

OPERATIONAL PROFILE 2015



Obuasi, one of AngloGold Ashanti's seven operations in the Continental Africa region, is located in Ghana's Ashanti Region, approximately 60km south of Kumasi. Mining operations have primarily been underground to a depth of 1,500m.

OBUASI
GHANA

HIGHLIGHTS

ON LIMITED OPERATIONS

with feasibility study underway to mechanise the mine

TAILINGS RETREATMENT

activities completed

REVEGETATION OF THE DIAWUOSO TAILINGS

footprint is ongoing

ARTISANAL AND SMALL-SCALE MINING

a challenge

ALL-IN SUSTAINING COSTS

of \$1,185/oz, down 14%

As at 31 December 2015

- **MINERAL RESOURCE** of 28.0Moz (inclusive)
- **ORE RESERVE** of 5.7Moz

OPERATIONAL PERFORMANCE

Production

Following a two-year review of operational efficiencies, the mine was placed on limited operating status at the end of 2014. A feasibility study is underway to investigate options to modernise the mine and extend the life of mine. The study is taking into account economic and technical aspects as well as security, environmental obligations and community and government relations.

In line with limited operations, 1Mt of low-grade stockpiles were processed during the year, yielding 53,000oz of gold from tailings retreatment and maintenance activities.



Costs

Costs at Obuasi declined, a consequence of the mine being on limited operations and the reduced capital requirement helping to contain these.

Growth and improvement

In line with Obuasi's Amendment to Programme of Mining Operations, the mine successfully transitioned to limited operations at the end of 2014.

Development of a decline from surface to the existing underground mining blocks progressed. This decline is expected to allow development of the infrastructure necessary for the mechanisation of operations and to de-

bottleneck the mine. By year end, the decline had reached an overall distance of 3,000m, allowing access to Sansu 3 and Block 8L, from where the bulk of early ore extraction is expected to be done once operations resume. Work continued on a feasibility study into the redevelopment of the mine.

AngloGold Ashanti continues to work closely with the Government of Ghana to conclude a suitable investment agreement for the redevelopment of Obuasi, provided market conditions are suitable. Once concluded, the search for a suitable joint venture partner will resume.

SUSTAINABLE DEVELOPMENT PERFORMANCE

Safety

Tragically, there was one fatality at Obuasi, the result of a work-related incident. We would like to extend our deepest condolences to the families, friends, communities and colleagues of George Emil Baffour.

The all injury frequency rate (AIFR) improved to 1.28 per million hours worked from 3.01 in 2014.

Health

Now that mining operations have been suspended with the mine being on limited operations, new cases of NIHL at Obuasi have dropped dramatically with few cases diagnosed in 2015. No new cases of silicosis were diagnosed during 2015.

As with the rest of the region, although we continued to make progress, malaria remains endemic. Our integrated malaria control programmes that started at our Ghana operations and included the local communities, continued to make good progress. These multi-faceted programmes, undertaken in partnership with communities and local governments, and health authorities, have had positive impacts for the company and surrounding communities, and support the United Nations Sustainable Development Goals. See the <SDR> for stats on the performance of our malaria programmes.

Employees and labour relations

The primary labour-relations challenge at Obuasi was management of the change to limited operations. In terms of the agreement negotiated, there were no wage negotiations with organised labour for 2015 at Obuasi as the mine is on limited operations.

Localisation and the skills development of nationals is a particular focus at our Continental African operations. Our approach includes a progressive reduction in the company's dependence on skilled expatriates. The aim is localisation at all levels, from technical skills functions to leadership and managerial roles.

Following the implementation of limited operations at Obuasi, 17 Ghanaian nationals from the Obuasi talent pool were seconded to AngloGold Ashanti's international operations – in Guinea, Australia and South Africa – for further work experience and technical training.

Environment

There were two reportable environmental incidents at Obuasi, both involving spillages of cyanide-containing process water into trench areas. Authorities were notified, corrective rehabilitative action was taken and ferrous sulphate was applied to neutralise the cyanide. Corrective remedial actions were also taken. See the <SDR> for further details on these incidents.

Several closure activities were undertaken at Obuasi, including in particular, the rehabilitation

of the historic Diawuso tailings area and the watercourse that runs through it. Re-mining of the tailings was completed and rehabilitation of the cleared footprint is planned to continue in 2016.

A new tailings management strategy, to be implemented in the initial years of mine redevelopment, is being developed in line with Obuasi's feasibility study. This strategy involves separate deposition of two tailings streams – the first stream of large, relatively benign flotation tailings from which sulphide minerals have been

removed, and the second stream of BIOX® tailings, which are cyanide-bearing and have higher contamination potential. Environmental permit approvals are pending completion of the feasibility study currently underway.

Land

During 2015, there was significant focus on addressing the historic tailings at the Diawuso area. This work included re-mining the historic tailings and rehabilitation of the watercourse adjacent to the tailings. The revegetation of the Diawuso tailings footprint is ongoing, and



we are engaging the Environmental Protection Agency (EPA) to relinquish this land early, as some community members require this land for their livelihood. Two separate shaft infrastructures, Eaton Turner Shaft and Sansu Shaft, were successfully decommissioned during 2015 and land rehabilitation initiated.

Communities

At Obuasi, water and sanitation projects funded through the AngloGold Ashanti Obuasi Community Trust Fund were completed and handed over to communities. The water and sanitation committees were established to oversee the upkeep and maintenance of these facilities. Other community projects funded by Obuasi included the construction of two metal-framed footbridges over the Nyam and Jimi rivers, the re-roofing of the Diawuoso community centre and the construction of the Sansu community sanitation facilities. In addition, economic livelihood and cottage industry skills training were implemented for 40 women from the local communities in ‘Tom Brown’ cereal production, décor and synthetic flower production.

Education and skills development

In August 2015, Obuasi supported the Mentoring for Youth Development Foundation (MENFYD) in their nationwide education project. This initiative is aimed at mentoring girls to become responsible citizens and high achievers. It targets approximately 2,000

female secondary school students, and features lectures and open discussions on education and the empowerment of women, as well as adolescent sexual health.

Another initiative at Obuasi is the AngloGold Ashanti School, a mine-owned school with capacity for 1,300 learners. The school comprises comprehensive primary to secondary school education, and was officially registered and established as an independent and self-sustaining entity in 2015. As part of the transition to a new operating model, we donated start-up capital of \$100,000 and school staff were also transitioned from the mine’s fixed-term contract payroll to full-time employment by the new entity. This new operating model has ensured that the school could open its doors for the first time to learners from the general public.

Land access and resettlement

In April 2015, AngloGold Ashanti officials from the EPA and parliamentary committee members conducted an aerial assessment of Obuasi to assess land that has been identified for relinquishment to the Ghanaian government. The relinquishment strategy for the north properties and building, including offices, a training centre, workshop, and houses (valued at \$15 million) was approved by the AngloGold Ashanti Ghana board and group executive management. An application to relinquish 60% of the mining lease area was also lodged with the Minister of Lands and Natural Resources.

Human rights and security

We seek to engage positively with local communities and to create the shared value necessary to ensure a strong, mutually beneficial security context for all. To this end, we establish open community forums in our areas of operation. We also hold regular meetings between AngloGold Ashanti, security representatives, community leaders and local authorities. These meetings allow stakeholders to discuss security concerns and the practical implementation of Voluntary Principles on Security and Human Rights (VPSHR) principles. We use creative and innovative methods to ensure that conversations around security, human rights and community are broad and inclusive. At Obuasi, we participate in weekly radio talk shows to inform and stimulate conversations with the local public on these issues.

Artisanal and small-scale mining

Efforts to formalise artisanal and small-scale mining (ASM) activities are part of an ongoing process. As ASM is largely unregulated, most of our activities in support of formalisation depend on direction from the relevant government authorities in each area.

In early February 2016, the military contingent that had provided security to Obuasi since March 2013 in terms of an agreement between Ghana’s military and members of the country’s Chamber of Mines, was withdrawn from the

site. No reason was given for the withdrawal and Obuasi was the only operation affected among dozens which enjoy this form of security. Shortly after the withdrawal, the site was invaded by hundreds of illegal miners who immediately began mining activities in the northern part of the concession. Police were unable to repel these miners, known as Galamsey in Ghana. Several acts of vandalism and arson were reported. Tragically, John Owusu, a long-time employee and colleague, was killed in a vehicle accident when a contingent of AngloGold Ashanti employees, observing the activities of the illegal miners, fled following an unprovoked attack on their position by the Galamsey.

AngloGold Ashanti immediately withdrew employees engaged in non-essential work on the site, while critical services, such as water pumping and treatment, medical services and the provision of electricity, including to some local communities, continued. We maintained correspondence and direct engagement with local, regional and national authorities at the highest level to ensure a peaceful return to law and order at the site. This engagement continued for more than a month, with the illegal miners operating unchecked, and in the process causing significant damage to infrastructure and to the ore body. More than a month after the site invasion and John Owusu’s death, the military contingent was ordered to return to site.

OBUASI ⁽¹⁾ – KEY STATISTICS

	Units	2015	2014	2013
Operational performance				
Cut-off grade ⁽²⁾	oz/t	0.146	0.152	0.117
	g/t	5.00	5.20	4.00
Average grade recovered	oz/t	0.043	0.109	0.144
	g/t	1.47	4.67	4.94
Attributable tonnes treated/milled	Mt	1.0	2.2	1.7
Attributable gold production	000oz	53	243	239
Total cash costs	\$/oz produced	966	1,086	1,406
All-in sustaining costs	\$/oz sold	1,185	1,374	2,214
Capital expenditure	\$m	23	82	196
Productivity	oz/TEC	5.76	6.10	4.10
Safety				
No. of fatalities		1	0	1
All injury frequency rate (AIFR)	per million hours worked	1.28	3.01	2.39
People				
Total average no. of employees		856	3,541	5,194
– Permanent		–	3,153	4,728
– Contractors		856	388	466
Environment				
Water use	ML	3,129	3,696	3,685
Water use efficiency	kL/t	3.28	1.68	2.14
Energy consumption	PJ	0.56	1.46	1.77
Energy intensity	GJ/t	0.59	0.65	1.03
Greenhouse gas (GHG) emissions	CO ₂ e	79	198	199
GHG emissions intensity	t CO ₂ e/t	83	0.09	0.12
Cyanide usage	t	1,065	2,632	2,891
No. of reportable environmental incidents		2	1	3
Total rehabilitation liabilities ⁽³⁾	\$m	210	217	184

⁽¹⁾ Obuasi was placed on limited operations at the end of 2014.

⁽²⁾ Based on the Ore Reserve.

⁽³⁾ Includes Mpasatia (Bibiani pit) for 2015.