

MALI

**SADIOLA
YATELA**

For the year ended 31 December 2005



- 1 Message from Terry Mulpeter
- 2 Introduction
Sadiola
- 3 Yatela
- 4 Mineral resources and
ore reserves
- 5 Community
- 6 Occupational safety and health
- 7 Labour practices
- 8 Environment

About this report:

AngloGold Ashanti is committed to reporting to a broad range of stakeholders. In addition to its operational and financial performance the company also reports on its economic, social and environmental performance – the so-called triple bottom line.

This country profile forms part of a broader group Report to Society, which is available on the company's website, or from the contacts detailed below.

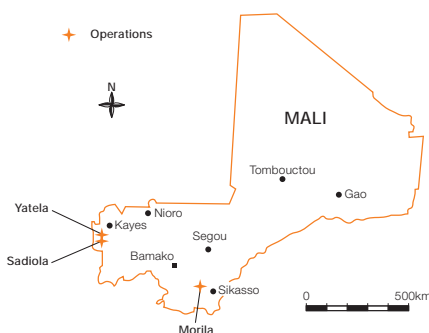
Madani Diallo

Tel: +223 221 4747
 Fax: +223 221 5042
 E-mail: madiallo@anglogoldmali.com

General e-mail enquiries:

investors@anglogoldashanti.com

Website www.anglogoldashanti.com



Message from Terry Mulpeter

From an operational perspective Sadiola and Yatela performed well during the year. Gold production was on target with 442,000 ounces (168,000 attributable ounces) at Sadiola and 246,000 ounces (98,000 attributable ounces) at Yatela, achieved at a total cash cost of \$265 and \$263 per ounce respectively. The good performance was marred by an increase in safety incidents, and reducing these is a key focus for all departments.

We are continuing to build stronger relationships with our stakeholders through quarterly communication meetings with our communities and we explained the role of the community in our cyanide emergency response plan. We held the annual stakeholders communication and consultation workshop in November 2005 where topics such as the progress to date with the Integrated Development Action Plan (IDAP), feedback from the epidemiological study phase 1 and the closure of Yatela mine were discussed.

The main objective of the IDAP is to create an overall strategy for promoting socio-economic development within beneficiary communities, in order to improve livelihoods and employment opportunities, and to establish new initiatives to lessen the communities' reliance upon the mine after closure.

The implementation phase of the IDAP, which focuses on 17 villages within both the Sadiola and Yatela communities, began with the election of a board of directors and staff recruitment. Training is being provided in agriculture and blacksmithing, and projects started to date include bee-keeping and the growing of maize, sesame and peanuts. Since 2004, a total of \$444,376 has been given to establish and manage development projects.

Management of water is a key concern of the local population. A Water Management Committee comprising local government officials from Kayes, the mayor and *sous-préfet* of Sadiola, village chiefs and officials from Kayes hydrology and health departments has been set up to handle ongoing problems with the increased consumption of water by the growing population in Sadiola, Farabakouta, Niamboulama and Kourouketo villages.

The committee oversaw the establishment of a borehole pumping system to supply water to several standpipes in two villages close to the Yatela mine site. The minister of mines attended an official handover ceremony in June 2005. Water is distributed by means of a metered system to the communities of Kourouketo and Niamboulama. Thus far the Local Management Committee of Kourouketo has collected about \$3,600 from sales of water. We wish to assist in the implementation of a similar system for Sadiola and Farabakouta in 2006.

Terry Mulpeter
 General Manager: Sadiola and Yatela

Introduction

AngloGold Ashanti has interests in three mines in Mali: Sadiola (38%), Yatela (40%) and Morila (40%). In 2005 the Malian operations produced 528,000 ounces of attributable gold at a total cash cost of \$220 per ounce.

Both the Sadiola and Yatela mines are held by AngloGold Ashanti in successful partnership with the government of Mali and Canadian listed company lamgold. In the case of Sadiola, the International Finance Corporation (IFC) is also a partner with a stake of 6%. Sadiola has produced about 4 million ounces of gold since its establishment in 1996.

Yatela was established shortly after Sadiola at a capital cost of US\$73 million. First gold was poured in 2001. Situated only 25 kilometres north of Sadiola, Yatela benefits from synergies and economies of scale through the utilisation of some of Sadiola's infrastructure. The mine is expected to produce until 2008 with a life-of-mine production figure of 1.6 million ounces.



Sadiola

Ownership: AngloGold Ashanti owns 38% of Sadiola in partnership with the government of Mali, lamgold and the IFC.

Location: Sadiola is situated in the north-west of the country, 77 kilometres to the south of the regional capital of Kayes.

Geology: The Sadiola deposit occurs within an inlier of greenschist facies metamorphosed Birimian rocks known as the Kenieba Window. The specific rocks which host the mineralisation are marbles and greywackes which have been intensely weathered to a maximum depth of 200 metres. A series of north-south trending faults occurs which feeds the Sadiola mineralisation. As a result of an east-west regional compression event, deformation occurs along a north-south striking marble-greywacke contact, increasing the porosity of this zone. North-east striking structures which intersect the north-south contact have introduced mineralisation, mainly with the marble where the porosity was greatest.

The Sadiola Hill deposit generally consists of two zones, an upper oxidised cap and an underlying sulphide zone. From 1996 until 2002, shallow, saprolite oxide ore from the Sadiola Hill pit was the primary ore source. Since 2002 the deeper saprolitic sulphide ore has been mined and will progressively replace the depleting oxide reserves.

Mining and processing: Mining takes place in an open pit at Sadiola. Ore is treated in a 435,000-tonne-per-month gold plant.

Performance in 2005: Attributable gold production declined by 3% year-on-year as tonnage throughput decreased. A mill breakdown in the second quarter had an impact on production. The yield, at 2.73g/t, was maintained despite the processing of lower grade oxides in the latter half of the year.

Total cash costs rose by 10% to \$265 per ounce, mainly because of the significant increase in fuel costs during the year. Gross profit adjusted for the effect of unrealised non-hedged derivatives went up to \$20 million, with the decline in production and increase in costs being offset by an 11% rise in the gold price received.

Capital expenditure increased by 17% to \$7 million. The main areas of expenditure were cyanide recovery and plant modifications, exploration, grid power studies and mining infrastructure.

Government remittances: Sadiola's contributions to government revenue in 2005 comprised corporate tax of \$13.3 million, dividends of \$5.5 million, import duties of \$3 million and royalties of \$11.8 million.

Sadiola

		2005	2004
Gold production – 100%	000oz	442	459
Gold production – 38%	000oz	168	174
Total cash costs (\$/oz)		265	242
Total production costs (\$/oz)		336	301
Capital expenditure – 100%	\$ million	18	16
Capital expenditure – 38%	\$ million	7	6
Total number of employees		1,245	1,159
Employees		584	550
Contractors		661	609



Growth prospects: A pre-feasibility study into mining of the hard sulphide ore was completed and showed that this would be uneconomical at current metallurgical recoveries. Further metallurgical test work will be conducted during 2006 on improving recoveries. A feasibility study and infill drilling will continue once that has been successfully achieved.

Outlook: Attributable production at Sadiola is expected to increase to between 185,000 and 193,000 ounces during 2006, at a total cash cost of between \$302 and \$314 per ounce. Planned attributable capital expenditure of \$7 million will be spent mainly on housing, contractor camp relocation, gravity concentration test work, exploration and the deep sulphide feasibility study.



Yatela

Ownership: The Yatela mine is a joint venture owned by Société d'Exploration des Mines d'Or de Yatela SA, in which AngloGold Ashanti and Iamgold each holds an effective 40% interest, and the government of Mali 20%.

Location: Yatela is situated some 25 kilometres north of Sadiola and approximately 50 kilometres south-south-west of Kayes.

Geology: Yatela mineralisation occurs as a keel-shaped body in Birimian metacarbonates. The 'keel' is centred on a fault which was the feeder for the original mesothermal mineralisation, with an associated weakly mineralised diorite intrusion. Mineralisation occurs as a layer along the sides and in the bottom of the 'keel'. The ore dips almost vertically on the west limb and more gently towards the west on the east limb, with tight closure to the south.

Operating performance: Tonnes processed at Yatela increased during the year while the head grade decreased by 12% to 2.99g/t. Attributable production rose marginally to 98,000 ounces.

Total cash costs rose by only 3% to \$263 per ounce. The increases in fuel and mining contractor costs were offset by improved cost performance in other areas, including the significant benefit realised by the move from bottom-lift stacking of the heap-leach pad to top-lift stacking.

Gross profit of \$11 million adjusted for the effect of unrealised non-hedge derivatives was 38% higher than in 2004 owing to a 9% increase in the gold price.

Yatela

		2005	2004
Gold production – 100%	000oz	246	242
Gold production – 40%	000oz	98	97
Total cash costs	\$/oz	263	255
Total production costs	\$/oz	340	323
Capital expenditure – 100%	\$ million	5	7
Capital expenditure – 40%	\$ million	2	3
Total number of employees		910	1,033
Employees		210	208
Contractors		700	825

Capital expenditure of \$2 million was 33% lower than that of the previous year and was incurred mainly through heap-leach pad construction.

Government remittances: Yatela's contributions to government revenue in 2005 comprised import duties of \$2.9 million and royalties of \$6.6 million.

Outlook: In 2006 Yatela's attributable production is expected to rise to between 118,000 and 122,000 ounces, at a total cash cost of between \$249 and \$259 per ounce. Capital expenditure attributable to AngloGold Ashanti is planned at \$0.2 million, to be spent mainly on the final extension of the overland conveyor.



Mineral resources and ore reserves

Mineral Resources and Ore Reserves are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 edition), and also conform to the standards set out in the South African Code for the Reporting of Mineral Resources and Mineral Reserves (the Samrec Code). Mineral Resources include the Ore Reserve component.

AngloGold Ashanti had Mineral Resources of 175.8 million ounces and Ore Reserves of 63.3 million ounces as at 31 December 2005. Of these, Sadiola and Yatela accounted for attributable Mineral Resources of 4.7 million ounces and Ore Reserves of 1.1 million ounces.



		Metric			Imperial		
		Tonnes million	Grade g/t	Contained gold tonnes	Tons million	Grade oz/t	Contained gold million oz
Mineral resources – attributable (as at 31 December 2005)							
Sadiola (38%)	Measured	7.0	1.50	10.5	7.7	0.044	0.3
	Indicated	23.8	2.40	57.0	26.2	0.070	1.8
	Inferred	33.8	1.86	62.8	37.2	0.054	2.0
	Total	64.5	2.02	130.3	71.1	0.059	4.2
Yatela (40%)	Measured	2.3	1.16	2.7	2.6	0.034	0.1
	Indicated	3.1	3.18	9.9	3.4	0.093	0.3
	Inferred	0.7	2.75	1.9	0.8	0.080	0.1
	Total	6.1	2.36	14.5	6.8	0.069	0.5
Ore reserves – attributable (as at 31 December 2005)							
Sadiola (38%)	Proved	2.8	1.95	5.4	3.0	0.057	0.2
	Probable	5.3	4.09	21.5	5.8	0.119	0.7
	Total	8.0	3.35	26.9	8.8	0.098	0.9
Yatela (40%)	Proved	0.5	1.33	0.7	0.6	0.039	-
	Probable	1.5	3.97	6.1	1.7	0.116	0.2
	Total	2.0	3.3	6.7	2.3	0.096	0.2





Community

A fundamental philosophy of the company is that its operations and activities should contribute towards long-term sustainable development and that communities should be better off for AngloGold Ashanti having been there. Total corporate social investment expenditure in 2005 was \$8,752,407, of this amount Sadiola and Yatela spent \$627,079.

AngloGold Ashanti strives to ensure that surrounding communities are informed timeously of, and where possible are involved in, developments which affect them, throughout the lifecycle of the operations.

A joint Public Consultation and Disclosure Plan (PCDP) was developed for Sadiola and Yatela and has proved to be a useful tool for engaging with stakeholders. An all-inclusive stakeholder committee is the main vehicle for stakeholder consultation and grievance resolution. The committee includes traditional village leaders, as well as local and national government officials.

A stakeholders' consultation workshop takes place at Sadiola mine every year – in 2005 it was held in November and brought together representatives from the local communities; regional and national government; national and international non-government

organisations (NGOs); the media; mine management; AngloGold Ashanti and the IFC.

Another example of the relationship between the mines and the people who live around them, is the ongoing involvement of communities in water management. An inclusive Water Committee oversees regular water testing, and plans for the sustainable provision of water are being developed.

In line with AngloGold Ashanti's business principles, social investment initiatives are aimed at making both a practical and a meaningful contribution in those areas of greatest need. A fundamental philosophy of the company is that its operations and activities should contribute towards the long-term sustainable development of its host communities. This is particularly challenging for sometimes short-lived mining operations or exploration projects. A difference can be made, however, through supporting procurement activities; the contribution of redundant assets to the communities; assistance with the establishment and development of small- to medium-sized sustainable enterprises; and the outsourcing of the provision of goods and services to local vendors where appropriate.





Occupational safety and health

No fatalities were reported at Sadiola and Yatela during 2005 although the lost-time injury frequency rate (LTIFR) increased at both operations. Sadiola's LTIFR increased to 1.30 per million man-hours from 1.13 in 2004 and Yatela's from 0.76 in 2004 to 1.25 in 2005.

Managing safety and health

Safety and health performance is monitored and managed as an integral part of operational performance. While AngloGold Ashanti sets minimum guidelines for the company as a whole in respect of safety and health, regions and operations are encouraged to develop their own specific principles, guidelines and policies in line with local conditions and legislation.

Because mining operations often take place in areas with limited infrastructure, particularly with regard to health care services, AngloGold Ashanti makes provision for such services. Both Sadiola and Yatela have on-mine medical facilities which are considered by the company to be among the best in the region. Medical surveillance is carried out regularly on all employees to either prevent, or ensure early diagnosis of, potential health problems. The medical

surveillance programme is run jointly by the medical staff and human resources department. Sadiola also has a well-equipped small hospital on site.

Employee participation

Safety and health agreements are in place between management and the union at Sadiola and Yatela. Union representatives are employed in the different departments and function as an extension of management. Fifteen union members are elected in total and they perform a vital function in terms of reporting defects and possible risk exposure areas.

Communication with employees on safety and health issues takes place regularly. At Sadiola oral and written communication includes posters and local FM radio broadcasts covering different topics each week. Weekly communications meetings are held with employees and monthly meetings take place with safety representatives. The mine also publishes a monthly SafeGold report. Safety communication is extended to the community who are invited to attend scheduled meetings at the mine, held both to inform and to educate stakeholders on issues of concern.

Regional health threats

Malaria

Malaria is a significant health threat in West Africa. During 2005, 316 cases of malaria were reported amongst the workforce and the malaria lost-time injury frequency rate (MLTIFR) was 51.4, which compares favourably with other AngloGold Ashanti operations in West Africa. The MLTIFR allows the rate to be compared with the conventional LTIFR and clearly demonstrates the negative impact malaria has on productivity and health in the workforce.

Integrated malaria control programmes have been successfully implemented at Sadiola and Yatela and they have contributed to a decline in the incidence of the disease. The programme includes:

- vector control, which involves mosquito identification and insecticide susceptibility tests, as well as indoor residual house spraying, house screening and the provision of insecticide-impregnated bed nets;
- disease management, which relates to effective diagnosis and treatment;

- surveillance and monitoring of both the vectors and parasites (for drug resistance) and the compilation of accurate records; and
- information, education, communication and health promotion. A set of indicators has been developed to monitor the disease and its effects on local communities and the AngloGold Ashanti workforce, and also to establish baselines against which the outcomes of regional malaria control programmes can be assessed.

HIV/AIDS management

HIV/AIDS programmes are part of AngloGold Ashanti's policy to reduce the incidence of the disease amongst its workforce. While the company plays an advisory role in the development and delivery of HIV/AIDS programmes, individual operations are responsible for the programmes and initiatives which are frequently undertaken in collaboration with government bodies and NGOs.



Labour practices

AngloGold Ashanti is committed to upholding the Fundamental Rights Conventions of the International Labour Organization (ILO) and endeavours to ensure the implementation of fair employment practices by prohibiting forced, compulsory or child labour. Certain ILO conventions (such as 128 dealing with child labour, and 29 dealing with forced and compulsory labour) are also governed in Mali by law and various codes such as the Malian Labour Code and Malian Collective Agreement.

Collective bargaining

In line with the company's upholding of human rights conventions, freedom of association is encouraged and collective bargaining structures are recognised in the regions where these structures commonly exist as they do in Mali. At Sadiola and Yatela all employees are represented by the Mining Industry Union (SECNAMI) and guided by the National Collective Convention. No industrial action took place during 2005 and in May agreement was reached with the union in respect of production bonus payments for employees at the two mines. Safety, volumes and costs all play a part in determining these payments.



Talent management at Yatela

AngloGold Ashanti has a Talent Management Programme to identify and develop the company's management for the future. The programme has three areas of intervention: development, retention and the monitoring of talent, which includes an annual talent review at executive level to look at succession plans for talented employees.

As part of this broad initiative, a career development and talent management programme has been initiated at Yatela where a number of employees with potential have been identified to form

Housing

Senior staff at Sadiola and Yatela are housed in company accommodation while other employees are paid housing allowances. Loans for the purchase of land and housing in and around the capital city of Bamako are facilitated by the government of Mali.

Localisation of workforce

Legislation in many African countries, including Mali, governs the recruitment of expatriate employees and promotes the localisation of the workforce. AngloGold Ashanti has policies in place to give preference to the employment of local citizens. There are also plans to increase employment of local citizens and reduce the number of expatriates (particularly at a management level) at the operations. The plans entail the identification and training of local citizens to replace expatriate staff once they have the requisite skills. At Sadiola and Yatela the training of a local successor is stipulated in the contract of any expatriate.

Training and development

AngloGold Ashanti places great emphasis on the training and development of its workforce. It is committed to providing all employees with the opportunity to participate in training that will improve their workplace competency and to ensuring that every employee has the opportunity to become numerate and functionally literate in the language of that person's workplace.

Study assistance programmes for employees and non-employees are provided across the group to increase the skills pool available to AngloGold Ashanti. As part of this, a bursary scheme was implemented in Mali in 2004. Ten top school leavers started their studies at the University of Pretoria in South Africa in the disciplines of mining, engineering, metallurgy, environment and geology, following a language bridging programme at Wits Technikon in Johannesburg at the end of 2003.



part of the talent management pool. The following steps have been taken:

- in-house training of management trainees under the mentorship of a senior manager;
- succession planning related to expatriate positions;
- exposure to further technical or managerial experience elsewhere in the group; and
- participation in the company's Management Development Programme.

Environment

AngloGold Ashanti's environmental philosophy and practice are guided by the company's business principles and environmental policy. Operations are subject to the environmental laws, rules and regulations of the countries in which they are situated. Where no such laws exist or where these laws are perceived to be inadequate, the operations are guided by the company's business principles, environmental policy and the tenets of good practice.

The company's environmental policy and strategy is overseen by the board Committee on Safety, Health and Sustainable Development and driven at the corporate level. Within each region, the environmental manager provides advice to the relevant management teams. At most operations, on-site environmental professionals are responsible for implementing the mine's environmental programme and advising the general manager. Regional environmental offices and the operations themselves may engage specialists who consult to the operations.

AngloGold Ashanti formally adopted ISO 14001 as the standard for the company's environmental management system during 2005 and has set itself the target of achieving certification for all its operating mines, including Sadiola and Yatela, by the end of 2006.

The use of cyanide in the recovery of gold is a core concern for the gold mining industry and is critical to its viability. AngloGold Ashanti was party to the development of the International Cyanide Management Code and was one of the first signatories announced in November 2005. The code is a voluntary industry programme for companies that use cyanide in the production of gold. Its codes and principles commit signatories to manage cyanide in a responsible manner.

AngloGold Ashanti's reporting protocol enables the company to identify and manage the risks and impacts of environmental incidents as well as their associated costs. The protocol provides the appropriate level of information to advise the executive and the board of the nature and occurrence of important incidents and management's response to these. It also stipulates that a major incident must be reported within 24 hours.

Protecting birdlife

In Mali, where the long dry season lasts for about nine months of the year, wildlife is attracted to what little water there is available. This often includes man-made water ponds associated with mining. At Sadiola and Yatela a number of operational facilities fall into this category, including the process ponds, the Tailings Storage Facility (TSF) and associated return water dam (RWD), all of which contain toxic residue both from the heap-leach gold extraction process at Yatela and the conventional process at Sadiola.

A study to investigate wildlife deaths associated with cyanide-bearing tailings dams and heap-leach operations was conducted

AngloGold Ashanti Malian operations – environmental statistics 2005

Total environmental liability	\$ million	13.4
Cyanide use	kg	6,873,000
Water usage	m ³	17,093,115
Energy use	GJ	1,530,354

* Note that the usages given above are for the operations as a whole. The figures are not for attributable usage.

by the environmental manager at Sadiola and Yatela and Donato Environmental Services, in conjunction with the Australian Centre for Mining Extension and Research.

Yatela

It was established that, soon after production started at Yatela, large numbers of birds were dying after ingesting cyanide residue from the process ponds, the top of the heap-leach pads, the solution trenches and other areas within the plant site. Site trials were then conducted to ascertain the most effective measures to deter birds from visiting potential death-traps. They included:

- permanent patrol personnel on heap-leach pads and around process ponds;
- shade cloth to cover ponding of cyanide solution on top of the heap-leach pads;
- spikes to pierce the heap material where ponding occurs;
- construction of freshwater bird ponds;
- suspended and floating netting over the process ponds; and
- noise deterrents in the form of propane guns.

The open-water process ponds proved the most challenging area to control and, eventually, the use of high-density polyethylene (HDPE) bird balls to cover exposed water and to prevent birds from landing on the water proved to be the most effective measure.

The mitigation measures have resulted in a significant drop in bird deaths from 554 in 2001 to just two both in 2004 and in 2005.

Sadiola

Sadiola, which began operating in 1997, experienced no bird fatalities in the first four years because only oxide ore was being processed. Consequently cyanide concentrations were relatively low and underwent natural degradation in the tailings decant pond. As supplies of oxide ore became depleted, however, the mine started processing deeper, soft sulphide ores which necessitated changes to the conventional metallurgical process, including the addition of higher cyanide concentrate levels. Weak acid dissociable (WAD) cyanide levels increased to more than 200 milligrams per litre (mg/l) well over the recently established International Cyanide Code limit,

About ISO 14001

The International Organization for Standardization (ISO) is a voluntary not-for-profit network of national standards institutes from 146 countries with a Central Secretariat in Geneva, Switzerland, that co-ordinates the system. ISO 14001 focuses specifically on environmental management systems, and was first published in 1996. It applies to those environmental

aspects over which the organisation has control and over which it can reasonably be expected to have an influence.

ISO 14001 certification is the only ISO 14000-series standard against which it is currently possible to be certified by an external certification authority. Based on regular auditing by an appropriately accredited external body, an organisation may state that it is ISO 14001 certified.



which recommends a maximum of 50mg/l to protect birds, other wildlife and livestock. In a nine-week period between 1 March and 10 May 2002, 197 birds died at the silt trap, the RWD and the tailings decant pond. Cyanide concentrations were immediately reduced by temporarily halting the sulphide ore treatment before installing a hydrogen peroxide plant at the tailings decant pond for initial cyanide destruction, and finally construction of a permanent cyanide destruction system.

Sodium toxicosis

Despite these measures 77 bird fatalities occurred at the TSF silt dam and RWD in April 2003 and 17 during December of that year. Toxicological tests conducted at Onderstepoort Veterinary Institute in South Africa were inconclusive. When a further 107 fatalities were recorded in May 2004, the evidence pointed to sodium ion toxicosis. Sodium levels in the brain tissue of the two bird species were found to be 2,218 and 2,255 parts per million (ppm) respectively, above the 1,900ppm threshold for sodium toxicosis.

Sources of sodium are sodium cyanide, which is used in the leach circuit, and sodium metabisulphite used in the cyanide destruction process. Dissolved sodium concentrations at the RWD were found to be elevated in relation to previous years; during the three-month period when it was estimated the birds died, levels ranged from approximately 800 to 1,400mg/l.

Five birds that died of sodium toxicosis on two separate days in

March and in June 2005 were found to have sodium levels in a range of 1,958 to 2,407ppm. Average sodium concentrations in water were found to be 1,650mg/l and 1,000mg/l respectively.

It is suggested that, unlike birds that live in saline environments and have developed a nasal salt gland for excretion, terrestrial birds are poorly equipped to deal with excess sodium – especially where they do not have access to fresh water after ingesting saline water. It was postulated that the grasshopper buzzard, heron species and egret species – the bird types that succumbed to sodium toxicity – have a toxic threshold of between 800 and 1,000mg/l, whereas other species might have higher tolerance levels. This apparent tolerance may be due to inherent physiological differences and/or species-specific behaviour that limits their exposure to sodium, for example, accessing freshwater rather than process ponds.

Protection measures

Sadiola staff have adopted 800mg/l as a conservative target for regulating sodium levels in process waters. Mitigation measures include:

- reducing the attractiveness of the habitat by removing dead trees standing in ponds, removing a 75-metre-wide strip of vegetation around ponds, and placing tailings over exposed areas of natural ground inside the TSF;
- bypassing of the TSF silt trap ponds;
- appointing permanent bird hazing patrollers around ponds to

Dust monitoring at Sadiola

Sadiola mine is situated in the Kayes region of Mali where there are two distinct seasons: a short wet one from June to early September and a longer hot and dry season from October to May. The region is subject to dust pollution from the Harmattan, a dry dusty wind that blows along the north-west coast of Africa and which can reduce visibility to less than 50 metres. This can be exacerbated by construction and mining activities.

Dust was a significant issue during the construction of the mines. Emissions continue to emanate from the mine pits and waste rock dumps, but it is the dust caused by traffic between the mines, which are situated about 30 kilometres apart, that is of greatest concern to neighbouring communities.

The national road between Sadiola and Yatela is a dirt road which passes through several rural villages. Apart from other traffic, trucks use the road to deliver raw materials, buses transport employees and vehicles shuttle between the mines. Significant quantities of dust are stirred up forming clouds of very fine dust particles which are particularly bad during the dry season and pose a health and safety hazard. Respirable dust poses the greatest health risk because the particles can be easily inhaled.

The two villages that are most affected by dust emissions are Kourketo and Sadiola with a combined population of 14,000. Residents' complaints have been addressed through the Community Stakeholder Committee which liaises with the mine on behalf of the community and through direct contact with the community development manager at the mine.

Measures being taken to minimise dust levels in and around the mine include:

- road watering – during the dry season some 96,000 litres of water are used per day for dust suppression;
- haul road watering where pit water from the dewatering programme is used to suppress dust on the access and haul roads inside the mining area;
- the application of binding agents in the form of molasses and lignosulphonate; and
- traffic relocation – a new road has been built to divert mine traffic off the national road and on to a new private road, situated away from neighbouring villages.

At the last two stakeholder workshops, communities voiced their appreciation of the efforts being made to manage dust emissions.



- deter birds from alighting on the water;
- using propane cannons and electronic distress calls; and
- the construction of 30 freshwater ponds.

A wildlife monitoring programme has been instituted and pond inspections are carried out regularly to assess the performance of mitigation measures and to provide for the early detection of future incidents. It has already been noted that the number of bird species frequenting the process ponds has decreased from 50 to 15 and the frequency of visits has also reduced.

Planning and implementing closure at Alamatoula, Yatela

In all jurisdictions in which the group operates, AngloGold Ashanti is required to provide financial assurance – in a form prescribed by law – to cover some or all of the costs of the anticipated closure and rehabilitation for the operation. The company devises plans before the start of the operation and these are updated regularly to take into account life-of-mine projections.

Yatela has started with the implementation of its closure plan at Alamatoula pit, one of two pits at the operation. Production from the pit ceased in February 2005, and the pit and associated waste rock dump are now in the decommissioning and rehabilitation phase. At the main Yatela complex, mining will end sometime in mid-2007 and active heap leaching will be completed by mid-2008, with the rinsing of the leach pads scheduled for the fourth quarter of the same year. Rehabilitation is expected to be completed by 2009 while the lease is anticipated to be relinquished in 2013.

Closure plans were first drawn up in 2002 and updated again in 2005, before production ceased at Alamatoula. The estimate for the total cost of closing Yatela mine is currently at \$11.7 million.

Committee formed

Since large-scale mining is fairly recent in Mali, the existing legislation regarding mine closure is silent on a number of issues and the closure of Yatela has, therefore, presented an opportunity to bring together stakeholders to discuss all aspects of closure, including environmental, social and economic impacts. A Mine Closure Committee was formed comprising government representatives from the departments of mines and the environment, Yatela mine and the local community, which numbers 17 villages within the immediate environs of Yatela and Sadiola mines. Among other things, the committee will facilitate a co-ordinated approach to mine closure through consultation and communication with various departments and levels of government, with local communities and with other affected parties.

One of the major environmental challenges faced is the

decommissioning of the pit. A possible solution arrived at following discussion at a stakeholder workshop in November 2005 envisages the likely conversion of the pit into a lake to be used for fish farming. (An experimental fish farm is currently being run at an old quarry site at Yatela mine.) The leach pads, used in the gold extraction process, are to be thoroughly cleaned and rinsed. Local vegetation will be encouraged to grow on the waste rock dumps and leach pads. Discussions will be held with the government, through the mine closure committee, on the possible alternative uses for the houses, offices, roads and other infrastructure.

Livelihood projects

Mine closure inevitably affects surrounding communities owing to a greater or lesser reliance on the mines for their livelihood. While jobs will be lost due to mine closure, it is anticipated that some employees may be redeployed to the nearby Sadiola mine while others may benefit from opportunities at other new mines which are being developed in Mali. In addition, an Integrated Development Action Plan (IDAP) has been instituted to work towards ensuring sustainable livelihoods for communities after closure. One of its objectives is to lessen the communities' reliance on mines after closure by offering a sustainable source of income. Comprising representatives from the communities, the mine, government departments and NGOs, the IDAP Association is discussing alternative livelihood projects which are due to start in 2006. The projects that have been recommended include bee-keeping, agriculture and cattle-fattening. While it was hoped to begin implementation during the course of 2005, it took longer than anticipated to get buy-in from all stakeholders regarding the process of setting up and staffing the association, and rolling out the proposed projects.

Monitoring

Post-closure monitoring is planned for five years after the closure of mining operations. This will include the monitoring of ground water, surface water, dust and rehabilitated areas. A community liaison officer will be employed to maintain contact between the mine and the local community and annual environmental reports will be submitted to government to facilitate the final approval for termination of monitoring activities and relinquishment of the mining lease.

The Yatela mine closure is being viewed as a pilot project which may provide the Malian government with a blueprint for future mine closures to be followed by all large-scale mining companies operating in the country. As a result it has attracted the attention of other mines operating in Mali. Representatives from other mines attended a one-day workshop in November 2005 to discuss mine closure policy.