was the steel sleeve lining of the outlet penstock pipeline for the Bafokeng No. 4 tailings dam designed in the early 1980s by SRK. More recently, the team designed a unique HDPE liner system to meet the requirements of Water Affairs from an environmental and structural perspective for the coal stockyards for the Medupi and Kusile Power Stations in South Africa, the fourth- and fifth-largest coal-fired power stations in the world.

Richard Stuart retired as a consultant in 2008, but innovation continued to be the thrust of the department. The raising of the concrete towers at the Bafokeng tailings dam at the Impala Mine required the design and construction of a traffic access road to the existing towers in the pool area where fine saturated tailings existed to a depth of 40 metres. Settlements of up to 800 millimetres were integrated into the design over the six months it took to raise the towers a further 40 metres. The Impala platinum mine water savings project became the template in Africa for rock flour tailings.
PROJECT: Alchemy Community Empowerment Initiative
At Four Mines in Limpopo and North West Provinces, South Africa

CLIENT: Anglo American Platinum

SCOPE: The purpose of the project is to facilitate constructive and sustainable community development that will outlast mining at four of the company’s South African operations and to aid community development in distant areas that contribute labour to these mines. The initiative has several groundbreaking elements: community shareholding in Anglo American Platinum (Amplats), making the participating communities the third-largest shareholder; the establishment of locally based development trusts, co-designed with community representatives and having significant community representation on the Boards of Trustees; an innovative model ensuring the cashless transfer of shares and immediate flow of funds from dividends and other sources; and an integrated development planning process led by the development trusts.

The planning process seeks to optimise the use of local development resources and to build lasting development partnerships with government, business and civil society. This will be achieved through meaningful, ongoing stakeholder and community engagement, ensuring development trust accountability.

Alchemy has been planned and is being implemented in a complex and fluid social and political environment. The project team comprises Amplats managers and line specialists at corporate and mine levels as well as a group of advising consultancies. The SRK team has been involved in the initiative since its inception in 2009, working on social baseline research, organisational design, development planning, stakeholder engagement and the establishment of development trusts.

OUTCOME: Alchemy is widely recognised as a positive, innovative and potentially sustainable community empowerment and development model with applications in South Africa and beyond.

The initiative is providing a body of development and engagement lessons that will inform Amplats and possibly affect broader practices as mines, government, communities and labour seek new approaches.

Akhona Stokwe and her daughter, Liyema, are proud owners of a house in Seralang thanks to Amplats’s home ownership initiative.
Natal Revitalised

Mike Slabbert, who joined SRK as part of the merger with Binnie & Partners in 1988, moved to Durban in 1989 to re-establish the office. Chris Taylor, a groundwater specialist, and Ron Tluczek, a geotechnical engineer, were part of the early team when SRK was hired to survey and document the flood risks facing the City of Durban. The Transkei Government Department of Water Affairs also became a major client. A few years later, the office landed an extensive stormwater infrastructure project from the Durban Corporation. The project really put SRK’s local expertise on the map.

A second office was established in Pietermaritzburg in 1993, 90 kilometres inland.

Rob McNeill, who started as a civil engineer with Zimbabwe’s National Railways before moving to South Africa and joining SRK in 1985, moved to Pietermaritzburg from Welkom. He had run the Welkom office after Dave Bentel left in 1991 for Reno. “As it was basically a one-man show in Pietermaritzburg, I went back to my roots in civil engineering,” McNeill says. “My primary focus was roads and water reticulation in the rural communities. From 1994 through 1998, I ended up doing 350 kilometres of piping reticulation for the Umgeni Water Board — 95 percent done by hand labour — while simultaneously being employed by Umgeni Water as a project manager on numerous projects, all of which endeavoured to maximise local community labour employment and return half the value of the project back to the communities. During the period 1994–1996 we had a severe drought in eastern South Africa and SRK was invited to [join] the task force to oversee the drought-relief implementation process.”

McNeill also expanded the office services to waste and cemetery integrated planning, site identification and development design, environmental services and geotechnical services. The first integrated waste-management plan for KwaZulu-Natal was prepared by the Pietermaritzburg office. In 2002, McNeill reintroduced tailings services.

In the 1990s, the Natal offices grew to more than 30 staff specialising in civil, environmental, water and geotechnical engineering services. Instead of mining clients, they dealt with local municipalities, industrial plants and the service sector. SRK also developed a strong relationship with Shell, helped by Joe McGinley from the Reno office, in hydrocarbon remediation work.

After a two-year secondment with Consult 4, on a pre-feasibility study for the further phases of the Lesotho Highlands Water Project, James Morris arrived in 1996. Morris had joined SRK in 1988, working initially in Johannesburg. He had been with a major contracting company before joining SRK, where he concentrated on water and environmental work before moving to Durban.

SRK Natal was doing mostly civil engineering work in the late 1990s. With the departure of Mike Slabbert in 1999, Morris and McNeill decided that a more diverse range of products was critical for survival in the tough market conditions. “We ‘persuaded’ some guys from Johannesburg to come to Durban, and expanded the range of services,” Morris says. “During this period we developed very strong and innovative GIS, database and Excel skills that we applied to many aspects of our business, such as visual analysis, data and asset management and decision support systems.”

Vis Reddy drove the expansion of the air quality services. An environmental geochemist, in 1997 he moved to SRK in Johannesburg from Mintek, where he was a scientist involved in air quality monitoring and assessment. Two years later he moved to the Durban office.
“We did our first air quality project in 2001,” he says. “From 2000 through 2005, I spent about 20 percent of my time on air quality work, but it took off and we had to grow the team.”

Using computer models, SRK offers clients options for management measures and plans for dealing with concerns. Changes in environmental legislation have resulted in SRK’s impact assessments expertise being combined with air emission licence applications.

“When required, we do base-line monitoring prior to any development activity, and establish monitoring networks in areas that are likely to be impacted based on the outcomes of predictive air dispersion modeling studies,” Reddy says. “In some cases, our job entails advising clients that they might have to move villages or change the way their infrastructure is laid out. An increasing number of clients are asking us to get involved in carbon-footprinting for projects as part of the studies. This has been identified as an area for future growth.”

The Durban office expanded its services in the broader environmental field when Nick Holdcroft joined the Durban office in 1998 and set about re-establishing the environmental team. It initially serviced the environmental impact assessment market, and later expanded into major industrial projects in the region.

“Our environmental services have since grown into the public sector where our projects are more strategic in nature,” Reddy adds. “A recent project has been the development of a hazardous waste management plan for the province of KwaZulu-Natal.”

With Holdcroft’s departure at the end of 2008, Reddy continued to grow and expand the environmental team into an integrated multi-skilled team that is proving to be a differentiator in the KwaZulu-Natal market.

**PROFILE: Joe de Beer**

**Joe de Beer** joined SRK Johannesburg’s civil geotechnics department in 1987. Since his graduation in 1965, with a master’s degree in engineering geology from the University of the Witwatersrand, he had accumulated a wealth of engineering geology experience. In 1990, he transferred to SRK’s environmental department and over the following two decades established himself as a leading environmental consultant.

During de Beer’s career, which spanned half a century, he provided advice on projects mainly in Africa but also in Russia and elsewhere.

He has managed numerous environmental and social impact assessments for mining, manufacturing and infrastructure projects. In addition, de Beer undertakes due diligence reviews and mine-closure planning studies. He has worked on-site as an environmental control officer and has published papers on a wide range of topics, including dolomitic stability and sinkhole risk assessment, foundation design, geotechnical data banking and environmental management.
In 1999, the Pretoria office was re-opened by Matt Braune as a subsidiary of the water team in Johannesburg.

Born in Germany, Braune moved to South Africa with his family in the 1960s. He joined SRK in 1985, working in the water section and quickly moving to Welkom to deal with widespread flooding that occurred during the late 1980s. Guided by the guru of water engineering, Brian Middleton, a city-wide stormwater master plan was initiated and successfully completed over a period of five years. From this study several unique methodologies and techniques were developed. The work was internationally recognised and brought conference invitations from Australia and North America. Braune also undertook trips to Europe to learn more about risk assessment techniques in urban stormwater management. “This expertise enabled SRK to become a leading consultant in stormwater management for municipalities,” Braune says. “Over the next few years I obtained appointments from about five major municipalities within South Africa, creating a thriving stormwater management section.”

While much of the work was for local governments, mining companies required the expertise too. The Rio Tinto uranium mine in Namibia proved to be a long-running client after a sustained 15-minute cloudburst over the site brought production to a standstill for 10 days due to flooding of an electric switchgear.

In 1999, motivated by health reasons, Braune decided to move to Pretoria for its more moderate climate.

“The other partners were hesitant, but they backed me and it turned out well,” he says. “I diversified the office because of the business model and what I learned from Brian Middleton, who was my mentor and guide. I went into disaster management, which ties in with risk assessment. I employed people with specialist skills in disaster management, enabling the Pretoria office to undertake studies within South Africa as well as in countries across southern Africa. We have done risk and vulnerability assessments in Botswana, Mozambique and Namibia.”

After having established the stormwater and disaster management sections, it was time to expand once more.

“I created an environmental team comprising scientists who were specialists in environmental authorisations and environmental management for the mining, commercial and governmental sectors,” Braune says. “Due to these diversifications, the Pretoria office has grown from a one-man band to nearly 30. Dingaan Mahlangu was the first person I employed in the Pretoria office. Dingaan joined SRK in January 2000 from the Department of Water Affairs and Forestry. He became the first black director of SRK in Africa in 2008 and has an MSc in disaster risk management. He now manages several large projects and has played an instrumental role in the success of the Pretoria office.”

Mahlangu’s major clients are the cities of Johannesburg, Tshwan’ e, Durban and Cape Town.

Braun continues, “this work is an exciting field that is integrating some of the climate change and social problems facing Southern Africa. We need to come up with innovative ways to tackle these challenges and save our planet.”
PROJECT: AECI Environmental Liability Study

CLIENT: African Explosives and Chemical Industries (AECI)

SCOPE: AECI has manufactured chemicals and explosives on numerous sites since 1924. During much of this time, waste-handling practices did not meet today’s standards, leaving soil, groundwater and surface water contaminated to varying degrees. SRK was appointed in 1995 to undertake the first comprehensive environmental study of all of AECI’s sites. The initial study was updated annually until 2008 and led to SRK’s assisting AECI managers in remediation, reclamation and amelioration of more than 200 properties across South Africa. These range from small depots to chemical factory sites extending over more than 4,000 hectares. Teams of scientists and engineers from all of SRK’s South African offices have been involved.

OUTCOME: The environmental liability study led SRK to develop some innovative technologies. These included the use of a remotely controlled drilling rig to sample for nitroglycerine and the licensing of South Africa’s first large chemical waste dump with a vegetative rather than synthetic cover. The study also brought about major innovations in GIS technology, with the development of a comprehensive land management information system to address the large number of sites and the extensive problems, investigations and remediation activities. Some of the sites have been restored to health and sold while others are being safely managed by AECI on an ongoing basis.

This site was situated on dunes in the Western Cape and was severely impacted by many years of chemical plant operations. It has subsequently been remediated, re-vegetated and restored to a healthy state.
PROFILE: Horst Marker

Horst Marker, who lectured at Wits from 1976 to 1978, is a specialist in geotechnical analysis and construction, including fluid flow modeling using sophisticated numerical methods. Besides helping establish the SRK Cape Town practice in 1979 and later the Swaziland office, Marker opened the Zimbabwe practice in 1982. He operated SRK from his home in Harare until he decided in late 1986 to leave Zimbabwe. Marker continued working for SRK from the Johannesburg office until 1989 when he accepted the position of Associate Professor in Civil Engineering at the University of Durban-Westville. He returned to SRK the following year but continued to lecture on groundwater flow modeling and groundwater technology. He conducted various studies on the Nchanga and Palabora open-pit mines.

“As a result of my long history with SRK, I had a very close relationship with Oskar Steffen,” Marker says. “His family and mine are very close, and when Oskar turned 70, my wife and I attended his birthday celebration. That I still have such close relationships with SRK people says everything.”

Cape Province

John Brown moved to Cape Town in 1990 to indulge his passion for rock climbing on the local peaks. Another Wits graduate, Brown did a short stint at Rand Mines before joining the groundwater department under Connelly.

“I transferred to the Cape Town office to get closer to Table Mountain,” he says. “The Cape Town office was relatively small — Tony Dell and Graham Howell were servicing the Hex Railway Tunnel arbitration and Peter Rosewarne had set up shop to provide groundwater services. Shortly after I arrived, Dell and Darcy Williams moved to the Lesotho Highlands water scheme for an extended period. Graham Howell moved back to the Johannesburg office to work on the Lesotho Project as part of the Consult 4 consortium, while Brian Wilson moved to Vancouver. Eventually, the only anchor consultants were Peter Rosewarne, Bruce Engelsman — who joined SRK in 1994 in Johannesburg but subsequently moved to Cape Town — and me.”

Brown developed a practice designing foundations for the new high-rise buildings and shopping malls that marked the city’s modernisation. But the office expanded its spectrum of work to include golf courses, landfills and the oil industry of Angola. An attractive market in Angola eventually led to the establishment of a joint-venture in Luanda in 2006 under the initial guidance of Bruce Engelsman and Brian Middleton. There were also geotechnical investigations for Eskom, the South African power authority, looking for sites up and down the coast for their future nuclear power plants.

Howell returned to Cape Town in 1995 to run the office and the newly revitalised Port Elizabeth outlet. During the late 1990s, the environmental section was born with Tony Barbour’s arrival and the civil, geotechnical and groundwater disciplines
were consolidated and expanded to about 40 staff. Gary Bentel, who was a geotechnical engineer, was a welcome addition before Perth called. Allan Haines returned to Cape Town for a short spell before also moving to Perth.

In 2002, the downtown office relocated to the woody suburb of Rondebosch and the administration building of Albion Springs, the former head office of the Schweppes soft drinks company.

Port Elizabeth was essentially a one-man practice for Chris Langton until he moved to Australia in 1993. Rosewarne visited regularly from Cape Town but there was no true SRK presence. The 1994 arrival of Kurt Uderstadt, a civil engineer from the Eastern Cape, began to change that. Chris Lomberg, a water specialist, joined him the following year but left for Australia in 1999, leaving the department manned by Michael Royle and Todd Hamilton, from SRK Vancouver, who stayed until 2001. Gordon Maclear was seconded from the Cape Town office in 2001 to take over when Hamilton left.

In 2001, the office added environmental services with the arrival of Rob Gardiner. Brent Cock came in 2006 to provide engineering geology expertise. Port Elizabeth remained a sub-office of Cape Town until 2002 when it started to stand alone.

“We’ve managed from Port Elizabeth to establish a pretty good international footprint into Africa and we are working directly with the Johannesburg office, especially in geotechnical and environmental services,” Uderstadt says.

The Port Elizabeth office grew to a staff complement of 28.

Gert Nel, a hydrogeologist, opened SRK East London in 2001 to provide groundwater services to the municipal and private sectors. The former Transkei region had been neglected under apartheid, partly because it was the family home of Nelson Mandela, and was now a focal point for infrastructure development under the new government. Eunice Goossens, a specialist in water and sanitation services, joined in 2006. East London expanded into the hydrocarbon sector in 2003, and a three-year contract with BP was signed in 2013. Notable successes included the drilling of successful boreholes and drawing a health-and-safety award nomination from Shell. The East London office also played a key role in the remediation of hydrocarbon contamination in the Port Elizabeth Harbour, a multi-million rand project. As a result, the staff complement grew to 12.

A merger in Cape Town with Toens and Partners in 2003 doubled the size of the groundwater team with the arrival of Des Visser, Alan Woodford, Chris Esterhuyse and Millie Goes.

In 2006, SRK Cape Town won Chevron’s contract for sub-surface contamination work in southern Africa. That same year it won a key tender from Eskom to review and update its nuclear quality manual and develop a business plan for the future nuclear program. This led to a contract to develop safety reports for three potential nuclear sites — a large, lucrative project. The office also developed a strategy to identify and license future nuclear sites to meet South Africa’s needs over the next 20 years. In 2007, SRK took over a small Kimberley consultancy and Chris Esterhuyse took the helm in the capital of the Northern Cape.
PROJECT: National State of the Environment Report

CLIENT: Department of Environmental Affairs, South Africa

SCOPE: In 2004, SRK was commissioned by the South African government to prepare a comprehensive report on the state of South Africa’s biophysical and social environments and the key drivers influencing them, based on technical input and peer review from the country’s experts. The SRK team was required to host a national stakeholder workshop to solicit the views and opinions of representatives from all spheres of South African society, including government, business, NGOs and academia.

The project involved reporting on the existing policies for environmental and social change, including assessing the initiatives being implemented and identifying areas requiring further action. The team was to produce a long-term environmental outlook for South Africa up until 2025.

At the start of the project, the available data was insufficient because of numerous gaps and inconsistencies. SRK marshalled more than 30 leading environmental and social experts to prepare detailed studies on a wide range of thematic issues, including biodiversity and ecosystem health; land, inland water, marine and coastal resources; human settlements; and environmental governance.

To satisfy the community participation requirements, the company conducted a facilitated scenario-planning workshop. Specialists, peer reviewers and project team members attended a day-long meeting to brainstorm South Africa’s possible environmental futures based on various development scenarios.

The meeting stimulated productive environmental debate and aligned the report more closely with regional and global initiatives.

OUTCOME: SRK published its findings, including key trends, in a 370-page book, South Africa Environment Outlook. Mapping was integral to this report and GIS was used to present findings spatially on a national scale. The report became a principal information source for the Southern African Development Community Regional Environmental Education Programme run by the Wildlife and Environment Society of South Africa and for the Global Environment Outlook (GEO-4) prepared by the United Nations Environment Programme (UNEP). Members of the SRK team were asked by UNEP to peer review the GEO-4 submission for the Africa region.

The report and its findings, which were discussed in the country’s parliament, received attention from a number of South Africa’s leading national newspapers and journals. It spurred the preparation of a National Strategy for Sustainable Development in South Africa, in which the SRK team participated as policy writers.

South Africa Environment Outlook was the first comprehensive, national report on the state of the environment. The level of detail and accuracy in this book have earned its reputation as an important ‘go-to’ document, despite being compiled and published a decade ago.
Still, Times Change ...

The iconic Dick Stacey left on November 30, 2000, to assume the Centennial Chair of Rock Engineering in the mining department at Wits. After nearly 25 years with SRK, he felt conflicted about leaving — even though it meant a return to the university that had professionally birthed so many of the firm’s luminaries. He had always downplayed his own achievement and stature.

“Geomechanics at SRK — Martin Pretorius and his team, Awie Swart, Richard Butcher, William Joughin, Gerhard Keyter and Johan Wesseloo — is very strong, and my departure will not result in any loss of technical capability,” Stacey said with a too humble nod to his colleagues as he went out the door. “On the contrary, it will be an opportunity for a young engineer to come in and develop for the long-term benefit of SRK. I hope that, in a different way, I shall be able to be of benefit to SRK in my new position. It will be strange not to drive to this office every morning, but it is my wish to be able to participate on projects with SRK in the future, and that this will bring me into regular contact with you. There are also the Friday afternoons, and I hope that I shall be welcome quite frequently!”

Hendrik Kirsten left a year later — in 2001 at 59, well in advance of mandatory retirement age. Like Stacey, he had decided that as much as he loved SRK and what it had become, it was not what he wanted to do any more.

“The three best career decisions in my life were to go into geotechnical engineering, start SRK with Oskar and Andy, and 27 years later, leave SRK,” he says.

“In none of these instances did I have any idea what the future would bring, but in every one I have been extraordinarily lucky in how well things have turned out. Timing is everything, but even in this regard I cannot claim any credit. Everything started and stopped just at the right time. One cannot wish for a better situation than to have a profession in which one is paid to do a hobby twenty-four-seven. But I needed a change.”

Kirsten says he needed to “escape the tyranny of the monthly regimen of production, the relentless treadmill of finding personnel-for-the-work and work-for-the-personnel.”

Thought about what constituted true reward for a man on the cusp of 60 clashed with the demands of corporate competitiveness.

Kirsten still had time to establish a single practice again and continue working for himself. He didn't think that would still be an option at 65.

“I regularly have projects on which SRK, or retired SRK staff, assists me or reviews for me,” he says with satisfaction. “On occasion I review projects for SRK. SRK still plays a unique role in my career, albeit that the relationship is completely independent. I have developed a greater awareness that one needs to continue to engage with people and the world around one and that one needs to participate in decisions of which the outcome is not a known certainty. One lives and progresses by risk and there is no mythical age beyond which progress is no longer relevant.”
Unlike the other two founding partners, Oskar Steffen was a far more symbolic figure. He was not just a figurehead, he was an avatar. He epitomised what most of the professionals that SRK attracted aspired to be. In 2005, he turned 65, divested himself of his shares and continued to show up at the office. It was the same for many of his generation: How do you stop doing something you love? Peter Terbrugge did exactly the same as Steffen. Their status may have changed — they were technically “associates” — but not much truly changed.

By 2010, the South African practice had 350 staff, seven business units and a technical drawing office supported by teams in nine offices around the country.

Mining might have been the country’s economic engine and SRK’s life’s blood, but the industry had become severely politicised with talk of nationalisation and trade union battles. As more and more mining companies spread out across the globe, SRK followed them to new locations in Africa and diversified its offerings. Soon, the South African practice was selling its mining expertise elsewhere on the continent more than at home. Surprisingly, nations such as Zambia, Zimbabwe and the Democratic Republic of Congo — all of which had earlier embarked on nationalisation programs or were inhospitable to international firms — had realised the importance of being part of the global mining market and had changed their policies.

For years, SRK had had an office in Zimbabwe; now it opened offices in Tanzania (2006), Angola (2006), the Democratic Republic of Congo (2010) and Ghana (2011). The Tanzanian office closed in 2011 as local experienced staff was unavailable.

Project offices have since been opened in Malawi (2012) and Cameroon (2013).

“The wheel is turning,” Middleton says. “We have advised a number of governments in Africa on how to set up a robust mining sector. After three decades, our original practice driven by the mining industry has diversified into many other sectors. We’re much broader in South Africa than we are in any of the other practices. We work for the nuclear industry, we work for the chemical industry, we work for local governments and we work for the national administration.”

In 2011, SRK established a rail and project management section in South Africa under the direction of Jon Middleton (no relation to Brian) and assisted with a large geotechnical assessment for a proposed mine rail line in Guinea. In 2012, it was appointed by Vale (Brazil) to manage the construction of the Malawi section of the Nacala rail line from Tete to Nacala on the Mozambique coast.

Peter Labrum, who took over after Brian Middleton moved to Australia in 2010, says size and multidisciplinary pursuits bring their own challenges for the practice in terms of maintaining a common culture and personal bonds.

“There might have been about 50 people in SRK when I started,” Labrum says. “I remember going to a Christmas party in 1979 where our wives brought the salads and eats. We did our own catering. These days it has become so much bigger but somehow we have to keep the SRK culture and traditions alive.”


After four decades, SRK’s major challenge was no longer to grow or manage growth — the firm had proven it could accomplish that. It was performing a far more demanding trick — transforming the whale into the hero of the story: it didn’t swallow Jonah, it provided shelter from the storm. SRK wasn’t a behemoth that consumed professionals, bending their independence to maximise shareholder value, but rather a large tent under which they could build their own practice and a network of peers for shared projects.◆
“There might have been about 50 people in SRK when I started,” Labrum says. “I remember going to a Christmas party in 1979 where our wives brought the salads and eats. We did our own catering. These days it has become so much bigger but somehow we have to keep the SRK culture and traditions alive.”