

## **WHAT WILL WE BE LEFT WITH WHEN YOU'VE GONE?**

### **MINE CLOSURE 2013**

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**SAM HOE-RICHARDSON**

Good morning.

My name is Samantha Hoe-Richardson, and I am Head of Sustainable Development at Anglo American.

First of all, thank you for giving me the opportunity to speak to such an esteemed audience – and in such a wonderful setting.

I should like to talk about the twin issues of mine closure and land stewardship – issues that are crucially important not only for the future of my own company, but for the industry as a whole.

They present challenges which all mining businesses must face up to.

As an industry – and indeed as Anglo American – we can already point to examples of good practice. We are developing a variety of approaches so that future generations will be able to point to a sustainable legacy.

But this is not something that a mining company can deliver on its own. We have to work in partnership with all of our key stakeholders, in order to develop closure and “legacy development plans” which will be a blueprint for a future that all can buy in to, and upon which all can build.

Partnerships are a theme I will return to later. But for now, I'd like to tell you a story.

Two years ago, I was in Peru, at a round table meeting.

I was discussing the Quellaveco copper project with a group of local residents.

Quellaveco is majority-owned by Anglo American. It would represent a \$3 billion investment, would create thousands of jobs, over up to 30 years, and provide huge tax revenues for the state.

Developing a mine there has a lot of support.

But it also has a lot of opposition.



The mine would be located in a water-stressed area whose economy is largely based on agriculture. Opponents fear that the mine would pollute alpine lakes and divert scarce water resources that are needed for crops.

The people I was talking with were agnostic about the project – though profoundly interested in the sustainability of our mine closure plan.

Their concerns could be summed up in a single question, and that was: “What will we be left with when you’ve gone?”

I was surprised. Not by the question itself, because I had been asked it before. And more than once.

What surprised me – and always does – is just how difficult it is to answer.

Yet, in truth, it is a fundamental question that we – as a company and as an industry – need to be able to answer. Indeed, unless we can answer it frankly and to the satisfaction of whomever is asking, I believe that in the future we will not be allowed to mine.

And that, I think, is the way it should be.

This is not hype or scaremongering. Quellaveco’s environmental impact study was approved years ago, but construction was postponed because of community objections.

While these have largely been resolved, work on building the mine has yet to begin.

But why is it such a difficult question to answer? Three reasons come to mind.

Firstly, the mining industry as a whole does not have a particularly good record of successful or responsible mine closure, and its reputation has suffered accordingly. People are suspicious.

Secondly, mines can have an extremely long lifecycle. An investment made now could be operating well into the 22<sup>nd</sup> century. Individuals alive today won’t be around to oversee the closure or be held to account for the promises they make.

Neither can we imagine the world as it will be then. The period from initial exploration to closure can range from 15 to 150 years. To put that in context, 15 years ago the phenomenon that is Google didn’t exist. Nor did the euro.

150 years ago, neither did Germany or Italy.

Furthermore, 150 years is well within the timeframe for significant climate change impacts to affect the industry

So we can't realistically predict the technical and environmental changes that may take place over the life of the mine, let alone the social and economic needs of individual communities at closure.

Thirdly, it depends on who is asking the question, and how far we are into the mine's life. Local communities aren't the only people with an interest.

"What will we be left with when you've gone?" is something our employees, also think about.

It is a question that governments ask at the outset when they consider how much tax revenue the mine might generate, how it should be spent for social and economic development at national, regional and local levels, and how that spending can ensure long-term national benefit.

Public authorities also need to consider the potential liabilities they might face after issuing a closure certificate – something they are often reluctant to do.

It's a question investors want an answer to – for similar reasons.

And any number of NGOs – with a broad range of concerns – have genuine reasons to ask the same thing.

These various stakeholders all have different needs, different drivers and different timescales. Yet one thing they all have in common is a recognition that although a mine might have a life of well over a century, it is still temporary. It will close.

And those Peruvians I was having lunch with were not only concerned about the impact that the project might have on their lives, but also on the lives and prospects of their great grandchildren. They were thinking long-term

And so must we.

In 1954, Sir Ernest Oppenheimer laid out the core values of Anglo American – the company he had founded in Johannesburg during the First World War.

He said: "The aims of this Group have been – and will remain – to earn profits but to earn them in such a way as to make a real and permanent contribution to the well-being of the people and to the development of southern Africa."

That is still our view – though across a much broader geography than was covered in Sir Ernest's day.

Mining companies are not charities. They need to make profits. But what is important is how they make them.



Mining can do good. Our mines can bring jobs and prosperity to countries and communities. They can bring schools and healthcare. Roads and power plants. Running water and cellphone networks.

For example, in the Limpopo province of north-west South Africa, the construction of a 600 kilometre water pipeline to our platinum mines will give 1.4 million people access to a reliable source of potable water for the first time.

Mines can, of course, also cause disruption, fuel inflation and attract migrants who are not always welcome.

However, we work very hard to ensure that the net impacts are generally positive. And we can be a catalyst for development – before, during and after mine operations.

In 2012, for example, Anglo American paid more than \$23.2 billion to our suppliers, to our employees, and in taxes and royalties to governments.

Approximately 80% of this spending was in developing countries, with the positive economic impact extending well beyond these direct inputs.

More than \$1.5 billion of our expenditure on suppliers went to suppliers based in the communities close to our operations.

But if those living in poverty are to enjoy the benefits of mining investment, they must be able to actively participate in the potential opportunities that this brings.

This requires proactive efforts on the part of companies, coupled with support from government and non-government bodies.

Many mining companies make substantial investments to address weaknesses in social and economic infrastructure – such as health and education – also providing access to training, energy and to credit.

Since the 1980s Anglo American has been pioneering approaches to building small, non-mining businesses in South Africa –and since 2006, in Chile. These projects support more than 60,000 jobs.

We have specifically designed enterprise development schemes for projects in Peru, Brazil and Botswana, providing infrastructure and resources to communities, while enabling them to identify and develop business opportunities independently.

But there are limits to how far companies can – and should – do this on their own. Mining companies do not run countries – governments do.

Governments need to provide legal frameworks and institutions to support development. They need to effectively manage the natural resources on which

development depends. And they need to eliminate corruption through the promotion of transparency.

For good outcomes to happen, we need to work in partnership with the whole range of stakeholders. Partnerships are critical.

And by partnership, what I mean is something **to** which each party has to contribute – and from which outcomes are seen as a "win-win".

Partners need a clear understanding of the nature of the challenges they face, the decisions they need to make, and of the outcomes to which they are committing others both now and in the future.

Partnerships, of course, also need to be enduring – because of the multi-generational impacts of a major mine.

The capacity for different groups to contribute to partnerships, however, varies considerably.

It can sometimes be very limited with a lack of understanding by governments and communities about what a mine can do in terms of social and economic transformation. Equally companies may well start with very limited understanding of community cultural and social imperatives.

Expectations on all sides may be unrealistically high.

In some countries in which we operate, mining rents are paid to central government. And the central government makes judgements over where that income should be spent and on what. That spending is not necessarily in the region where the mine is situated, and might be on things that are not for the benefit of the local community.

In other countries, such as Brazil, a much higher proportion of rents goes to local communities. But local government can lack the capability to spend the money properly. This is something that we try to address, and last year we spent almost \$2 million on developing the capacity of local municipalities in both South Africa and Brazil.

Nonetheless, if there is a good local or regional development plan in place, then the local revenues can contribute to realising it.

I should also say, by the way, that this lack of understanding is not just an issue for the developing world.

In Australia, for example, there has been a marked decline in the amount of investment going into the mining sector, not just because of the slowdown in China, but also because of the levels of taxation that the government has imposed.

The pips have squeaked.

Partnerships are vital because the issues to be dealt with can be very complicated.

Communities faced with major potential benefits and major disruptions may not be well equipped to make fully informed choices.

In South Africa, for example, I have seen piles of nappies beside a river and the local community asking for a clinic because their children get sick. We could provide a clinic. But it might not be what the community needs most. Perhaps they need clean running water more. Or a waste dump.

We are a mining company and we do not know best what that community needs. But perhaps, sometimes, neither do they.

In such a circumstance we might work in partnership with an NGO that can help to establish priorities.

It could turn out that providing a clinic *is* the right choice. But we also need to partner with government agencies to ensure that support for the clinic is maintained once the mine has gone.

I'd like now to look at mine closure and land stewardship from a different angle – the self-interest of a large mining company.

'Doing the right thing' – and being *perceived* to be doing the right thing – can enhance relationships with stakeholders, particularly host communities and governments. A consequence of this can be to influence future access to land, resources and capital.

But addressing these issues properly can also help to reduce our own operational risks and liabilities.

For example, the extended timescales of a mining operation make us vulnerable to the effects of the degradation of the Earth's natural capital. Mines have an inescapable need for so-called 'ecosystem services' that nature provides free-of-charge: things such as fresh water, protection from natural hazards and erosion control.

These must not be taken for granted. They need to be protected and maintained, or replacing them could prove expensive or impossible.

Yet according to Cambridge University, 60% of global ecosystem services are being degraded or used unsustainably by mankind.

The UN has estimated that in 2008, the economic cost of biodiversity loss and ecosystem degradation was between US\$2 and 4.5 trillion dollars. Or, looked at another way, between 3.3 and 7.5 per cent of global GDP.

Even more worrying is their prediction that assuming ‘business as usual’, global environmental costs could reach US\$28.6 trillion by 2050 – equivalent to 18 per cent of GDP.

At a more prosaic, practical level: it can be cheaper to plan the closure of a mine properly, than not.

De Beers’ Venetia site in South Africa has reduced its overall Life of Mine closure liability by 35% – at virtually no extra cost – by reversing the traditional waste deposition strategy at this open pit diamond mine.

Rather than starting waste deposition close to the pit and moving in an outward direction over time, the waste is now hauled to the far extent of the Life of Mine deposition footprint and deposited systematically *towards* the open pit.

This creates lower bench slopes, and means that land rehabilitation can begin while normal deposition continues.

As a rule of thumb, the earlier we begin rehabilitation, the better the result. Even where closure requirements have not been integrated into the initial planning, rehabilitation that takes place while the mine is still working:

- reduces operational environmental risks such as soil erosion and water pollution
- improves the outcomes of our rehabilitation efforts and
- is less costly in the long run.

Closure liabilities are directly proportional to how well mines have addressed closure risks and met environmental management and closure plans during the operation of the mine.

The work at Venetia was done using Anglo American’s Mine Closure Toolbox.

This was developed between 2005 and 2008 to help our operations in their strategic long-term mine closure planning.

Until now, it has only been available internally.

But we believe that the issues that it can help address are so significant for the industry as a whole, that the latest version of the toolbox, which is being launched at this conference, is being made available for anyone in the industry to use.

The toolbox was initially designed to expand the focus of planning from simply making financial provision for rehabilitation and physical closure, to planning for sustainability beyond mine closure.

It is currently being implemented throughout all of Anglo American’s managed operations around the world, which means that:

- each of our mines has a formal closure plan in place
- carries out rehabilitation at the same time as mining and
- has a water management model as part of its closure liability assessments.

The toolbox itself consists of a strategic planning tool, a rapid assessment tool and a tool that focuses on closing the identified gaps to achieving the closure vision.

The three tools work together to ensure that all aspects of a mine's closure, from the dismantling of machinery, to the potential environmental and social impacts after closure are tackled in an integrated manner.

The new version of the toolbox we are launching here has increased emphasis on community and broad-based stakeholder engagement and on the importance of enduring partnerships to ensure that mines are designed commissioned and operated with eventual closure in mind.

Our view is that we must start planning for the closure of a mine well before operations begin.

In fact, even at the exploration stage, we need to begin to understand the long-term, socio-economic needs of the communities that might be affected by a mine, as well as investigating the macro-geology.

Historically, the industry's closure planning has typically focused on the engineering aspects of a mine:

- the decommissioning of the workings and plant,
- dismantling of unusable infrastructure, and
- the rehabilitation of disturbed land.

And during the years of operation, there is a perpetual conflict between production and rehabilitation in the competition for equipment, funds and resources.

But with a more holistic, long-term approach, Anglo American's focus is increasingly on leaving behind a positive environmental and social legacy.

In planning for such an outcome it is critical that the overall environment in which the mine is located – social, economic, physical and biological combined – defines and drives the closure plan, and mine planning as a whole.

All of our closure plans have a site-specific closure vision – a vision of what post-closure might look like – with objectives and goals established in consultation with the stakeholders. This recognises that **one size does not fit all**. Every community and region has its own distinct needs.

It will not always be possible to put the land back to how it was before the mine, and that isn't always the best option anyway. But decisions about the closure vision do not belong to mining companies alone. Rather they belong to the people that will remain in the area after the mine closes.

Their preferences might well change during the life of the operation. So we need to continually involve and collaborate with communities and other stakeholders in developing and refining the closure plan and vision, in line with their expectations. The objective should be to leave behind self-sufficient and self-sustaining communities.

The earlier this approach is begun in the life of a mine, the more time there is to achieve the desired outcome, because it is not possible to simply fast-track good community relationships, and establish sustainable post-mining, socio-economic opportunities.

This must be done from the outset and continually.

At the beginning of this speech, I said that I felt the industry's recognition of mine closure and land stewardship as significant, was a positive.

Projects being developed today are addressing these issues in a variety of ways – and I hope I have given you a feel for the approach we are taking at Anglo American.

It is clearly more difficult to retro-fit an appropriate closure plan to an existing mine than to develop one from the outset. So the full benefit, to both miners and communities, of work that is taking place now, might not be seen in our lifetimes.

For the foreseeable future, we will still be faced with mines that were developed in a different world and a different time.

We will need to continually involve and collaborate with local communities in developing and refining our closure plans and visions, in line with their expectations.

We will need to work in partnership with governments and NGOs to achieve the best outcome possible for everyone concerned. Ultimately success will be measured by the legacy we leave.

And to close, I would like to try and answer the question I posed at the beginning.

What should be left when we have gone are self-sufficient and self-sustaining communities whose future is brighter for the mine having been there, than if it had never been there at all.

And countries where the nation's mineral endowment has been transformed for the national benefit – not merely consumed.

Thank you.