

# General statement on mineral resource and ore reserve estimation and reporting

The following summary of the ore reserves and mineral resources attributed to Kumba Iron Ore's current mining operations and growth projects are reported, in *Table 1* and *Table 2*, as those remaining at 31 December 2008. The figures reported reflect 100% of the mineral resources and ore reserves irrespective of Kumba's attributable ownership, which is detailed in the relevant tables.

Compared to the 2007 report, Kumba has incorporated three significant changes to its reporting protocol in 2008. Firstly, mineral resource estimates are reported in addition to ore reserves and secondly, in accordance with the SAMREC Code of 2007, modifying factors used to convert mineral resources to ore reserves are declared where relevant. Note, however, that Kumba believes the disclosure of forward-looking iron ore prices, associated exchange rates and other financial parameters may disadvantage its competitiveness in the iron ore industry; these modifying factors thus remain undisclosed. The third change relates to the reporting of inferred mineral resources, where in order to more transparently explain movements between 2007 and 2008, two categories of inferred mineral resources are reported in 2008: Inferred mineral resources outside life-of-mine plans and inferred mineral resources considered for life-of-mine scheduling.

Mineral resources are reported according to the latest available geological models, which have been updated within three to six months prior to the end of the year of reporting. Ore reserves for the mining operations have been estimated within two months of this statement, while for projects, updates are performed as required by business feasibility investigations or when primary business case assumptions change.

All mineral resource and ore reserve tonnages are quoted in metric tonnes. Mineral resource grades reported are the average grade above cut-off and are reported *in situ* using operation-specific cut-off grades. The ore reserve grades reported represent the weighted average grade of the 'plant feed' or 'run-of-mine' material and take into account all applicable modifying factors. The average grade and tonnage estimates of 'saleable product' are also reported to show that beneficiation losses have been taken into account in the figures reported.

Kumba uses the concept of 'optimistic pit shells' to define the limits for 'reasonable and realistic prospects of eventual economic extraction', which are necessary for the declaration of mineral resources according to the SAMREC Code of 2007. Optimistic pits shells were established by doubling the April 2007 long-term revenue factors used at that time to estimate optimised shells from which practical pit layouts containing the ore reserves were derived (all other parameters for pit shell optimisation remained unchanged). Thus, Kumba's 2008 mineral resources are not an inventory of all mineral occurrences drilled or sampled regardless of cut-off grade, likely dimensions, location or continuity. Instead they are a realistic record of those, which under assumed and justifiable technical and economic conditions, may be economically extractable in future.

The mineral resource and ore reserve statement has been compiled so that it complies with international reporting standards and conventions as well as the regulations set by the JSE Limited. It conforms to our mineral resource and ore reserve reporting policy (endorsed by Kumba's board of directors), which recognises the SAMREC Code of 2007 as the minimum reporting standard. Note, ore reserves in the context of this report have the same meaning as 'mineral reserves', as defined by the SAMREC Code.

In accordance with the SAMREC Code, Kumba derives the ore reserve estimates reported for each operation or project by applying mining, metallurgical, economic, marketing, legal, environmental, social and governmental 'modifying factors' to their reported mineral resources. Initially, grades and tonnages estimated from the geological block models are discounted by the application of 'modifying factors' such as dilution and mining losses in order to develop a so-called mining model, which forms the base from which the ore reserves are estimated through life-of-mine scheduling. Kumba's operations and projects consider the expected long-term revenue versus the time-inflated operation and production costs associated with mining and beneficiation as well as environmental and social costs, in determining whether a mineral resource could be economically extractable and converted to an ore reserve or not.

## Ore reserves and mineral resources

Competent persons have estimated the mineral resources and ore reserves reported here. All 'competent persons' have been duly appointed and made aware of their responsibility towards unbiased mineral resource and/or ore reserve estimation on an operational or project level according to the Kumba reporting policy. All competent persons have sufficient relevant experience in the style of mineralisation, type of deposit and mining method as well as in the activity for which they have taken responsibility to qualify as a 'competent person', as defined by the 2007 SAMREC Code. The mineral resource and ore reserve estimates have been signed off by the relevant competent persons, who consent to the inclusion of the information in this report in the form and context in which it appears. A list of the competent persons responsible for Kumba's mineral resources and ore reserves is available from the company secretary upon written request.

Kumba applies a rigorous three-year rolling internal and external audit process to its mineral resource and ore reserve estimates. As part of the external independent review process conducted at Kumba's operations and projects since 2005, Golder Associates Africa (Pty) Limited audited the existing Sishen Mine mineral resource and ore reserve estimation and reporting processes in 2008. Financial provision has been made for a similar detailed independent external review of the Sishen South estimation and reporting processes in 2009 and the Zandriverspoort Project will be reviewed once the prefeasibility study has been completed. Thabazimbi Mine was similarly audited in 2007.

The estimates reported here have been reviewed and are endorsed by V Lickfold, the person within Kumba designated to take corporate responsibility for mineral resources and ore reserves. The chief executive officer of Kumba, C Griffith, also endorses the estimates presented in this report.



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13 February 2009



**C Griffith**  
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13 February 2009