

Sustainable development

"Business cannot flourish in an ocean of poverty"

Tokyo Sexwale, Chairman of the Business Chapter of the WSSD, Johannesburg 2002



With Northam's continuing transformation, it is placing a renewed focus on those aspects of its business which foster and promote sustainability. We continue to be vigilant about minimising any potential negative impacts of our business on our employees, neighbouring communities and the environment. At the same time, we have also made some modest progress in integrating the elements of sustainable development into our business practices.

The company's economic performance is reported in the preceding pages of this report. Further information on employment practices, training and development is provided in the Empowerment Scorecard on page 26, where we continue to report on progress on the provisions of the Broad-based Socio-Economic Charter for the Mining Industry (the Mining Charter).

This section of the company's annual review seeks to report on Northam's social and environmental performance. Taking into account the nature of the company's business, the disciplines of safety and health remain the primary focus area to measure social performance.

Safety

The good progress made in 2004 in halting some deterioration in the 2003 safety statistics was almost entirely obliterated by the single largest underground mining accident at Northam some three months into the 2005 financial year.

In the early hours of the morning of Monday 20 September 2004, a fire was detected on a conveyer belt between 13 and 14 levels, some 2 100 metres underground. Rescue teams successfully evacuated 46 people from the affected area and extinguished the fire. Tragically however, a further nine employees working in a development end on 14 level, who could not be rescued in time, died as a result of the accident.

At the time of going to print the exact cause of the fire is still the subject of a full departmental inquiry.

Any loss of life at work is unacceptable. But it is to be hoped that the scale of this tragedy will result in some deep introspection amongst the entire workforce and all parties involved. Along with the appropriate remedial actions that will result from the investigations, we will all need to take a hard look at ourselves to ensure that nothing like this happens at Northam ever again.

There has been good progress in halting the disturbing trend in safety performance in 2003. Nevertheless, the death of four employees at our operation during the year is unacceptable, and further work remains to be done in changing attitudes towards safety throughout all the levels of our organisation.

New standards have been set for safety training with clear targets and measurable outcomes.

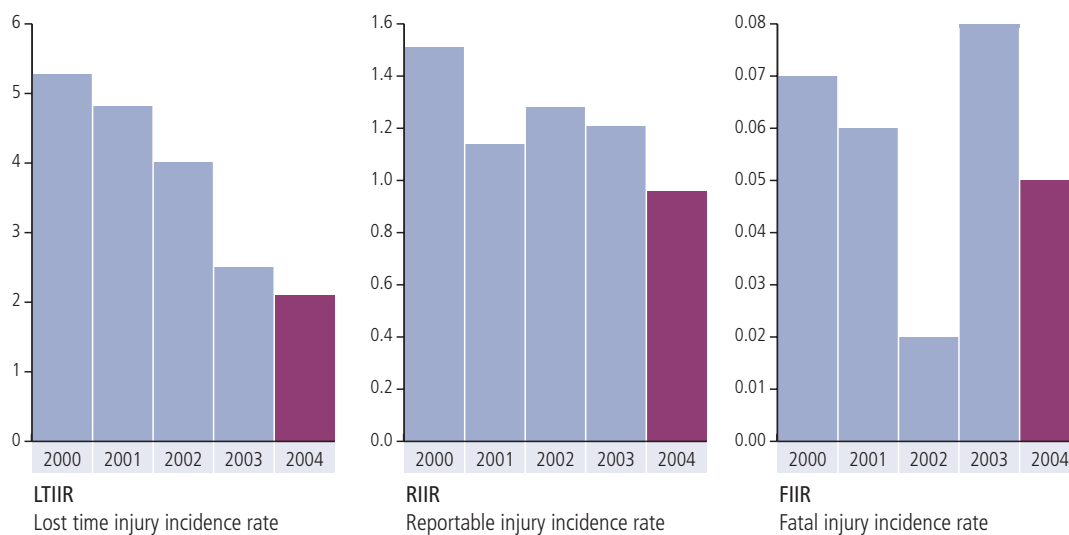
At the beginning of the year the main causes of underground mining accidents were falls of ground (FOG). With the continuing FOG prevention campaign (described more fully below) this trend appears to be diminishing. Towards the end of the financial year at-risk behaviour, as opposed to at-risk conditions, started manifesting as the main cause of accidents.

During the year Northam had 11 inspectorate visits from the Department of Minerals and Energy (DME). In certain cases these visits have shown up some shortcomings in safety practices and procedures. These shortcomings, most of which have been isolated incidents, have since been addressed. On a positive note, the visits have also elicited good feedback with regard to support standards and underground ventilation and air flow. Good compliance (between 80 and 100%) has been achieved with regard to the distance of backfill and pre-stress elongate support from the workplace – which is set at 1.5 metres. Next year's target is to get all support to a minimum of 90% compliance and to maintain it at that level.

Progress on safety initiatives

- Training in the effectiveness of accident investigations focused on the ABC (Activators, Behaviours, Consequences) cause analysis techniques. Shift bosses, mine overseers and underground managers received training in this technique with the ongoing implementation of the behaviour based safety (BBS) programme.
- New standards have been set for safety training with clear targets and measurable outcomes.
- The SOS fall of ground prevention campaign has yielded considerable success with a number of sections qualifying for the 150 FOG free day category. The number of falls of ground is steadily decreasing. Results are clearly communicated and a 34% decrease had been measured when comparing the last six months with the first half of the year. Most significant was the decline in the lost time and reportable injuries.
- The BBS training, known at Northam as Sizanani (to help one another), was launched in August 2003. Training for team coaches started in January, and by the end of the year 500 team coaches had been trained. The Behaviour Intervention Action Plans (BIAPs) were completed in the third quarter of the year and have been implemented in all the sections.

Primary safety indicators



- Behaviour Intervention Assessors' training was completed for safety officers, who are directly involved in the implementation, monitoring and measuring of targets.
- Industrial theatre has been proven to be a valuable tool in an integrated approach to safety awareness. This is used frequently at the mine, with employees also being used in the productions.
- Safety awareness extends to off-job hours with campaigns to improve road safety.
- An accident management system has been introduced which includes improved communication of information on all aspects of safety, including accident investigations.

Occupational health

Northam's mining and processing environment holds relatively few occupational health hazards. Employees are subjected to regular medical examinations in order to detect any possible manifestation of illness and disease. In line with legislation, tests are performed for Chronic Obstructive Airways Disease (COAD – including silicosis and pneumoconiosis), noise induced hearing loss (NIHL) and tuberculosis (TB). In addition, and exceeding the legal requirements, medical staff perform random tests for cholera.

No cases of COAD have been reported at Northam in the past five years. However, 75 employees were compensated for noise-induced hearing loss (NIHL) in the current reporting period. Although this number is slightly higher than in previous years, it is largely attributable to employees' prior exposure to underground pneumatic drilling equipment at other mines. To date all cholera tests have also been negative. However, medical staff will continue to perform these tests, which take into account employees' places of origin.

Medical examinations performed

	Full time employees	Contractors
Initial	704	1 474
Annual	6 051	724
Exit	294	1 004

The increased incidence of TB remains a matter of concern. During the period under review 94 new cases of TB were diagnosed, although the number does not indicate any specific trend. Given that underground work is a known risk factor for contracting pulmonary TB, and that the working environment has remained unchanged, the higher prevalence could be ascribed to the incidence of HIV. Also of concern is that HIV positive patients who are treated with prophylactic antibiotics are more susceptible to developing multi-drug resistant TB.

Medical staff maintain regular contact with TB patients to ensure that they adhere to their treatment regimens. Counselling and follow-ups continue.

Renewed emphasis was placed on the reduction of preventable workplace accidents; this has been complemented by medical staff's focus on promoting the use of personal protective equipment (PPE), while encouraging employees to take in adequate fluids and maintain a healthy diet.

Northam plays an **active role** in the area through **partnerships** with **government agencies, NGOs** and other **businesses**.

Since April 2004 the company's outsourced medical services reside within Platinum Health, a reputable and well-resourced provider which has extensive infrastructure and readily available medical expertise.

Northam has also engaged the services of a medical rescue company, Netcare 911, particularly to deal with

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medical emergencies such as mine accidents. This has resulted in considerably improved response times in emergency situations. Debriefing/counselling sessions for bystanders in emergency situations have also improved with the expansion of the employee assistance programme (EAP).

Dealing with the scourge of HIV/AIDS

Since July 2001, 325 cases of HIV have been identified. Tests continue to be conducted on a voluntary basis, and include both pre- and post-test counselling. Although there are some signs that employees are making better use of the voluntary counselling and testing (VCT) provided, there is still not adequate uptake of these services, in all likelihood still owing to the stigma of the disease. The prevalence phase of the epidemic is still evident at Northam, and there is a need for prevalence testing to ascertain more reliable information on disease levels at the company.

A matter of concern is the absence of any real decline in repeat sexually transmitted infections despite continuous efforts to change behaviour patterns. Renewed efforts to raise awareness and change behaviour patterns have

begun, with a specific focus on induction training for foreign workers, who, in their places of origin, do not always have access to this education. Peer education is now well established at Northam and in the surrounding communities. Frequent block to block visits are conducted throughout the Madiba Village and in local hotspots.

Northam plays an active role in the area through partnerships with a number of organisations, including the provincial and local government authorities, NGOs and other businesses active in the region in promoting HIV/AIDS awareness and in fighting the spread of the epidemic.

In September 2003 Northam participated in the North West Province provincial council on HIV/AIDS. This structure advises the government on AIDS related issues in the province. Northam has also been active in the partnership campaign hosted by the Thabazimbi local municipality, which was initiated by the Waterberg district municipality. Other participants were Kumba Resources, Amandelbult, various NGOs and government departments.

During the year an HIV information and learning centre was established on the mine. The focus at the centre is on new recruits and ex-leave employees, but the centre is also accessible to the broader employee body and to the neighbouring community. Induction courses run on a weekly basis. The centre offers the following services:

- Life threatening diseases education material
- Pre and post test counselling sessions for HIV
- Information and counselling on STIs and TB
- Visual education – videos, slides, posters and books
- One-on-one consultation

Circle of Hope community initiative

Northam has recently become a participating member of the Circle of Hope. This is a community initiative, managed by the CSIR, and is a partnership with local and provincial government, Anglo Platinum, NGOs, faith-based organisations and traditional leaders. The Circle of Hope actively engages with communities through peer education, managing STIs and TB, VCT and wellness, home-based care, and socio-economic empowerment initiatives.

Hope Crisis Centre

A recent development in the local area, the Hope Crisis Centre is a unique initiative started by volunteers in the community, to provide further care, counselling, training and education with a specific focus on individuals who are both infected and affected by HIV/AIDS, and victims of various forms of trauma and abuse. The centre is a response to years of underdevelopment, lack of information and the inadequate awareness among communities of their human rights. Of particular relevance among the services are the provision of places of safety, and care homes and shelters. Northam is making available both facilities and resources to support and grow this initiative.

Uplifting local communities

The company's corporate social investment (CSI) programme was formalised in 2003 and is administered by a CSI committee chaired by the manager: financial services.

The main focus of CSI expenditure and activity in the past financial year has been on education. Northam's operations are in a fairly remote area of the country in the Limpopo Province, where schools are relatively isolated, and learners frequently need to travel long distances to and from schools. For a number of years now Northam has provided transport by bus for children to and from school, and in 2003 Northam made available R1 million for the Northam Comprehensive School, which is a Nelson Mandela Schools project.

One of the most important criteria when allocating funding and resources for projects is their sustainability, the level of community initiative, support and buy-in, and what difference the project would make to people's lives. An example of such a project is the Naletsana School at Koedoeskop. Although Northam is not the main sponsor of this school, the company has made available resources, material and equipment for a domestic science classroom, which will be a multi-purpose venue also for art classes and science. The school serves some 500 learners from the local farming community, and provides technical education and vocational training to Grade 10 level, together with hands-on training and knowledge/skills transfer for teachers. Parents of the learners are also engaged in the upgrading of the school's facilities.

Also on the educational front, Northam is a partner with the Telkom Foundation in the Ntsime Secondary School, where some 20 computers and workstations have been provided.

In line with the spirit of volunteerism which is coming to the fore in this remote area, Northam's human resources department has become engaged in other initiatives, such as providing legal resources amongst the local community. In addition, the company is making available skills training for a number of unemployed people in the community at the Itereleng training centre in Thabazimbi.



The new domestic science centre at the Naletsana School boasts kitchen counters made from recycled material from the mine. Northam has contributed to the upgrade of this and other facilities at the school, making available resources, material and funding.

Environment

Northam's environmental programme continues to focus on minimising the impacts of its operations on both ground and surface water and air quality, while also protecting and preserving the area's biodiversity.

The company's environmental management programme report (EMPR) remains the blueprint for monitoring and control, and is regularly reviewed in consultation with the relevant regulatory authorities.

In addition, independent audits are performed to ensure compliance, while environmental staff keep abreast of technological advances to pursue further mitigation of potential environmental impacts.

The two watercourses in the vicinity of the Northam operations, the Bierspruit and the Crocodile River, have to date manifested minimal adverse effects emanating from the mine's activities. These watercourses are an important focus area of the company's biodiversity programme, and Northam continues to monitor the level of impairment, if any, on their water quality.

Recycling of water remains an important strategy in Northam's continuing drive to minimise water usage. Total consumption of 12 837 megalitres (F2003: 15 058 megalitres) was measured in the year under review. The amount of water supplied from the Magalies Water Board remained constant at 3 816 megalitres; the balance of 9 021 megalitres having been recycled.

The mine's integrated water strategy is up and running. Groundwater monitoring is performed on a quarterly basis to determine the impact of operations on the subterranean environment. In general, the quality of the groundwater has been found to be of an acceptable standard. There is no evidence of heavy metal contamination, and, while the salinity of the groundwater is high, in most cases this can be accounted for by the hydrogeology of the region. Some sample wells manifested unacceptably high nitrate concentrations, but this was largely confined to the domestic waste area, the concentrator plant and around the waste dump. This could increase the risk of plume algae at surface water discharge points, but the risk was largely mitigated by the low phosphate levels in all the samples taken.

Tests and analyses undertaken during the year have indicated that neither the waste rock dump nor the ore stockpile represent a significant risk of either acid or heavy metal contamination of the groundwater.

The environmental department continues to work towards preparing for applications for water user licences in terms of the South African National Water Act.

Waste management

Significant improvements have been made in terms of the re-use of reclaimed material and the management of the waste sorting facilities.

The licensed domestic waste disposal site continues to be well managed. Biannual audits are conducted by independent assessors. In certain cases some insignificant and isolated areas of non-compliance were identified. These have since been addressed.

Containing air pollution

The main potential threats to air quality at Northam are sulphur dioxide emissions (SO₂) from the smelter, particulates (dust) from the tailings dams, transportation and materials handling, and carbon dioxide emanating from surface transport vehicles. Northam maintains a strict air

quality management programme, and in the reporting period SO₂ levels remained at levels well below the allowable threshold.

The installation of a wet scrubber system downstream of the electrostatic precipitator has eliminated dust emissions at the smelter. With the grassing of the tailings dams dust levels are negligible, as is the case in the underground hydropowered workings.

With the conversion of the refrigeration plant to acceptable R134a refrigerants, ozone-depleting substances (CFCs) have been phased out.

