The Significance of Mineral Reporting Codes and Guidelines

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Your Project, Our Experts, Your Value

There has been significant disruption in the mining industry over the last few years. Some of the major disruptions include commodity price volatility, volatility in the R/$ exchange rate, significant cost escalations, logistical problems, uneasy relationships with Environmental, Social and Governance ("ESG") stakeholders, technical skill shortages and impatient funding mechanisms. However, the market still expects new, fundable, profitable mines, and mine expansions to be developed, and for existing operations to deliver strong financial returns in line with company projections and investor expectations.

How can you develop your project for lowest probability of failure, that not only delivers technically, but are also fundable? By returning to the fundamentals of our industry! Mining projects can, and must be, designed for a reasonable chance of success. Success that results in safe and sustainable operations, off-take agreements, sufficient funding and on-time, on-budget implementation of the right mine and infrastructure for the intended market, and with sustainable stakeholder relationships.

There are numerous codes and standards that serve as a guideline for project development and public reporting of the technical parameters and estimated value of mining projects at various development stages. In the late 1960's and early 1970's, the American Association for the Advancement of Cost Engineering International ("AACE") set out a guideline for project development and cost estimate classification. This methodology has been accepted world-wide to control the development of complex projects. Mining projects certainly fall within the complex, multi-disciplinary category. The guideline starts at a Class 5 opportunity identification, then progress to potentially fundable estimates in the interim, and then to a Class 1 execution estimate. The first stages (Class 5 and Class 4) are the scope development phases. Here, the intension is to investigate WHAT to design. In the design and engineering development stages, you design WHEN and HOW these components will interact and integrate as a cohesive solution to achieve the project objective. The levels of estimate accuracy continuously improve through the development stages, and stage gates regulate progress to the next stage of development. This process represents international best practice.

The development of our own South African code for the Reporting of Exploration results, Mineral Resources and Mineral Reserves (SAMREC) started in 1992, and was first issued in 2000, and adopted by the JSE in their Listing Requirements. Today it (and other international codes) forms the basis of reporting public estimates and should be adopted, even if the estimates are not intended for publication. Public reports must contain the information that a reasonable investor would expect to find and use as a basis for making an informed decision regarding a project. The same principles apply for reports that may find their way into the public domain. It is encouraged that all estimates and reports comply with the relevant Codes, irrespective of the intended audience.

As part of the 2016 SAMREC edition, Table 2 was added to provide further guidance on the project development process, focussing on Class 5, Class 3 and Class 2 estimates, as the Codes provide guidelines on public disclosure. It compares well with the AACE guidelines and is clearer on aspects specifically associated with the mining sector. Reference to the South African Codes include SAMVAL and the SAMESG guideline.

The prevalence of studies that does not clearly fall within a defined project development estimate Class, or so-called CPR's (Competent Persons Reports) that does not conform to the reporting and disclosure requirements of the Codes, has affected the reliance that external funders and funding institutions are prepared to attach to 'fundable' reports. This causes confusion and additional perceived risk for traditional and external funding mechanisms, making projects increasingly difficult to fund. For example, a clear and thorough guideline is provided for CPR's, in addition to the Table 1 reporting requirements; and clear guidelines and requirements are available as part of section 12 of the JSE Listing Requirements. To avoid reporting that could be considered misleading, it is preferable that all study reports are well positioned in terms of the Class of study, and that reports and estimates covering Mineral Resources and Mineral/ Ore Reserves and Mine Valuations, comply to SAMREC, SAMVAL, and the SAMESG guidelines.

Reasonable and Realistic Prospects for Eventual Economic Extraction (RRPEEE) is a critical point to be made. A point that does not receive the emphasis it is supposed to receive in the reporting requirements of technical studies. Amongst other references, Section 4.3 of SAMREC Table 1 covers the minimum requirements of RRPEEE in eight separate points as part of the Estimation and Reporting of Mineral Resources. The minimum technical areas to be considered include physical properties regarding the geology; engineering parameters such as mining method, associated modifying factors, processing and geotechnical requirements; infrastructure in terms of access, water and power; legal, permitting, governmental and statutory requirements; environmental and social aspects; marketing; economic assumptions such as potential costs and commodity prices; and material risks.

Comprehensive Codes and Guidelines are available to not only provide structure to the project development process, but to provide guidance in terms of the public reporting of the project outcomes. These are well structured, and well applied in most cases, but unfortunately not in all. In some cases, non-compliance with these Codes and Guidelines results in difficulty in determining project fundability. Competent and Qualified Persons are encouraged to report and disclose projects results in line with the Codes and Guidelines, irrespective of the intended audience.

Compliance with the reporting codes ensures that the project owner develops the project on an appropriate techno-economic basis. It also empowers the project owner to trigger funding at the appropriate stages of the project and to implement it into a safe and sustainable operation.