

BHP Billiton  
HSEC Briefing  
13 October 2004

Contents

<b>HSEC OVERVIEW.....</b>	<b>1</b>
<b>YTD PERFORMANCE.....</b>	<b>5</b>
<b>SAFETY PROGRAMME.....</b>	<b>12</b>
<b>CONCLUDING REMARKS.....</b>	<b>15</b>
<b>QUESTIONS AND ANSWERS.....</b>	<b>16</b>

## HSEC Overview

**Mike Salamon**

**Group President Non-Ferrous Metals**

### **I. Introduction**

Good afternoon, ladies and gentlemen, and welcome to this, the third of our SRI presentations. I guess a few formalities – first, much appreciated if mobile phones are switched off. Secondly, in terms of the format, we're going to run through about forty-five minutes of presentation, and then we've got Q&A, so probably better if we deal with it in that format. And then, thirdly, we have yourselves here and you've got people on the phones.

Ok – the agenda for the day – I'm Mike Salamon. I'm an Executive Director of BHP Billiton, and have carriage for the Health, Safety and Environment (HSE) portfolio in the group, amongst other responsibilities.

#### **1. Policy and Strategy**

I'm going to briefly introduce the company and make a few comments in regard to broad policy and strategy, and then I'm going to hand over to Ian Wood, who's our Vice President, Sustainable Development.

#### **2. Sustainable Development**

Now Ian will be referencing the document 'Working for a Sustainable Future', which is our sustainable development report. We have copies of that available, the executive summary, and on the web there's a much more fulsome document. The document is produced in accord with the GRI parameters, and is rich with many, many case studies. Ian will be essentially reviewing our performance against our sustainable development scorecard.

#### **3. Fatalities**

Then, thirdly, because we've had a particularly rough safety run we had, very, very tragically, seventeen fatal accidents during our last financial year. That has engaged top management and management throughout the corporation very extensively over the past nine months, and so we thought it would be appropriate to bring Barry Formosa, our Vice President of Safety, to the meeting to give an indication of how we are responding to that challenge.

#### **4. David Walker**

Then last, but by no means, least David Walker, who's the president of our UK, North American and Middle East oil operations and has carriage for health and safety in our petroleum business, is here and will obviously be available if required in the Q&A.

## **II. BHP Billiton**

### **1. The Company**

Just for those who are not that familiar with the company, BHP Billiton is the world's largest diversified resources company. It is a truly global company. It comprises seven major business units, each of which is a major company in its own right, and each of which is a global company as well. And we have some 100 operating sites around the world on all six continents.

And from a managerial perspective, that gives us one particular challenge in that we are truly a 24/7 corporation, and operate in every time zone, so if any of us look like we've got bags under our eyes, you know why. We're always getting the three o'clock in the morning phone calls.

### **2. The Past Financial Year**

Just a very quick review of the past financial year. It was a record year in pretty much every respect, substantial financial results, \$5.5 billion of EBIT, \$3.5 billion of attributable income. EBIT up in every one of our operating businesses. We also completed the exercise of delivering the synergies and cost improvements that we had envisaged at the time of the merger, and then, very importantly, we have brought on and continued to bring on very major projects.

Since the time of the merger in July 2001, we have brought on \$4.1 billion worth of projects. Currently we have some \$8.5 billion worth of projects in our pipeline, and in accord with the financial outcomes our shareholders also, I believe, participated handsomely in terms of growing dividends and a return of capital, which is currently underway.

### **3. The BHP Billiton Charter**

Now, this is the BHP Billiton Charter. You'll see it in our annual report and our sustainable development report. It's the guiding philosophy, which drives everything that we do. We're very much focused on I guess what traditionally would be called the triple bottom line. So in other words, financial reporting is very important, but so also are the non-financial aspects of our performance.

### **4. Zero Harm**

And a term that you will see regularly throughout BHP Billiton is zero harm. It's something we take extremely seriously, both in terms of our employees, the environment, our footprint, and the communities in which we operate. It really is a very, very strong guiding principle. It's one which every operating business lives by. It's one which we look at for any new investment, whether that be a new project or an acquisition.

### **5. Accountability**

Accountability for delivering the sustainable outcomes is very much a line responsibility. In other words, it devolves through from the CEO through the executive committee through the businesses to the site operations, but of course what is also very important is the governance around that, so that we can be assured that we're not conning ourselves, we are really delivering against those objectives.

## 6. Governance Structure

Now the governance structure is driven by the board, the two most important elements of which are the risk management and audit committee, and the health and safety and environment committees of the board.

### a. *Risk management and audit committee*

Underneath the risk management and audit committee, which is principally the financial reporting, we also have a global ethics panel, again a very, very important feature of our lives, especially as we operate in many diverse cultures and many countries.

### b. *Health and safety committee*

On the health and safety committee, it's a committee, which comprises the CEO and myself as executive directors, and then a panel of experts, and it's chaired by a non-executive committee member.

### c. *Remuneration committee*

And also very important in this continuum is the remuneration committee, because the outcomes, in terms of sustainable development, safety and environment, are an important facet of how we reward our people, in terms of achieving bonuses or not achieving bonuses, and clearly the remuneration committee has a big role to play there.

### d. *Forum on corporate responsibility*

And a possibly somewhat unusual feature of our governance structure is a forum we call our forum on corporate responsibility. It's a group of executive management, together with NGO representatives from around the world. It's not a decision-making body, but it's an opportunity for the NGO community and executive management to discuss critical, important issues. It meets twice a year – I chair it, and it has informed us on many, many issues which typically executive management would probably not get, that other perspective.

### e. *Value drivers*

These are the value drivers that we as a corporation respond to. These were released in April 2002. They're, I guess, familiar to any follower of the company. The important facet there is the last one, which is a relatively new addition, which is a recognition that in our business really everything we achieve is through people, and so clearly realising the potential of our people is a critical element.

### f. *Strategic imperatives*

Now, together with each value driver, there are strategic imperatives, and you will see, if you look through that column of strategic imperatives, that the sustainable development agenda turns up time and time again.

For the vast majority of our people - we have some 35,000 people - the most important one is probably the top one. That's what we focus on. And zero harm, zero harm before production is an absolutely critical driver in everything we do.

And then of course the employees' block down at the bottom, something that as the old economy gets its revenge, in a way, is becoming more and more important to us. The availability of quality people is something that this industry is hugely challenged with, and it's something that executive management is spending a great deal of time pursuing.

*g. The management scorecard*

Now these value drivers and strategic imperatives associated with them are what make up the management scorecard. These are the things that our bonuses and share rewards are based on. They're quite structured scorecards; associated with all of these are quantitative outcomes.

Our strategic imperatives are what drives our scorecards. That is real line accountability. The remuneration committee is not a rubber stamp by any stretch of the imagination. Those scorecards are truly measured.

Health, Safety, Environment and Community (HSEC) management standards and what flows from them are what our operations and what senior management live by day to day. We have tested those standards across many of the best companies. I guess the outcome of that test is that we stack up well in terms of our standards and systems.

## **7. The Challenge: Turning Standards into Outcomes**

Our real challenge, and I guess Barry will get into that in some way, is making sure that we use those standards and systems in an excellent way, to ensure that we have excellent outcomes. With those few words of introduction, I'll hand you over to Ian.

### **YTD Performance**

**Ian Wood**

**Vice-President, Sustainable Development and Community Relations**

## **I. The HSEC Report**

Thanks very much Mike. As Mike mentioned, I'll be giving you an overview of our performance year to date. But before I get into that, I'd like to highlight the way we've produced our HSEC report this year. It's basically in two parts.

### **1. Executive Summary**

We have an executive summary-style document, which is about sixteen pages, we use this for our broad-scale distribution to all of our key stakeholders.

### **2. The Main Report**

And then the main report which is on the website. And so I just wanted to highlight that we've had very positive feedback in relation to that format. So we've actually gone a bit further this year. The executive summary report is actually quite a bit shorter, but one of the things I'll be referring to consistently throughout the day is the scorecard. This is our HSEC scorecard, and I'll be talking about various aspects of that. So they're our five-year targets and I've selected a few of the key ones that I want to talk about, but certainly very happy to discuss any aspect during the Q&A.

### **3. Sustainable Development**

Another thing that we did differently in the report this year is included quite a substantial section on how we feel our company can contribute to sustainable development. So you'd be aware that sometimes our sector is criticized or people say, how can you possibly contribute to sustainable development if you're exploiting a non-renewable resource? So we've really explained our position on that, and I'd be very keen to get any feedback that you may have on that aspect of the report, because as I say it is a new element.

And one part of that is talking about our sustainability challenges, so the key issues that we're working on as a company, and again we've talked about that in some detail, and we'll be refining that over the coming year, but this is our first attempt at it. And this slide really shows those five key sustainable development challenges.

## **II. The Five Sustainable Development Challenges**

The first one is fatal risks. Mike's already alluded to that, and Barry will be talking in greater detail on that shortly.

Occupational and community health, greenhouse gas emissions, we are a substantial producer of fossil fuels and we also have energy-intensive businesses, so we have clear exposures to that agenda.

Access to resources - our business is based on accessing and developing new areas, new projects, and therefore we need access to land, and that brings issues of biodiversity, indigenous peoples, human rights etc., and then sustainable community development and closure.

As you'll see in our discussion on sustainable development and how we contribute in that area, it's all about leaving a lasting, positive legacy, and that is a challenge for us. Mike's already talked about the Charter, and I obviously don't need to go back through that process. But the Charter itself underpins everything that we do as Mike said. It's supported by our HSEC policy and our HSEC management standards, and those documents are mandatory. Every single asset must implement those standards, so our company has a very focused, centralised, systems-based approach, which is a different approach to some companies in our sector.

Other pieces of the systems that we implement which are also mandatory in every operation include for example our guide to business conduct. This is the ethical business practices that every single employee and consultant or contractor is bound by. The fatal risk control protocols that Barry will talk about, and we've just released a closure standard which is really seeking to address this issue of leaving a lasting, positive legacy, and ensuring that we plan and effectively provide for and deliver closure.

## **III. Performance Outcomes**

### **1. Audit Programme**

Okay - so, moving on to some of the performance outcomes, the first one is our audit programme of our sites to our HSEC management standards. So we had a commitment to ensure that all our 100 operations around the world was audited, and we have achieved that. And the overall audit conformance for our HSEC management standards has improved over the year, up to 3.7 out of five. Based on our standards our internal target is four, as in terms of full implementation. Beyond that, our view is that sites are leading industry practice or setting leading industry practice. So four is full implementation - that's our target that we need to meet this by end of June next year.

## 2. Traffic Lights

I should also point out we have used the traffic lights in the past in previous reports, but this year you'll also see we've got arrows to indicate whether we're continuing to improve, so some of our targets have already fallen due, but we want to give people an indication of whether we're improving or tracking sideways or declining.

## 3. Fines – A Failed Target

And you can see the next one – we've not met this target. We obviously, like most companies, have a target of full compliance with the law. We had eleven fines during the year up from nine the previous year, but I should point out that one of those fines accounted for about three-quarters of the quantum there of approximately \$200,000. And that related to a safety incident at a site about four years ago, but it's just come through in the last year.

## 4. Increased Conformance

The data there, and I haven't got a pointer and I've been told not to move away from the podium, so I'm sorry it's hard to explain, but that data simply shows each one of our management standards, the audit result over the past three years, and if you can see it in the slides that you have in your pack, you can see that the overall conformance has increased.

## 5. Safety

Safety – as Mike's already mentioned, we've had an unacceptable outcome this year. It's something that everybody in the company is absolutely focused on turning around. Barry's going to talk to us about that in greater detail. The interesting thing, though, is although we missed that target, our classified injury frequency rate, which is an overall high-level measure of safety performance, improved substantially over the past 12 months. So there's a disconnect between general safety performance and exposure to fatal risks. That's been a key learning for us, and Barry's going to be talking in greater detail about that.

## 6. Occupational And Community Health

Occupational and community health – a very strong focus for us, and a challenge. A lot of our operations are in regions that have community health issues like tuberculosis, malaria, HIV/AIDS. It's clearly in our interest to ensure that we have a healthy workforce in a healthy community, and it's also a great opportunity for us to contribute positively to community development and community health.

### a. *Mixed health performance*

In terms of health performance, there has been a mixed outcome this year. This first point, I think, we need to just spend a couple of minutes on to ensure people understand it.

Our occupational exposure to noise deteriorated, so we reported more people operating in environments that were above the levels where you could have impacts on hearing if you didn't wear personal protective equipment (PPE). So just bear that in mind. This is assuming people are not wearing their PPE, which of course they do, and we audit that, and you'll see the data. In the report we had very good compliance with PPE, but our objective is to eliminate the hazard at source, and so we report our progress on that issue. And some of this will simply be better reporting and monitoring at the sites, so people are more effectively monitoring exposure rather than any real deterioration in the exposure.

*b. Decrease in occupational illness*

In terms of the incidence of occupational illness, quite a significant decrease during the year in terms of the reported or identified cases of industrial illness. Again important to indicate that some of these things have significant lag times, so I don't want to overstate the significance of that data, but certainly there has been a decline the last 12 months, and you'll see from the next slide, or the box there, the graph, that the majority of those illnesses are hearing loss related to noise exposure, which is why we focus on that area.

## **7. Diesel Particulate Initiatives**

The next issue I wanted to talk about was diesel particulate initiatives that we have. It is a potential health risk, exposure to diesel particulates in underground working environments. We have done a lot of work in New South Wales looking at opportunities to reduce that exposure, and that work has been very successful. So we've introduced new technology that enables us to scrub particulate material out of exhaust gases for diesel equipment underground. We're looking at rolling that out at other sites that have similar exposures to diesel particulates.

## **8. Medicines For Malaria**

And then the next point on this slide is our new relationship with medicines for malaria venture. We're funding quite a significant contribution to this project, with a view to helping the development of new anti-malarials, which will obviously have benefits globally, but will also benefit the communities that host our operations and our employees.

## **9. Greenhouse Gas Targets: A Step Ahead**

Greenhouse gas emissions I've already mentioned – we do have a significant exposure to this agenda, and we have a very focused response to that issue. The first data set relates to our own internal targets of how we go about reducing our greenhouse gas emissions, and you'll see that the intensity for the amount of greenhouse gases emitted per unit of effort or per tonne of product has decreased significantly, so 9% over the past two years. Our target was 5% over five years, so we're well ahead of our target.

And I should also just point out that this is on top of a previous exceeding of a target, where we achieved a 12% reduction in the previous five years. So we've made good progress in that regard.

## **10. Water Intensity**

On the down side, water intensity has increased. And again it's difficult to explain that without being able to easily point to the dataset there, but effectively what's happened with water is we've brought on or re-commissioned projects that were on care and maintenance in the copper business. Due to low prices we actually put some capacity on hold. That's now come back on line. It's relatively water intensive and that has resulted in a deterioration in the water intensity.

We also have commissioned a new facility at Escondida in Chile, and the recovery of water from the tailings dam has not operated to specification yet, so we're doing further work on enhancing that. So that's the basic underlying reason for the water intensity data.



## 11. Strategies To Tackle Greenhouse Gases

### a. *Aluminium*

In terms of greenhouse gas intensity, the key contributor to that is bringing on new capacity in the aluminium business. It's amongst the most efficient smelting capacity in the world, and that has had a significant overall reduction on our company intensity.

### b. *Coal bed methane*

I just wanted to very quickly talk about coal bed methane. This is an area that we feel is a significant business opportunity for us in its own right, but it also has the potential to significantly reduce our greenhouse gas emission.

Methane, as you may be aware, is a very greenhouse-intense gas. Its warming potential is 24 times that of carbon dioxide, so if you release methane into the atmosphere as we do from coal mines it greatly contributes to the company's overall greenhouse gas emissions.

Now if we can capture that methane and use it as a fuel source, convert it to carbon dioxide, we greatly reduce the overall emissions for the company. So we're doing that right now at our coal mines. We're extracting methane ahead of mining – it improves the safety of the operation, provides a fuel source and reduces greenhouse gas emissions.

### c. *Mine ventilation air*

But there are some interesting new developments that we're looking at as well. One of them is taking mine ventilation air, so this has very low concentrations of methane, and putting it through new technology, which is a flameless combustion process, to generate energy. And we've put about \$9 million into a project plant that's just about to be commissioned.

This is new technology – never been done before in a coal mining or in any mining context, and we're very optimistic that this will be something that we can transfer, not just across our company but to other companies as well.

### d.

And the other thing that's shown by this graph or diagram is the potential to burn methane with pure oxygen to produce a pure carbon dioxide stream, and then re-inject that, using a technology called geo-sequestration, back into coal seams. Now that's something that we're still working on. We're not doing this yet, but we believe it has a lot of potential.

## 12. Access To Resources

Access to resources I think I've already mentioned. Two key exposures here – one is biodiversity, and the other is community relations, indigenous peoples, human rights-related issues.

### a. *Environmental incidents*

On the environment side, we've had two environmental incidents during the year, and that's a deterioration from the year before which is disappointing. Both of them were at one site, in fact the site shown in the photograph here is a closed site, undergoing rehabilitation. There was an unplanned release of low pH water into a local creek, and as a result they triggered our internal reporting criteria.

We have completed lifecycle analyses for all of our major products and that's been done in association with the various commodity groups that we're associated with. And all of our sites

have land, water and energy management plans in place, and also waste minimisation programmes.

*b. Biodiversity*

Just want to talk a little bit about biodiversity. Environmental impacts for our new projects always incorporate a focus on biodiversity, which I guess is fairly obvious. 39 of our sites around the world, so around 40% of our operations, have specific projects on biodiversity conservation. We have a biodiversity position paper which is just in the process of being finalised, and I'm going back to Melbourne for a meeting on Monday at which we hope to finalise that document and that'll be available on our website shortly.

And an example – this is one of our newest projects, undergoing construction in Western Australia, and it's been possible to develop that project through managing biodiversity exposures through an offset programme. So we had purchased high quality, high value or high conservation value land, and swapped that for some other land that we wanted to access to ensure that the biodiversity values of the area are protected.

We've also just put out a public position on deep sea tailing placement. This is a technology that we have considered in the past. We were looking at it as a possible option, one of three at the Gag Island project in Indonesia. We've decided on balance that that's not something that we want to do, and we've decided to say that publicly to ensure that our position is clear in relation to Gag Island. But also you'll see we've extended it to say that because deep sea tailing placement really is only relevant in almost unique circumstances. We don't believe that's a technology that we'll be considering in the future. Mike Salamon has spoken on this issue in the past as well.

*c. Human rights*

In terms of community performance, we had no identified human rights transgressions during the year, and you'll see I'll say no identified human rights transgressions. Some of you may be aware that there have been a couple of accusations of human rights transgressions, and I'm happy to talk about that during the Q&A process. We've investigated both of those, and don't believe there is any substance to them, but again, very happy to talk about that if people are interested.

*d. Community relations*

Community relations plans are in place at all of our operations, including sites where we haven't specifically required it.

*e. Guide to business conduct*

And in terms of the socio-economic performance, I've mentioned right at the outset our guide to business conduct. This is something that we do take very seriously in the company, and we provide all of our employees, contractors, in fact any of our stakeholders, external people as well, can raise issues with us if they feel that anyone in the company is not living up to those standards.

*f. Helplines*

And this just shows you the sort of data that we get through our helplines. These are confidential helplines or confidential e-mail addresses where people can get assistance with these issues. Now I don't want to give you the sense that we have a call centre with phones running hot 24 hours a day. This represents about 80 calls for the year, 80 calls or e-mails for the year, a very small number in reality. And you'll see the spread of the issues are quite varied.

*g. Human rights self-assessment toolkit*

In terms of human rights, we've implemented and I think I probably mentioned that we were going to do this last year; we've implemented a human rights self-assessment toolkit, which is linked to our audit programme. Now 44 of our sites have so far completed that. As I said, it's linked to our audit programme, which means they have to do it ahead of their audit and we audit a third a year, so more sites than have been required to have completed it so far, which is good. 18 sites have undertaken specific human rights training for their employees.

*h. Oxfam*

I wanted to comment on our relationship with Oxfam. This has had quite a profile, probably more in Australia than overseas. The mining ombudsman that Oxfam set up based in Melbourne had some fairly significant concerns with our operations in Peru at Tintaya.

We have worked with them over the last couple of years, and I think we have made fantastic progress. In their latest ombudsman report, they actually talk very positively about that interaction, and use Tintaya as a case study of how they would like to see other companies respond to those sorts of issues. So we've actually turned what I think was a negative for us as a company into a positive, and learned a lot along the way.

*i. Community programmes*

Community performance in terms of our community programmes – we have our target of a 1% contribution of our pre-tax profit to community programmes. We have achieved that again, 1.3%, and that's a three-year profit rolling average. You'll see the split there, which pretty much follows our asset base in terms of where we spend that money, and you can also see there the sorts of programmes where we invest community contribution. Important to note that that US\$47 million is an extremely small part, in fact virtually insignificant part of our overall economic contribution.

And it's probably something that our industry has not sold very well, but if you have a look at the amounts of money that we pay in resource rent tax, royalties etc., in various regions around the world, the amount of money that we spend on goods, services, payments to employees etc., shareholder dividends, and you can see the regional totals there, around 14 billion a year goes back into the local economies where we operate and you can see also we're showing data here for the first time this year of where that money is spent.

This is a global aggregate of where we spend the money, and you'll see that about a third of it is spent in the local region adjacent to our operation zone in the local communities, around half within the country of operation and then the rest internationally, so that's a global average for BHP Billiton.

*j. Closure protocol*

And finally I mentioned the closure programme that we've just developed, our closure protocol. This is a process to ensure that we consistently plan for, provide for and deliver, as I said before, a closure outcome that meets community expectations and is also consistent with our budgets, government expectations etc. So that's a new initiative for us, and we have copies available.

*k. Document copies*

In fact all of the documents that we've been talking about, if anybody would like copies, we have a form out here that Ariane's put together. Just complete that and we'll get those copies to you as soon as we can.

And I think that's my last slide, and I'll hand over to Barry Formosa.

## **Safety Programme**

**Barry Formosa**  
**Vice President Safety**

### **I. Introduction**

Thanks Ian, and good afternoon, ladies and gentlemen. Thanks for the opportunity to share with you a little bit about our safety approach and programme. My discussion this afternoon is really going to be broken up into three components. First of all, I'd like to just talk about some of our key guiding principles and objectives. Then we'll move onto what we've learned from the fatalities that occurred last year, and then finally what we're doing about addressing some of those learnings.

### **II. Guiding Principles**

#### **1. Zero Harm**

The first slide is really a slide that we use extensively around the organisation to articulate how we want to achieve zero harm. The guiding principles include our charter, our HSEC policy and our future state, which I will share with you shortly.

#### **2. Controls, Protocols And Safety Excellence**

##### *a. Controls*

If we move into the controls, all of our controls are broken up into three key components. The first being plant equipment, workplace conditions, procedures and practices and behaviours.

##### *b. Protocols*

Our fatal risk protocols, which you have a copy of on your chairs there, are broken up into those three components also. We believe if we address all those components, we will have a comprehensive approach. They lead into three key approaches – systems, leadership and people.

And you can see the reasons why we have to have those, but a key one I'd like to draw your attention to is the leadership, which really is the glue that holds all of this together.

##### *c. 'Our Future State'*

As I mentioned, 'Our Future State' really is a key document to help us with our decision-making and thinking. This was developed by our executive, and it really articulates clearly what excellence looks like in safety. I'm not going to go through each of them in detail, suffice to say that it's really broken up into three key themes, one being leadership, the other behaviours, and the third the strategic importance that safety plays in our business imperatives.

### **III. Lessons From Fatalities**

I'd like to spend a bit of time talking to you about the key lessons from our fatalities, and I think as we go through these, some of them may challenge conventional thinking. It's important to note that these key lessons come about from an extensive review carried out from the investigations of our fatalities that was initiated by Chip Goodyear and the three group presidents. And I'd like to go through these with you now to build a picture about what we've learned and how we're addressing it.

#### **1. Sound Systems**

As Mike has alluded to, we believe our systems, are safe working systems and procedures and our HSEC standards are indeed sound. We've had them tested – they are comprehensive, and we believe if we apply them well they will deliver our objectives.

#### **2. Gaps In Application**

The second point is very much that the consistent and rigorous application of them is essential. We've identified gaps in that. As Ian has alluded to, we have learned very clearly that low injury frequency rates do not necessarily mean low fatality rates. That is really a key learning for us. And that is one of the reasons why we have implemented the fatal risk protocols, because we believe there needs to be a complementary focus on fatal risk to support our overall safety programmes.

#### **3. The Relationship Between Injury Reduction Programmes And Fatalities**

And that is very much the next point, that injury reduction programmes will not prevent fatalities in themselves. A lot of the underlying causes of our fatalities are similar.

#### **4. Near-Miss Reporting**

We have learned that high near-miss reporting is a very healthy thing, and often high near-miss reporting correlates very much with declining injury rates. And encouragingly we have seen a doubling of our significant incidents in terms of near-miss significant incidents reported across the company, and that has really given us a good basis to learn from some of the issues that we face around the organisation. We believe that's a very healthy sign.

#### **5. Leadership**

Leadership has already been mentioned as being critical and crucial, and visibility around leadership, effective contractor management, two-thirds of our fatalities since the company has merged have been contractors. Twelve of the seventeen last year were contractors. It really highlights a great opportunity for us.

And hazard identification and risk awareness are fundamental.

#### **6. Fatalities And Classified Injuries**

Moving on to the point made about the correlation between fatalities and classified injuries, if I could just mention our measure of classified injuries and what that means, a classified injury is any injury that prevents a person on any given day from carrying out their full and normal duties. So, regardless of whether they're at work or not, if they can't perform their full and normal duties it's classified in that category.

And this chart really depicts clearly that there is no defined link between our fatality rates and our injury rates. You can see a steady decline in our injury rates and our fatality rates fluctuating.

#### **IV. Key Initiatives**

If I could move on now to some of the key initiatives that we have undertaken. Two of these have been very much driven from the top.

The first is an initiative we call the OCE, or the office of the chief executive, mandated programme, and it's really about zero harm before production and profit. And the second is an OPCO, an operating committee-driven programme around doing the things we say we're going to do, which we've called operating discipline.

##### **1. OCE**

I'm going to share some of the things we're doing there with you now. In terms of the OCE-mandated programme, these are the slides that were promulgated from the very top of the organisation right down to every employee. All of our operations stopped, and this presentation was given directly to them by the asset leaders and the line supervision at each of our operations around the globe. And it really sends a very clear message that zero harm must occur before production and profit, and if we can't produce safely then we shouldn't produce at all.

And it was really a trigger to recommit to our efforts of zero harm, and you can see the messages that we sent there. One of the points that I'd like to highlight to you is the fourth point there, that talks about operations being shut down if we can't operate them safely. And we've demonstrated that in each of our key operating regions of America and North of the Americas, South Africa and in Australasia. We have operations that have shut down following events and before events have occurred where we have identified that safety has been a concern.

##### **2. OCPO**

In terms of the operating discipline programme, this is one that is just being rolled out now. It really is as I mentioned about doing the things we say we're going to do.

It has four key components – one is a review of our asset leadership to ensure that our asset leadership is aligned with our objectives, and that programme has commenced as we speak.

The second is to provide resources around the implementation of the fatal risks and other training requirements. Those resources are being sourced now, and we believe that the implementation and successful implementation of these fatal risks will go a long way to delivering our objectives of zero harm and elimination of fatalities.

Each of our operations is conducting weekly meetings where we review significant incidents that occur, not only at those organisations but around all of our sites, and we ensure that the closure of actions and lessons coming out of those is being implemented effectively.

And the fourth one is really around holding people to account for any issues that come out of our accidents and incidents investigations, and that's really about the line of accountability message that Mike spoke about.

I think the important message with those two initiatives is that they've been both driven, developed and implemented from the very top of the organisation.

### **3. Fatal Risk Control Protocols**

I've already mentioned the fatal risk control protocols a couple of times, but it's important to understand where they've come from. We've identified ten key areas as being the critical risks that we face in our day-to-day operations, and these fatal risks have come directly from a review of our significant incidents and fatalities that have occurred prior to the merger of the two organisations and since the merger. And I think that's an important learning for us, that we have actually used the data from our significant incidents and fatalities to identify the risks.

And the implementation of these fatal risk control protocols is no easy objective. We're putting a tremendous amount of effort and resources around the organisation. I don't believe there's any other issue or any other initiative in the organisation has got the attention and the energy and the effort going into it than these fatal risk protocols. And we're spending in the vicinity of \$100 million implementing these around the company.

### **4. Identifying The Risks**

The next slide really reinforces that we actually did get it right identifying these risks. And it looks at our significant incidents that have been reported, these are incidents that have the potential to result in fatality under slightly different circumstances, or indeed have resulted in fatality.

You can see the yellow bars are the ones that have resulted in fatality in the last twelve months, and the orange are the significant incidents, near-misses, that have been reported around those key risks. And you can see that we have clear alignment between our significant incidents and our fatalities.

And you can see the ones that really pose the greatest risk there – it's surface mobile equipment, isolation and equipment safeguarding being the top three.

### **5. The Initiatives Work**

The last slide I have, whilst it's early days, it's an encouraging slide, showing that in fact if our initiatives and our strategies are applied, and management take direct involvement and show direct commitment towards safety, it does make a difference. And we're seeing some encouraging signs in the initial stages of this financial year reinforcing our leadership-driven [End of Tape]

Thanks for the opportunity, and we'll take questions

### **Concluding Remarks**

**Mike Salamon**

**Group President, Non-Ferrous Materials and Executive Director**

#### **I. Fatal Risk Control Protocols**

##### **1. Implementation**

Thanks, Barry. Just a few things to round out what Barry was saying. I think one thing which always reminds us to be humble: at the time that slide was prepared we had not had a fatal

incident in the new financial year. In other words, since 1 July. Tragically over the weekend we did have one. It really emphasises how management can never rest on this.

I think the other point from an operating excellence point of view is that what those Fatal Risk Control Protocols do when they are implemented well is not only to deliver safety but they deliver excellence in performance. It means that you have control over precisely everything that you are doing. Clearly if you have got that control over your operations you are going to be delivering excellent outcomes throughout.

In concluding, the message is first that we are driving the sustainable development agenda and safety in particular, but as Ian pointed out it is really across the board. It is very much driven from the executive management and the Board, and the line is absolutely accountable. We believe we have got sound and strong governance structures. We believe we have benchmarked the systems and procedures as being sound. Clearly the discipline to apply them rigorously is critical.

## **2. Opportunities and Challenges**

As you know, the sector is growing tremendously, driven by demand from China. That is giving us great opportunities, but of course new challenges as well. I mentioned the challenges of bringing on employees. It is also giving us challenges in moving into new areas for operations, and these do bring with them all the challenges of new employees, governance and corruption, and everything else associated with that. It is an area that is just going to get more and more important for us.

Overriding all, we are committed to very transparent analysis of what we do, and communication of it through forums like this, but also with the communities in which we operate and with our employees.

We are happy to take questions and answers. I will take it from there. We will start here and after four or five questions we will move to the phones and then come back here.

### **Questions and Answers**

#### **Question**

I would like to start on this safety issue because it strikes me that it's the HS&E or sustainability equivalent of a profits warning, if you draw the financial analogy. I have also got your 2002 presentation in front of me, and in it there is a bullet point saying there is a very strong commitment from senior management to safety. Can you tell me what the senior management are personally putting on the line to convince us that 2005, 2006, 2007 are going to be different from 2004? What percentage of their remuneration is allocated according to safety, and was any of that paid for 2004?

#### **Mike Salamon**

A couple of points. First, in a debate it is very easy to get very emotional about fatalities. Safety is not just fatalities, and I think that is an incredibly important place to start. Fatalities are terminal and final so they are very emotional. They are real people, and we take them extremely seriously.

However, when we look at safety, a fatality is almost a statistical aberration. We cannot manage just fatalities. What we have to manage is excellent operations, where we work very hard to minimise the hazards and to maximise the understanding of all of our people of those hazards. A lot of what Barry described is really doing that. If you look at the fatality outcomes, we had 13 in



the first year, then we had three, then we had 17. What has been consistent throughout, though, is the classified injury frequency rate, which is a measure of all incidents and accidents. That has consistently come down. When you say to me 'What is management doing to demonstrate better safety outcomes?', I have to answer you in that way. I cannot guarantee that there will be no fatal outcomes. What I think I would and really should be able to guarantee is that by putting in all this effort that we will continue to reduce the accident frequency rates. Clearly by putting a lot of focus onto the specific areas of hazards we should be eliminating the things where our statistical database tells us we have the highest risks. I am not going to say more about what we are doing other than what I have said, but I think it is an important takeaway that managing safety is not managing fatalities.

In terms of what management has riding on this, it varies through the levels, but it is of the order of 15-20% of the bonuses. Nothing was paid in FY04. Let's put it this way; when I say nothing, it is not every operation that had these outcomes. Everybody who was involved in operations where the poor outcomes took place had that zero component.

### **Question**

Does that apply to the Board level as well.

### **Mike Salamon**

It applied to me, for example. There are only two Executive Directors, myself and the CEO. It applied to both of us.

### **Question**

Picking up from that point, can you explain in terms of the structure where does Barry as Vice President for Safety sit and who does he report to? How is the governance of safety structured? I understand that it is also the responsibility of the line, but if you could explain how that all feeds in that would be useful.

### **Mike Salamon**

The structure of the corporation is that we have what we call the Office of the Chief Executive, which is the executive level management. There are three so-called Group Presidents to whom all the operations report. For example, I have the Base Metals, the Aluminium, and the Stainless Materials group. Accountability for delivery of safety or outcomes is the line.

We also have a Corporate Group of HSEC specialists who are essentially experts and advisors. The head of that is a guy called Tony Lennox on the Health, Safety & Environment side, and really the Community side is Ian Wood. Tony Lennox reports to me; I have a couple functional reports as well as line reports. Barry reports to Tony. We have a Health person, we have an Environment person, and we have a Safety person. Barry is our guru in Safety. He is clearly very, very involved in the development of things like these Fatal Risk Control Protocols. Both Barry and Tony worked with the three Group Presidents, myself and the CEO in developing these various strategies, but ultimately the Corporate Group are just advisors. It is myself, the presidents of the businesses and the asset leaders; those are the people who actually have the power, authority and accountability to deliver financial, production, safety, and environmental outcomes, etc. It is not the Corporate Group.

**Question**

You said that you had conducted life cycle analyses on your major products. I was wondering what learnings you had found from conducting that life cycle analysis and what you are doing to apply it moving forward?

**Ian Wood**

Thanks. The work has been done in association with commodity associations, as I mentioned before. Just to pick an example, the Nickel LCA has been completed through the Nickel Development Institute. If you have a look on the website you will find some very useful information there in relation to the outcomes from that project. One of the things that I think is a very interesting outcome, and one that I think we need to see occur in other commodities as well, is clear advice arising from that work about what are appropriate uses of metals. If you look at the NiDI site you will see that they actually say that there are some inappropriate uses of metals. The same obviously applies for other metals as well. Those are the sorts of things that are coming out of those analyses, and commodity associations are getting much better at promoting those sorts of aspects. The other way it feeds back into the business is through looking at new technologies, different ways of producing metals, and more energy effective ways of processing metals, as well.

**Question**

What process do you have in place to learn from the commodity association discussions that you are involved with, to actually receive feedback and make sure you are applying it to your own businesses?

**Ian Wood**

Look, I can't give you any specific aspect. The work has basically just been completed. I guess we need to feed that back into the businesses at the moment, but I can't give you a concrete example at this stage.

**Mike Salamon**

If I could just add a few comments. We are clearly members of those commodity associations, and in the particular example that Ian was talking about, NiDI, the Nickel Development Institute, Chris Pointon, who heads up our Stainless Steel Materials business unit, is in fact currently the Chairman of NiDI. We are very much part and parcel of the activity. We have our Health and Environment people involved in the various working groups, and that feedback loop is instantaneous. It is not as if this is something 'out there.' We are part and parcel of those associations. Along with other members of the industry we are funding those associations and setting the agenda. So when we do these life cycle analyses we are living through that and learning as that work is developed.

**Ian Wood**

Let me just add to that. If you have a look at the case studies in the back of the report you will see some examples where life cycle thinking has been implemented within various parts of the business to more efficiently produce metals. It is a cost issue, but it's also a resource input issue as well. I think you will see some good examples of that life cycle thinking flowing back into the company. As Mike says, it is an iterative process.

**Question**

One further question if I may. Looking at your fatality rate, a large number of those deaths resulted from contractors. What sort of system do you have in place with those contractors to incentivise them not to allow fatalities?

**Barry Formosa**

Thanks, Katie. In terms of what we have in place with our contractors, it really forms a key component of one of our HSEC management standards. First and foremost, contractors is one of those 15 standards; contractors and suppliers. So it was very much identified in the early days. However, as a result of the focus we have had on contractor fatalities we have identified some clear opportunities for things we need to do better.

In March of this year Chip Goodyear personally sent out a directive to all of our people around what we need to do around contractor management. That was around things like ensuring we had adequate resources in place to effectively manage the work being carried out at our operations by contractors, and ensuring that there was single-point accountability for each of our contracts and contract work going on at the site. We ensured that each and every contractor that comes onto our sites is trained correctly, introduced to that single-point accountability, and has undergone adequate familiarisation with the work. We are ensuring that every piece of work that contractors do is agreed to and signed off by that single-point accountability.

A lot of the contractor learnings we've had in regions where there are labour pools of people. One of the learnings for us has been that we have not adequately controlled who has come on and off our sites. Regarding the labour pools, we have contracted the organisations to deliver the work, and they have, for one reason or another, brought other people onto the site without us being in full control of that or understanding the capabilities of those people. We have tightened that right up. The other thing we are doing is rolling out contractor management training to all our Line Supervisors who are responsible for contractors around the globe. That is a training programme that is being developed in-house that meets the needs of our contractor management standards. It has been developed by our own people for our own people. That is being rolled out across the globe currently.

**Mike Salamon**

Just to add a few points. We probably have as many if not more contractors working for us as we have employees. Especially with the rising project activity, we are probably well in excess of 30,000 at the moment in the number of contractors that we have. Some of the sites have really taken this to quite high levels; probably state of the art in terms of how do you manage a contractor operation. There are a couple of case studies at the back – one is Hillside and one is Worsley – on the sorts of things they are doing to manage contractors excellently. The areas that are the real focus are this single point of accountability within our organisation for any given contractor, and the absolute rigor of what a contractor is there to do.

The best practice territory now is where we are creating scorecards for that contractor where they are self-assessing themselves, and we are going back through that. Those self-assessments are highlighted. These use the 'one strikes, two strikes, three strikes - you're out' type thinking, obviously depending on how bad the strikes are. We have significant interaction with those contractors and increasingly with the CEOs of contractor companies. There is a whole variety of approaches to that. Really the incentive is if you are going to work with BHP Billiton, then you are going to work with BHP Billiton in accord with our charter, our safety policy, our HSEC management standards – or you're not going to work with BHP Billiton. That is the real incentive.

**Question**

So the contractors that have lost employees are potentially on a warning list, or no longer working with you?

**Mike Salamon**

There is a variety of situations. This has happened over a period of time in many different places. Absolutely, some will no longer be working for us, and some will be enhancing their activities. I think the same point that I made earlier applies; I know it is an emotional thing, but managing safety is not managing fatality. I personally am an underground miner by background, and let me give you a specific example of why I say that. When you are working underground in the stope and you have a fall of rock, that fall of rock falls there and doesn't touch you, nothing has happened. If it falls there, you're dead. I think that gives you a sense of why managing fatalities is not actually how you can manage the safety and the excellence of the operation. You have to manage it across the board. Really what you should be looking at is why that rock fell, not the outcome of whether it fell on somebody and killed him.

**Barry Formosa**

Just to support Mike's comment, that is why we place so much emphasis on the near misses. We have had a doubling of the reporting of near misses. We really believe that the lessons we can learn from those near misses provide us with the critical data to manage our risks.

**Mike Salamon**

Should we be going to the phones at any point?

**Operator**

We have one question.

**Participant**

I am looking at the overall performance summary chart with Standards 1-15 against the 0-5 table. It appears to me that while all the averages there are rising, which is clearly great news, we are seeing a greater disparity between the performance of the top and bottom of the organisation. There appears to be quite a long tail in some of the operations. This is particularly true against certain of the standards. You talk quite a bit about the contractors area; that is one of them. It is also true in Operations & Maintenance, in Communications Consultation, and so on. I am just interested to hear from you a little bit about how effectively you can manage that tail of operations in such a large organisation and really drive the performance, not only for the best performing operations and the average, but also for the tail.

**Mike Salamon**

I will start, and then I will ask my colleagues to add on to this. I think you have actually hit on a very important facet of the challenge that we face. We look at our various operations and many of our activities in the context of maturity curves, where really outstanding operations are going to be the ones that are at the high end of those scores. You will have managements who are really focused on the behaviour of their elements of managing, you are going to have employees who are doing risk assessments all the time and who do stop and think and are highly concerned about

what their colleagues are doing. They work effectively as teams, they are concerned about the environment, etc.

At the other end of the scale you have got operations, which are still pretty much command and control, very hierarchical, people in many instances know relatively – have perhaps basic training as opposed to in-depth training. The concept of doing personal risk assessments is absolutely foreign, etc.

If you look at the genesis of a group like ours, corporately we are very many different corporations, through mergers and acquisitions over the years. We are also in many different geographies and in many different industries. The consequence of that is that we happen, within these hundreds of operations, to have operations spread across that entire maturity curve. I think you have absolutely hit on the focal point, which is really that the best are amongst the best in the world. That is not our major area of concern. Our major area of concern is lifting the bar for the bottom. In a hard sense, beating them is not going to help. We have actually got to help them go up that maturity curve. There is no instantaneous way of doing that. Both in terms of leadership and in terms of employees, one has to take them through it; you cannot short-circuit the maturity curve, you actually have to go step-by-step through that. If you look at the activities, particularly in the area of operating discipline, that was very much where Bob Kirkby, Phil Aiken and myself focused. We said what we are about is not making the great even greater; they really are good. It is about helping the bottom guys climb up that curve quickly.

A lot of what we are putting into this is determining what excellent asset leadership does look like. The training capacity associated with those Fatal Risk Control Protocols using our investigation systems, and indeed being disciplined about what we do and being accountable about what we do, all of that is focused very much at bringing up the bottom. If you look at the 17 fatal incidents that we had, these are actually in only about five assets out of 100. It is about trying to make sure that we help bring up the bottom.

As an underground miner I am inevitably a bit superstitious, so I am nervous about people saying things have got better because almost the next day they start to get worse, but I have to say that the indications are that the enormous effort we are making has had an impact. The impact that was probably the greatest of all was when we stopped operations. In southern Africa we stopped some operations for up to three weeks. In my knowledge, and I have been involved in the mining industry for over 30 years, I have never seen that done before. We actually stopped operations utterly, and we got the guys focused on safety. It was all about this sort of learning experience. Firstly, the generic learnings. Then secondly, back into their operations seeing what they can do with their specific section and with their specific area to make it safer, to understand the hazards, to think through the hazards, and to get into that culture of thinking. That is probably the biggest challenge that we have – getting people to stop and think. That is really absolutely critical.

### **Ian Wood**

I would just add one point in terms of interpreting that graph. I should just stress that this is a three-year rolling audit cycle. Every one of our operations is audited every three years. So in the three years of data that you see there, it is not the same operations being audited in each three-year cycle; it is one-third, one-third, and one-third. I guess I would agree with you that if this was the full 100 operations data in each year and we were seeing the tail actually getting lower or worse in a particular year, then that would obviously be a very disappointing outcome. It is still disappointing that after three years we have a site that can be the worst that we have audited on that particular standard, but again I do want to stress that that site has not been audited before.

We use the audits as a learning experience; as Mike said, this is not about punishing sites, it's about pointing out to them where the gaps are. They are required to develop a performance improvement plan to get themselves to Four in terms of our full implementation, and that

improvement plan needs to be approved by Corporate. They are helped to do that. So this is a continual improvement programme, and because we do not then go and audit that site again next year, you don't see that improvement coming through so strongly. We will be seeing that, we believe, when we audit the first round of repeats next year, or in fact this year.

### **Barry Formosa**

Just to build on Mike's comment, if I could round up that question, one of the real great strengths of our organisation is in fact its diversity, the length and breadth of operations we have around the globe, and the fact that we do have operations that are really operating at that excellent level. The opportunity to learn from those operations and share internally is a key strategy we have. An area we haven't touched on today is our operating excellence area.

Operating excellence is all about learning how to do it right and sharing that across the organisation. Within our operating excellence area we have extensive networks and communities. The key function of those networks and communities is to share those leading practices, and share the experiences and lessons from our operations with our other operations. We have a lot of those focused clearly around critical HSE issues, and indeed safety issues. For every one of these Fatal Risk Protocols we have an existing community or network that is focused on sharing the practices. We have extensive networks in areas like Global Maintenance, Mine Operations, Underground Operations, Electrical, Safety, Light Vehicles, Hot Metals, Processing Safety. Those groups fundamentally drive the sharing and learning across the organisations to bring that performance a lot closer together.

### **Question**

I have two questions. One is referring back to your answer to Katie regarding the contractors and their self-assessment forms. I was wondering what due diligence is in place for the single point of accountability to assess contractors prior to hiring them? I know that your explanation for the doubling in CFC emissions over the years was that it was a result of the Petroleum business hiring out services to a tanker organisation, which had CFCs in their air conditioning, which seems to go against your management standard on that particular issue.

The second question was referring to something you said last year about working with the ICMM on the harmonisation of safety data across the industry. I was wondering if you could give us an update on where this has got to, and whether we can expect to see you reporting on your safety performance against an industry standard?

### **Mike Salamon**

Ian, do you want to do the first one?

### **Ian Wood**

I am not actually in the position to answer specifically in relation to the contracting of the ships for Petroleum, and I am not sure David would either. The CFC releases that we reported were related to the use of those materials on the ships. They were not operated by us, they were contracted to us, and we have reported the data.

### **Mike Salamon**

Barry, you talk about how we assess contractors.

**Barry Formosa**

In terms of holding people accountable and the due diligence around a single-point accountability, there are a number of things we have in place. Again, one of the things we have not mentioned is one of the recent initiatives in the organisation was an addition to the HSEC standards for contractors. It is a 41-point checklist, and one of those points on that checklist is to ensure that some review is done of the contract company before they are employed. One of the lessons we have learned, and again this has been a hard lesson to learn, is that when you are assessing contract companies you do not just assess their injury rates. You go and look at them and you assess their whole culture. You assess how they go about their business and look at the alignment of that with our objectives. I think previously, perhaps if you go just on injury rates, you might find yourself facing some struggles when you actually engage those contractors.

Secondly, we have a Standard Terms and Conditions for Major Contracts document that is being developed within the organisation, and within that guidance document there is clear guidance around how we will look at our contractors before we actually engage them and what sorts of things we need to assess. So those two things are really the key ways.

**Mike Salamon**

Just to scope this - since I think people assume we can do all this sort of stuff centrally - we will enter into probably tens of thousands of contracts annually, globally. Those will be of all sorts; anything from \$1 billion to hundreds of dollars. This is why ensuring that we have good standards and systems and apply them rigorously is critical. You cannot police that from the middle. I think people hugely underestimate that. If you have 100 operations spread on six continents you cannot be Barry Formosa policing this. The only way that you can effectively manage that is to have very strong standards and systems, rigorously applied. When I talk about the maturity curve, in a sense it is really that rigor of application. I think it is also important to recognise, as I said earlier, that you cannot beat people into submission on this one. They are doing this in Suriname when I am asleep. I have to trust that they are effectively trained and rigorously applying it. I can only come back afterward if the system has failed, but we have to put in the front end of this, and that is really what we are working on. This maturity curve is an important issue; we have got to get the people up the maturity curve, and some from very low levels.

**Barry Formosa**

Just one more point to build on Mike's comment. Regarding the Standard Terms and Conditions I mentioned, it's important to recognise that that is based around risk. As Mike mentioned, we have lots and lots of contractors. The local sandwich shop that delivers lunches to our officers on a daily basis would obviously not undergo the same amount of rigor and review as a major contractor that is coming in to do high-risk work. It is important to keep whatever we do in Safety practical and pragmatic. Again, one of the lessons is that if we do not do that we overwhelm the organisation with what we're trying to achieve. Keeping things practical and pragmatic creates understanding and also involvement because people understand what we are trying to do. That is important.

**Question**

And the ICMM safety data?

**Mike Salamon**

Harmonising.

**Barry Formosa**

I was just coming back from a meeting this morning on the Safety & Health Task Force. The good news is that the ICMM have adopted indicators based around the indicators that BHP Billiton use. We put together a paper some time ago on the use of lead indicators, and we also looked extensively at lag indicators. I mentioned earlier the classified injury rate. That criteria has been adopted as a principal; the exact criteria has been adopted by the ICMM as the principal lag indicator for the industry. The lead indicator paper that we put together is being used as the basis for advising the industry about implementation of lead indicators. So that was a real positive outcome from that meeting this morning.

**Question**

First off, just a word of encouragement perhaps. I thought the report was really good this year. It is quite rare these days that a report hits my desk and I think it is a real step forward from where an individual company was last year, but also in the industry context. I think your report's achieved that. I particularly welcome your announcement - or at least I think it was an announcement - today that you are going to be publishing a position statement on biodiversity, which is very welcome.

I have got three questions, which I think divide up as one for each one of you. First off, Mike, I wonder if you could tell us how many dismissals or disciplinary instances you had last year against your code of conduct, and what kind of categories they mainly fell into?

Secondly, Ian, you said you would touch a little bit more on the implementation of your human rights code. I wonder whether you could tell us - particularly in the context of Kalahari diamonds - how you respond to the accusations that you have been complicit in the forced relocation of indigenous people in the Kalahari?

Barry, we have heard a lot already today about Safety and the fatalities. Something I am not quite getting from what you are saying in the report, while there is a lot about what you are intending to do about things, is a real sense about why things happened last year the way they did. I wonder if it is possible to give a succinct reason for why you think there was an increase in fatalities?

**Mike Salamon**

Let me start by saying that I do not know the answer to the first one. We actually don't collect the information as to how many people we dismiss. I know of specific situations where I followed them through. My judgement is that it's of the order of somewhere between a few hundred to 1000. It is a fairly material number, and it goes quite high up the totem pole. We have a pretty rigorous investigation system that we apply. If we find that people have really been negligent or almost wilful in terms of not pursuing whatever the operating procedures are, we are pretty tough on them. Barry, I don't know if you - it is not data that I see -

**Barry Formosa**

I couldn't give you the exact numbers, but I am aware of -

**Mike Salamon**

I would say there are a few hundred.



**Barry Formosa**

I am aware of a lot of people.

**Mike Salamon**

Yes. So it is pretty tough.

**Barry Formosa**

Yes. We have thought about reporting this sort of data, but it is really hard to represent something that is logical and meaningful.

**Mike Salamon**

I think the other thing which again people underestimate is that we always tend to think of it in the context of the cultural framework we are living in. If you talk here in London you think here in the norms of the UK; in Australia you will think in terms of the norms of Australia, in Brazil, etc. They are actually very different. So this is where again a lot of what you see in those standards - I tend to think of it in the same way that auditors work in the accounting world. In the UK that is really on the basis of principles, not very detailed rules. I think if you look at our HSEC standards they are that way inclined. The nitty-gritty application of those actually has to make sense in Colombia, or in Australia, or what have you. Clearly we have to abide by the law, but we tend to go a lot further than the law. Even things like dismissals; you will find that there are quite significant cultural differences about how you apply a disciplinary programme, and you really should not try to apply an Australian disciplinary programme in South America, or vice versa, or you are just going to have a train smash. It has to make sense to the management, the people, and the community there.

**Ian Wood**

On the human rights issue in Kalahari diamonds, this is a very complex issue with quite a significant degree of background and history to it. It is one of the issues I referred to that we have had an allegation around during the year, and I said I am happy to talk about it.

The background, and I will keep this very brief, is that the Kalahari game reserve was established, I think in the '70s, as a game reserve. The Kalahari bushmen at that time were nomadic and they moved around and did not remain in a particular location and therefore adversely impact within the game reserve. Diamond exploration in the '70s wound up developing some water bores which the bushmen wanted to utilise, and it was of great assistance to them. They wound up establishing permanent settlements in the centre of the game reserves, a long way from any other services, and wound up, as I understand it, resulting in localised impacts because they were no longer nomadic. They were starting to impact quite significantly on the ecological values of the game reserve, which it was primarily established for.

The basic situation is that the Botswana government has been seeking to relocate the bushmen out of the game reserve so that they can provide services to them in settlements where they can cost effectively get services to them, rather than trying to provide services in the centre of the game reserve in a region where they are actually adversely impacting the values for which the reserve was established. Now you can form a view about whether that is a good or bad thing, and clearly some people feel that the bushmen should be allowed to remain within the reserve and live however they want. We do not have any issue with the bushmen being present within the game reserve; it makes no difference to us at all.

We are doing grassroots exploration, which involves flying out FALCON technologies, so we don't even touch the ground. We use FALCON technology over the game reserve, and if we identify anomalies that look interesting in areas where we obviously have leases, we can go in and drill those areas. This technology enables us to do most of it from the air and discount vast areas of the game reserve. It would be ridiculous to go to the Botswana government and ask them to please relocate these people so we could fly a plane over the area. It really makes no difference to us.

We have not made any representations to the Botswana government to relocate the people. We work all around the world with local communities, indigenous communities. Our EKATI diamond mine in Canada is a terrific example of us working with an indigenous community. They are now a very substantial part of our workforce. They provide services to our mine site there. There is no way we would ask a government to wholesale relocate communities; it just makes no sense. However, the allegation is that we are doing just that. My view is that that is being promoted in the hope that by putting pressure on mining companies like ourselves and De Beers we will go and interfere in the Botswana government's decisions about how it manages its sovereign responsibilities. That is just not something we feel is appropriate for us to do. We have certainly made it clear in discussions with the Botswana government that we do not feel there is any need to relocate the people, but it is inappropriate for us to make public statements to the Botswana government that they shouldn't be relocating these people. We don't have a right to do that.

### **Mike Salamon**

Let me start on the last one, and Barry can fill in. As I have said, if you actually take the context of safety over the last 12 months, there were 17 fatal accidents. It was actually six assets out of the 100 which had the fatal accidents, which implies that there were some that had multiple. In fact, the Chrome business had six fatal accidents, so six of the 17 were in one asset. At the same time, our classified injury frequency rate was going down. So in one sense, you say to yourself across the board probably the systems and procedures were working, but in certain places we had issues.

Then you ask: What are the common denominators around those issues? They are not perfect ones, but we did an enormous amount of soul searching and analysing to get to the bottom of those. I would say there are two themes in those. One is that we probably overestimated the impact that we have had with our safety systems and procedures in certain areas. If I look at some of those places and look at comparator companies - in other words not the big diversified companies but the very specific comparators in that particular industry, related industry, or geography - we actually look good. In other words, yes, we are probably having an impact, but we haven't brought the tail up anywhere near as much as we thought we had.

[Loss of Audio] I can tell you it is the most important. If there is one legacy that I can leave in that company it is that 35,000 people stop and think. That would be an enormous achievement.

Regarding change management, you don't think about what actually represents change; you change a General Manager, you increase production, you move a geographic area. Remember, our business is always changing because we're moving geography. I think that is something that we vastly underestimated; how rigorous one has to be about change management and the consequences of that.

If I were to name the two areas - one is that we underestimated the impact we'd had, and the other one was that there is a lot of change going on in our industry and obviously as demand rises the pace of that change rises as well. We underestimated how much effort we have to put into getting people to think their way through or plan through that change.

**Barry Formosa**

Just to build on Mike's comments, from my perspective one of the key learnings from last year, where we put a tremendous amount of effort, was when the company merged and the whole issue of zero harm at the beginning of the merger in 2001 took high significance and profile. A tremendous amount of effort went in; as Mike mentioned earlier, we had 13 fatalities in year one and we reduced that to three in year two. I don't doubt in the organisation that people believed we had this thing beat. People believed that we were on top of it, and that our systems were so embedded that in fact they were going to deliver sustained improvement from here on in.

What we have learned, unfortunately the very hard way and sad way, is that the amount of intensity you need to apply to maintain improvement in safety needs to double as you get to those levels of excellence. We are now looking closely at what we need to do as an organisation, when we start to see an improvement as we have now, to maintain the intensity, the focus, and the clarity around our strategy. What we need to do to keep that happening at the levels we require so that we don't have this cyclic nature of high management attention versus high fatalities, with high management attention bringing it down, and then low management attention and having this increase or cycle. I think that was one of the key lessons for us.

**Mike Salamon**

I gather we have some questions on the phone, so let's take those.

**Question**

Nine of the fatalities that occurred during your previous financial year were from South Africa. I wondered how the safety at your South African mining operations compared with that of the operations around the rest of the world. I also saw a bit of a contradiction; you have a zero harm target, yet you cannot guarantee no fatalities. I was wondering if you could reconcile that, please. Thank you.

**Mike Salamon**

You are correct, nine of the fatal accidents took place in South Africa. We had the worst HSE outcome in the world in South Africa, and we also had about the best one there as well. We have quite differing levels of maturity in the various operations, and we have put an enormous amount of focus into the ones which were at the bottom with some very, very significantly positive outcomes.

I think the answer to the second question is that zero harm is an objective. I think that is the challenge that we face in achieving zero harm; management actually has to be at it every single day, and there are no guarantees in life.

**Mike Salamon**

There is a second questioner there, I believe. Is there another question on the phone?

**Operator**

No, there are no more questions.

**Mike Salamon**

Any more here?

**Question**

I have two questions. One relates to a new environmental disclosure in your report, which is hazardous mineral waste. I was wondering if you could elaborate a little bit on how to interpret that number, which is 17 million tonnes of hazardous mineral waste. How is BHP going to use the findings to influence your environmental management and possibly set new environmental targets? For future reporting, are you going to widen the scope of your reporting on mineral waste to include all mineral waste by type and how they are going to be disposed of?

The other question is on coal bed methane; I was quite interested to hear about that earlier. I was wondering what the scale of that impact is compared to the group-wide GHG emissions that you have?

**Ian Wood**

In terms of the mineral waste issue, hazardous mineral waste is based on the site-based classifications. It is dependent on the operational environment as to whether a particular waste material is classified as hazardous or not. We do not have an internal BHP built-in standard of what constitutes hazardous waste or not, so it depends on the local regulations.

In terms of how that material is handled, all of our waste is handled in permanent storages appropriate to the nature of the material. Hazardous mineral waste, for example, would almost certainly be in a lined impoundment with appropriate capping, monitoring, etc. It is a regional classification rather than an internal guideline in terms of the data that we reported.

In terms of how we report data going forward, we will be reporting additional data on mineral waste material. As you are aware, we do not currently report all mineral waste. Our intention is to do that; in fact we did try to do it this year, but we just did not have confidence in the quality of the data. This was the first year that we actually asked our sites to provide that data. We got a data set that we just did not feel comfortable with, and decided not to report it this year. We do plan to next year, and that will be broken down into waste-rock & tailings and how that material is stored and handled. Was there another part to that question?

**Question**

Just the coal bed methane.

**Ian Wood**

I can't give you a detailed split on the relevance of coal bed methane compared to our overall emissions, but I would guess it is somewhere in the order of 10-20%. It is quite material for us.

**Mike Salamon**

David, do you have any insights into some of that activity?

**David Walker**

I'm not sure I can actually give you an idea versus our total emissions in terms of an annual basis.

**Mike Salamon**

Maybe just some of the things we are doing.

**David Walker**

We are doing this in eastern Australia where we have access to quite an amount of coal fields that we are involved in. What we are actually doing, which is the benefit, is actually de-gassing the coal, which makes it safer and easier to mine. At the same time this produces a clean fuel, which is being used for power generation in eastern Australia. It has an all-around benefit: we are producing natural gas, which is recognised as a clean fuel, with lower subsequent emissions when it is actually burned, which is obviously a benefit. At the same time, it is producing safer mining conditions in the longer term as well.

The total volume we produced from there is about seven million barrels of oil equivalent; I would have to do some sort of mathematics to figure out what that is like versus our total emissions, but that is the plan for this year. It will be something like that. We will do the maths and get back to you and work that versus our total emissions, but I don't know the number off the top of my head right now on a ratio basis.

**Question**

I wonder if you could talk a little bit about climate change and your approach to greenhouse gas emissions. I see that Chip Goodyear made a speech on renewable energies and fossil fuels needing to coexist, and seemed to indicate that this is an area you'd be looking at. I wonder if you could explain a little bit more about that. And could you talk a little more about your approach to the Clean Development Mechanism, which you said before you were looking at to offset some of your carbon emissions?

**Ian Wood**

Just back on the methane issue. We do actually report that; it is 12% of our overall greenhouse gas emissions, so it was in that 10-20% range that I mentioned.

In terms of what we are doing on renewables, I think we should be very clear on this: BHP Billiton is not proposing to invest in renewable energy technologies. What we are proposing to do is more efficiently utilise fossil fuels in our own activities, hence our internal targets on reducing the greenhouse gas intensity of what we do.

We are also looking at helping the global society more effectively utilise fossil fuels as well. We are investing a significant amount of money in looking at clean coal technologies. On the methane conversion side of things that we talked about, we have three elements to that. We are looking at geosequestration; that is potentially linked to the methane project as well, but it can also be used for other forms of carbon-based energy generation where you can produce a high concentration of carbon dioxide. So we are looking at geosequestration, as well. We are also looking at clean coal technologies that bypass the conventional combustion process. So gasification processes that can produce a pure stream of hydrogen and carbon dioxide. The hydrogen can be used obviously as a hydrogen fuel source with the only emission being basically water, and then again, producing a concentrated stream of carbon dioxide, which through geosequestration can be pumped back underground. That is where we are focusing our efforts. We have core competencies and core interests in that side of the business. We are not proposing to get involved in windmills or photovoltaics or other technologies that are outside our core competencies.

**Question**

There was a second part of the question on the Clean Development Mechanism and projects in southern Africa, which you have mentioned before.

**Ian Wood**

We are pursuing CDM opportunities there. They are actually progressing very slowly. Bureaucratically and from an administrative point of view, it looks as though it will be very difficult to get a CDM project up in South Africa. We are still pursuing it, but it is certainly progressing very slowly. The actual transactional costs in getting something to the point where it can be verified and proved and commissioned as a certified CDM project is very, very difficult, and I guess the more we go into it, the more we are finding it very complex and potentially not worth the effort.

**Question**

I wonder if you could expand a little on the process of planning for closure and of minimizing the impact that has on the local communities that do come to rely on depleting assets?

**Ian Wood**

That is a good question and I would encourage anyone who is interested to look at the detail of what we have just implemented around the closure planning process. The key, from our point of view, is to consider closure as soon as possible and preferably prior to the commissioning of a project, so that right at the outset through a consultative process with local stakeholders, everybody has an understanding of what we are trying to achieve in terms of the final land form, the final land use, the benefits that will potentially flow to local communities over the life of the project, to ensure that we do not wind up in a situation where within a couple of years, we are trying to achieve an outcome that we really should have planning for right from the outset. So that is the key, and if you have a look at the closure standard, you will see a very detailed process through which each operation needs to go through. It starts on page four through to page five. It really goes through all of the time frames, the deliverables and what we expect from each operation in terms of planning for closure, ensuring that the costs are adequately identified, incorporated in our accounts, provided for, and as I said before, the closure outcome delivered at the end of the day.

**Mike Salamon**

In all reality, I think if you do not do what Ian says, the worst situation would be where you have an operation that is finished, and then you have a problem. You cannot have a good outcome there. It is just minimizing the bad. If you start with closure in your head, you can deal with it as you move away from start towards closure. The later you leave it, the bigger your problem. I think one is living in dreamland if you believe you can solve that problem towards the last few years of an operation. The simple reality of the industry is probably 90% plus of the industry is in that situation, but they have never envisaged closure before they started, so there is a problem. We can whistle in the wind; that problem is not going to go away. We are just going to have to manage it. But there are no silver bullets.

**Ian Wood**

If you are planning for a particular outcome from the outset, you can place waste rock dumps in a way that they can be rehabilitated in accordance with the land form that stakeholders want. If you don't do that, then at the end of the day the stakeholders are saying, well, we want that moved;

that is a massive cost. So it makes a lot a sense, just purely from a cost point of view, to plan from the outset.

### **Mike Salamon**

From a community point of view as well it is ensuring that the financial flows that inevitably go in-country, there is a reasonable proportion of those that go in the region, and that there is infrastructure and structures put in place to make sure that something effective and sustainable and long-term is created from those financial flows. You cannot start that at the end.

### **Question**

Climate change, if I may. Three quick questions. Could you give us an update on your carbon trading activities, which I think were just starting off with the presentation you gave last year? Tell me a little bit more about your internal target about reducing the greenhouse gas intensity of your products and how long that target stretches ahead. Finally, whether you have done any analysis of a global price for carbon dioxide emissions emerging globally, and what that means, or indeed how that feeds into your investment decision-making?

### **Ian Wood**

In terms of carbon trading, we are now active in carbon trading. We trade carbon, and have done so quite successfully. We have been stapling credits to coal shipments. I guess it is a way of enhancing the attractiveness of that product to customers. It is an area that we are gaining experience in, and that is basically why we started doing it, so that we can gather those skills internally. I do not think it is huge amounts of money, but we are certainly trading.

In terms of the intensity target, it's a five-year target. We are two years through that now. We have already almost doubled the target in the first couple of years. Clearly, this is something that we need to keep as a stretch, and so we will be ramping that up again as we go through the review of our targets. I should point out, Mike, that a lot of that improvement in the intensity in the last year was bringing on some new aluminium smelters. That is not something we do every year; it is a lumpy kind of thing. As we bring on new capacity, which is more efficient than the old, you will see that intensity coming down. But it will be lumpy; I would not expect to see another 4% reduction next year, necessarily.

In terms of carbon pricing, this is something that we put a lot of effort into. I think it is something that we do very well. Talking to other companies, they are very interested in how we do this. Basically we have a carbon pricing protocol. We apply that to all new investments with the potential to generate over 100,000 tonnes of carbon dioxide per annum. It is used as a sensitivity, so we test new projects against this carbon price, which goes up over two commitment periods under the Kyoto Protocol so it goes out about 25 years. We have projected that price based on the best market intelligence that we can get and how we expect that price to evolve over time, and obviously the error bars on that grow as you go out. The idea is that we test all of those significant investments against that price to ensure that they remain robust under those credible carbon pricing scenarios, so it something that is very active. It is treated in exactly the same way as our other pricing protocols, so each year we review it. We have just done that. I think it is going to the OCE or the Board—

### **Mike Salamon**

In the next couple of weeks.

**Ian Wood**

Yes, in the next couple of weeks. It is annually updated. We don't disclose the price publicly, but I can assure you it would not come as any surprise to you. It is based on what we see in the current trading market.

**Mike Salamon**

Any last question?

**Question**

I just wanted to ask a quick question on your water management plans. You say you developed them for sites that use over 500 megalitres, and then for some sites that use less than that. What percentage of sites are covered? Do you ramp up the vociferousness of the water management plan in countries, which have water scarcity or water poverty?

**Ian Wood**

Water is a critical issue for a number of our operations, and so it tends to get picked up; where water is scarce it's a major operational issue. I would guess that Escondida is probably the best example we have got.

**Mike Salamon**

And Yabulu in Queensland.

**Ian Wood**

At Escondida, just to give you an example of some of the things they are doing, they are commissioning a desalination plant to actually pump desalinated water all the way up to the mine site to reduce their reliance on the ground water that supports the Salars in the region. It is something that we treat very seriously. It is factored into all our operational environments where it is a critical issue, so as I said it comes up anyway. In terms of what proportion of sites are covered, I think we have that. It is 98% of the sites that have water consumption above the level at which the target is set; I just can't recall the proportion of our sites that that represents.

**Mike Salamon**

Ladies and Gentlemen, I think we have had a pretty full section this afternoon. I really appreciate it, and hope you enjoyed it. I suspect we will back here next year. Thank you very much.