

## METALLOYS HSEC SITE REPORT FOR THE PERIOD:

1 JULY 2004 TO 30 JUNE 2005



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### INTRODUCTION

Metalloys, as part of the BHP Billiton Group is committed to the stringent Health, Safety, Environmental and Community (HSEC) requirements set by the company. As part of the BHP Billiton Charter and HSEC Policy commitments to communicate and engage our stakeholders, we aim to share information on our performance in these areas.

As a commitment to achieving and maintaining the standards set by ISO 9001: 2000 and ISO 14000 the company also aims to divulge any relevant information to the stakeholders in our operation. The stakeholders in our operation include our employees, shareholders, the community within which we operate and the relevant government agencies.

The time frame of this report will cover the period 1 July 2004 to 30 June 2005.

### COMPANY INFORMATION

Samancor first began producing Ferro-alloys in 1938 as Amcor Limited at a small plant in Newcastle. In 1942 the operations extended and the first furnaces at the Vereeniging plant were commissioned. The group's existing manganese alloys operations at Meyerton dates back to 1951 when Amcor's ferroalloys works at Vereeniging closed down.

Today the Meyerton plant, called Metalloys, is one of the largest producers of manganese alloys in the western world. Samancor is efficiently operated by BHP Billiton, which is one of the largest resource companies in the world.

Metalloys is situated close to a well-established labour force. The works are surrounded by the national power network and situated in an industrial growth area near the centre of highly sophisticated supporting industries. All the raw material required by Metalloys, besides coke and quartzite, are supplied by operations within the BHP Billiton Group.

The plant is highly adaptable. Five of the eight furnaces can be deployed for the production of either ferromanganese or silicon manganese, depending on market demand. Computer directed weighing and mixing of materials ensure that the correct proportion of the ores, reductants and fluxes are fed into the furnaces through feed chutes. These raw materials are fed around the electrodes through which electricity is fed, causing tremendous heat. Chemical reactions take place and the metal oxides are reduced.

The furnaces are tapped; the slag or waste material removed and the molten alloys are cast in layers on top of each other or onto a casting machine. Hot metal transfers take place at West Plant where hot metal is fed directly into the oxygen-blowing converter

(OBC), which forms part of a joint venture called Advalloy. At the OBC, oxygen is blown into the hot metal while it is stirred with carbon dioxide to reduce the alloys carbon content thereby creating value-added alloys. The products are crushed and screened to exact customer specifications. They are then railed or trucked to local consumers or exported overseas, either in bulk form or packed into drums, bags or containers.

Manganese, in the form of bulk alloys ferromanganese or silicon manganese, has a major application as an additive in carbon steel making processes. The main properties of manganese are its ability to act as a de-oxidising and de-sulphurising agent in steel making processes, which are still relied upon today. Both ferromanganese and silicon manganese are also utilised as alloying agents.

Examples of end products, having high-strength properties due to the incorporation of manganese, are structural steels, high tensile pipe steels and heavy plates, engineering steels and some manganese stainless steels. Silicon manganese is employed in the place of ferromanganese or ferrosilicon mainly for economic reasons. It is also used whenever lower carbon or specific alloying characteristics are required.

## **HSEC POLICY AND INFORMATION SYSTEM**

Metalloys is ISO 9001: 2000 and ISO 14001:2004 certified. These systems place a large significance on communication of applicable standards and policies to our employees. As required by these standards, regular internal and external audits are being conducted at scheduled intervals. These audits also contain a legal compliance component, which focuses on new and applicable legislation. All the shortcomings identified as part of these audits are then recorded and actioned by means of the existing ISO systems. An electronic abnormal occurrence report system allows for the recording and timeous tracking of the findings raised by the mentioned audits. Where required, longer-term action plans are put in place and managed on an individual project management basis.

During the period 1 July 2004 to 30 June 2005, Metalloys achieved all the BHP Billiton targets in terms of the HSEC scorecards. These targets are now managed through the five resource management plans, BHP Billiton 15 HSEC Standards and the Fatal Risk Protocols. Regular formal feedback sessions on these issues are held by means of an established HSEC Executive meeting on a monthly basis that is chaired by the General Manager of Metalloys.

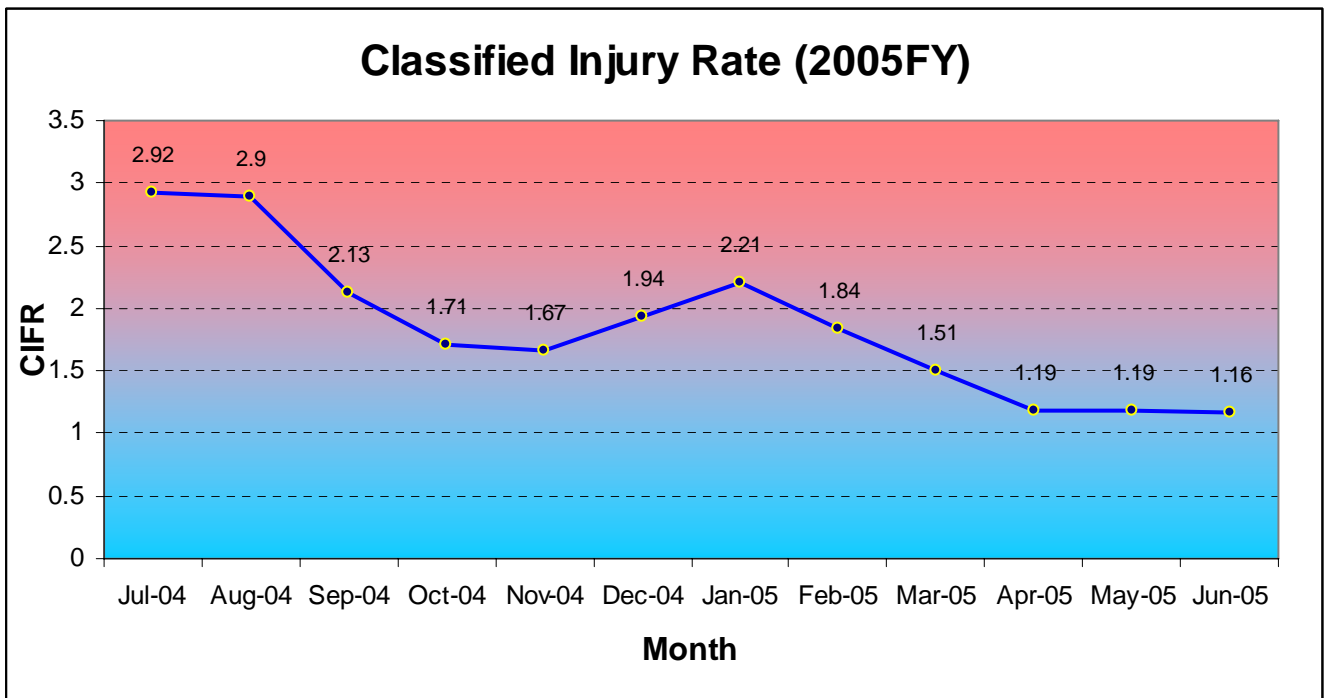
## **AREAS OF RESPONSIBILITY**

Metalloys has a dedicated Safety, Health, Environment, Quality and Community (SHEQC) Department, which consists of one Risk Manager, One Health and Safety Superintendent, one Quality and Environmental Superintendent, two SHEQC Coordinators and a Hygienist. The Health and Safety Superintendent is charged with Health and Safety issues whilst the other is responsible for Environmental and Quality issues. Both these superintendents report to the Risk Manager. The Risk Manager reports to the General Manager. In addition, one SHEQC Coordinator is responsible for Quality issues while the other for Environmental Issues and they both report to the Environmental and Quality Superintendent. It should be noted that a culture has been established at Metalloys whereby this department provides guidance and leadership on SHECQ issues, whilst implementation is the responsibility of line management. The good safety record achieved over this last period can be ascribed to this well matured culture.

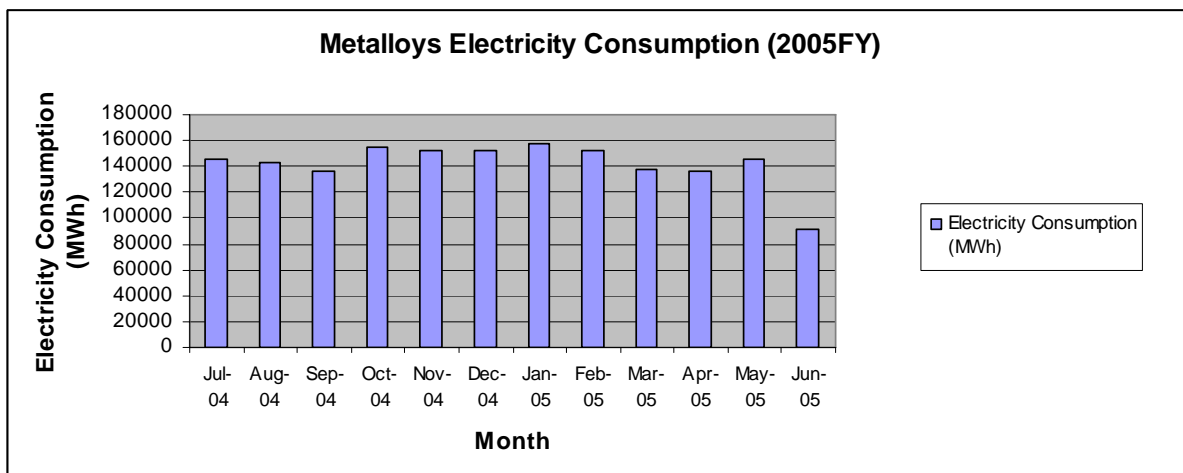
A functional line is also well established between the risk manager, both superintendents and the Group HSEC Manager responsible for corporate SHEQC issues.

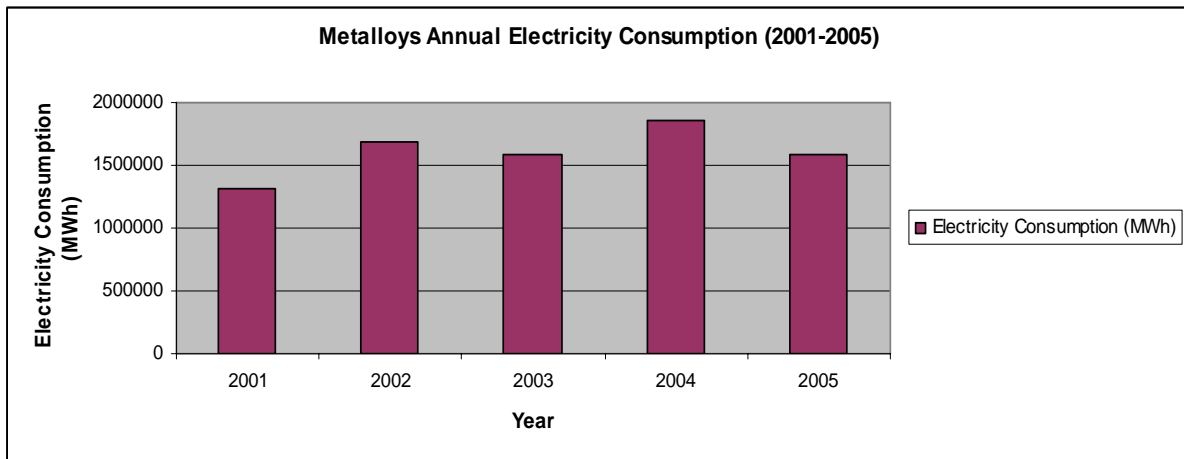
### HSEC PERFORMANCE

Metalloys uses the classified injury rate as one of the measures to determine if progress is made towards reaching the ultimate goal of achieving zero harm. The graph below indicates the progress that has been made in our quest for zero harm.

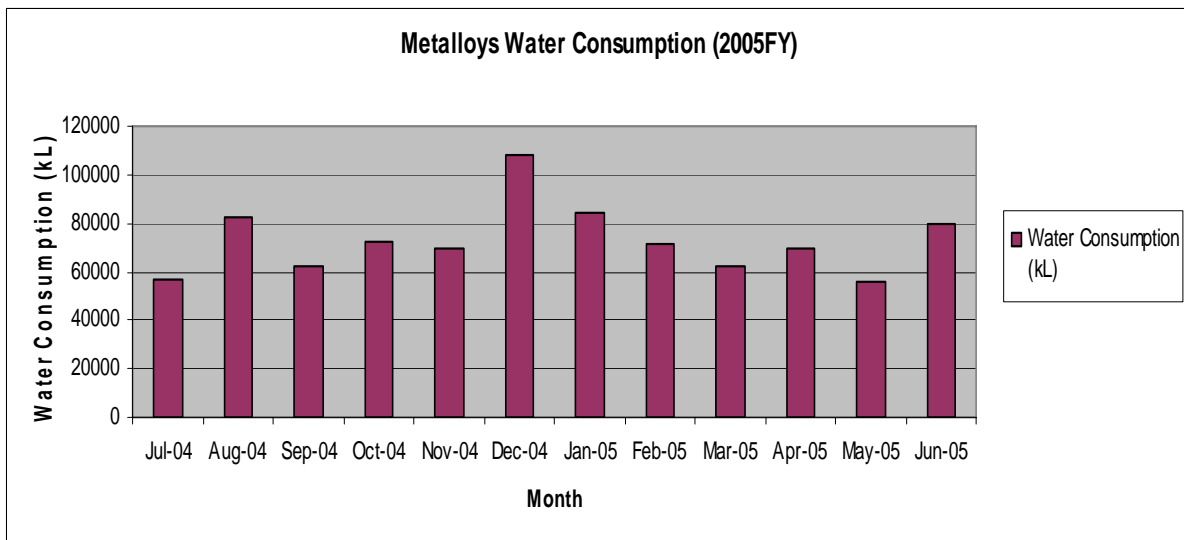


Due to the nature of the of Metalloys' operations, electricity consumption is not only a key cost element, but also the main contributor towards greenhouse gas emissions and therefore needs to be managed very carefully. The graph below indicates the consumption for the reporting period.



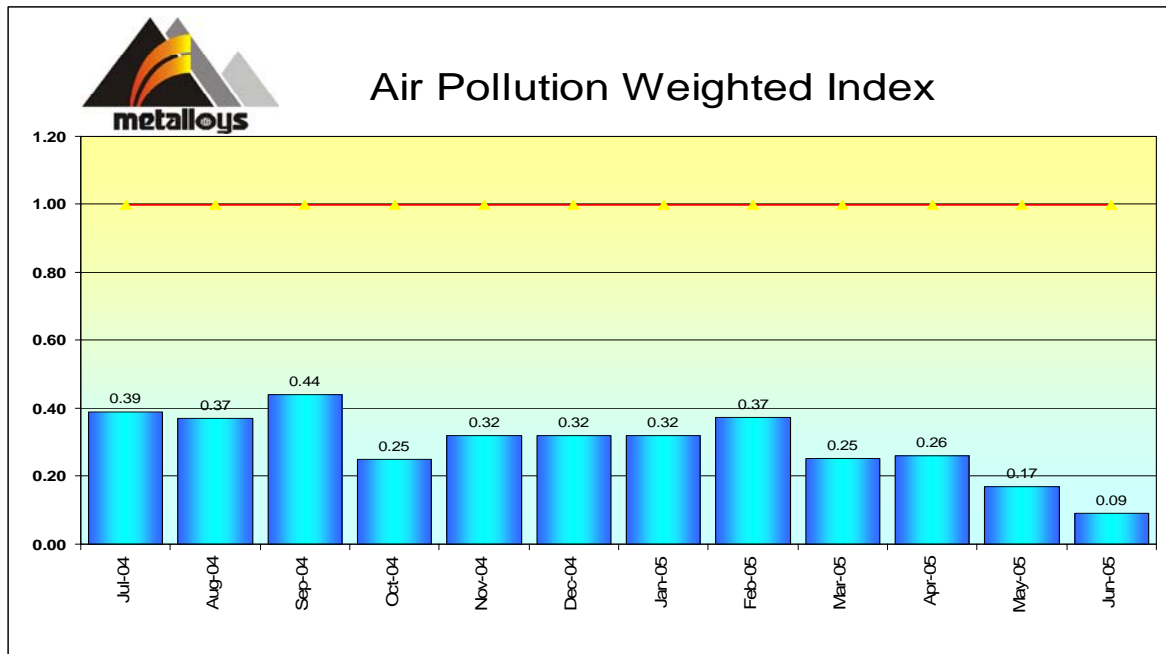


Water consumption is considered critical not only due to cost but also because of the scarcity of this natural resource in South Africa. Hence major efforts are being introduced to reduce raw water intake and optimize re-cycling. The graph below indicates that Metalloys is managing its water consumption effectively and preventing it of increasing.



Air quality in the surrounding area is probably the most critical environmental aspect in terms of the community's perspective of the effectiveness of how HSEC issues are managed at Metalloys. For this reason Metalloys has implemented an extensive air quality monitoring program and also conducted some modeling to determine impact zones. Continuous monitoring is currently being conducted around the site.

Note that with regards to air quality over the measured period, Metalloys falls well within the legal limit of 1 during all months as indicated on the graph below.



## HSEC AUDITS AND SELF ASSESSMENT

During the reporting period the company maintained its ISO 14001 and 9001 certification. As mentioned above, findings raised during the surveillance audits of these systems, are fed back into the formal system for action and follow-up

The company also received a 4.2 out of 5 rating on the BHP Billiton 15 standards internal audit, which governs the way operations in the group adhere to a set of prescribed guidelines. Metalloys will once again undertake this audit during 2006.

## TECHNOLOGY AND EFFICIENCY IMPROVEMENT

### Secondary emissions reduction

Historically occasional occurrences of air pollution at the West Plant have been a major area of concern to Metalloys management and the surrounding community. A concerted effort was therefore initiated to design effective secondary pollution control measures at this plant. The secondary pollution control system has been in operation for some time now and the effective reduction of suspended and fall-out dust has led to management approving the design of such a facility at the other two plants, that being North and South Plants. Consequently, North Plant has installed a secondary emissions plant which will in the coming months show improvements to air quality at that plant. Similarly, the Materials Management Department is also looking into various alternatives in order to improve air quality. Such alternatives include the fogger system and/or a bag filter plant. The effectiveness of the systems described above are continually being monitored from a health and an environmental perspective with specialized monitoring and measurement mechanisms as part of a stringent air quality management system.

### Fourie spruit and Amcor Dam

A substantial investment in the construction of a diversion canal for the Fouriespruit, a natural streamlet on the Metalloys site, got underway in June 2004, and took five months

to complete, with completion in October 2004. This construction of the canal was imperative as it prevents pollution of the water in the streamlet and caters for potential flooding.

Additionally, the newly constructed canal will act as a diversion to isolate runoff and process water within the boundaries of Metalloys from the water outside of the plant, thus minimising the chance of contamination of the natural water systems outside of the plant's footprint area. This project has also seen the expansion of the wetland downstream of the Fouriespruit thus proliferating a resource that is rapidly dwindling throughout the world according to the Ramsar Convention.

The Amcor Dam is a vital resource to Samancor and has been so, for the last 50 years. The water is used to cool the shells of the furnaces in the plant. Not only is it an important utility to Metalloys, but it is home to a variety of birds, even flamingoes, and a few fish species as well.

Metalloys undertook a project to upgrade the Amcor Dam wall in an effort to seal the leak from which large volumes of precious water were being lost. The newly built Amcor dam wall will also ensure that water from the Metalloys plant is isolated from the water in the surrounding area, which includes the Fouriespruit, thus avoiding possible contamination of the environment surrounding the plant.

## **COMMUNITY- ENVIRONMENTAL AWARENESS AND DEVELOPMENT PROJECTS**

World Environment Week and Arbour Week in August 2004 and June 2005 presented perfect opportunities for Metalloys to initiate environmental awareness amongst the citizens of our community.

During Arbour Week, a large number of indigenous trees were planted around the site. All employees and contractors were given the opportunity to participate in this activity. The greening of the Metalloys site will go a long way in attaining an aesthetically pleasing working environment to all stakeholders alike.

In addition, to encourage awareness and respect for our natural world, competitions were hosted by Metalloys. Colouring-in, drawing, Green-dress up as well as "Adopt a Tree" initiatives were some of the activities hosted by Metalloys.

Therefore, for World Environment Week, Metalloys approached a local school, Springfield Primary and together, hosted a World Environment Day program that saw the youth actively participate in various activities that they themselves had organized. This included songs by the talented choir, poetry recital, plays and drawings. Metalloys sponsored a number of trees that the children helped plant all around the school yard. A clear message of consciousness and respect for the environment was the achievement for the day.

## **COMMUNITY CONSULTATION**

Metalloys has developed a comprehensive community relation's plan, which has been implemented with great success in the adjacent community. Other specific community related projects at which Metalloys have played a significant part are:

- Facilities were provided whereby children who have to be appearing in court as witnesses can be questioned in a group without feeling intimidated and nervous by not being in a court room environment.
- Metalloys has revamped the Wilberforce science centre in Evaton and equipped it with state-of-the-art laboratory equipment, which will be used not only by the Wilberforce College, but also by several other schools south of Johannesburg, including Beverly Hills, Mzxeke, Poelano, Ruta-Setjhaba and Qedilizwe High schools.
- The company has made significant investments in learner and adult education, as part of its social commitment to local communities. Recent sponsorships include the R800 000.00 funding of an additional three classrooms for the Springfield Junior secondary school near Meyerton, as well as the launching of four successful e-learning and development centres in Sebokeng, Sharpeville, Kagiso and Steelpoort.
- The Metalloys sponsorship of a R1-million upgrade of Midvaal Community Health Centre in Meyerton, close to the company's premises, has ensured that the local underprivileged communities have access to improved health care services. The extensions and renovations of the Midvaal health care centre (previously known as the Meyerton Clinic) have not only ensured the improvement of the levels of health care available to local residents, but also the creation of jobs and skills development during the construction phase of the renovated health centre.
- The establishment of the R7-million Kotulong Community Centre near the plant in Meyerton has been hailed by the local community as a gift of life from Metalloys.

Metalloys funded the conversion of single sex dormitories, which once housed migrant workers, into a multi-million rand model facility which includes a hospice for the terminally ill, residential units for orphans and vulnerable children, a central kitchen and dining/multipurpose hall, a resource library, a playroom, recreation area and administration and service facilities and gardens.

The project was initiated in February 2003, with the aim of the Kotulong Community Development Centre being to add quality to the lives of the surrounding community, many of whom are unemployed, poverty stricken and disadvantaged.

The vibrant Kotulong centre, which is the Sotho word for "to harvest", was opened in May 2004, and saw Metalloys joining in a partnership with government partners and NGOs, to convert the hostels into a model clinic.

The centre provides for an 18-bed in-patient facility, anti-retroviral therapy and immune boosters, youth camps, residential care for 60 vulnerable children and a 16-bed paediatric ward. The clinic also runs an outreach programme providing home-based care to 48 patients by volunteers and serves as a feeder to the hospice for those patients who are unable to take care of their families.

The community assisted in identifying their needs, and a feasibility study was undertaken prior to the project being initiated. Local community skills were also used during the project.

The major focus areas of Kotulong are the Hospice, the Orphans and Vulnerable Children's programme and the Income Generation Programme.

The Hospice opened in May 2004, already houses 45 patients and the outreach programme reaches another 45 patients in the community. The income generation

programme develops and empowers the community whilst generating income by selling the products being manufactured via gardening projects, beadwork and sewing projects.

The Orphans and Vulnerable Children's centre houses orphaned and vulnerable children in-house and via an outreach programme. Also opened in May, the centre currently has 27 children in residence and these children attend a nearby school, which Metalloys has also assisted by providing extra structural facilities to meet the growing demand.

Metalloys support of the Kotulong centre won BHP Billiton's Development Trust the Foundations and Trusts award for corporations with an outstanding corporate social investment programme and is hailed as a benchmark in CSI initiatives.

A meeting was held with the local town council at which Metalloys' business and HSEC issues were discussed in detail. Feedback from this meeting is also used when updating the community relation's plan.

## **FEEDBACK AND FURTHER INFORMATION**

Any feedback and / or comments on this report or related information can be directed to Riedawaan Pillay (084 - 556 2256) or Jaco van Wyk (082 - 924 9103)

If you wish to know more about BHP Billiton's HSEC policies, practices and performance please visit BHP Billiton at <http://www.bhpbilliton.com>