



SAMCODES

SNIPPETS

Technical Studies

Technical Studies are used to justify progression of a mining project to the next investment level. Three levels of Technical Studies are identified in the SAMREC Code – Scoping Study, Prefeasibility Study and Feasibility Study and Table 2 provides guidance in terms of the level of accuracy of the study and the nature of the information to be provided.

During early exploration, some level of economic analysis may be carried out by a company on exploration data which might not include Mineral Resource estimates to assess the potential for the project to proceed to the next phase of exploration. These analyses are considered to be a part of the exploration programme planning and are solely for internal company decision-making purposes. They are not for public disclosure.

The Code does not require that a full Feasibility Study must be undertaken to convert Mineral Resources to Mineral Reserves, but it does require that at least a Prefeasibility Study or Life of Mine Plan will have been carried out to determine that the mine plan/production profile is technically achievable and economically viable, and that material Modifying Factors have been considered to an appropriate level of confidence.

A **Scoping Study** is an order of magnitude technical and economic study of the potential viability of Mineral Resources that includes appropriate assessments of realistically assumed Modifying Factors together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a Pre-Feasibility Study can be reasonably justified. A Scoping Study may not include historical estimates, Exploration Results, Exploration Targets or Mineralisation. A Scoping Study should include appropriate assessments of realistically assumed Modifying Factors together with any other relevant operational factors that are necessary for the Competent Person to demonstrate, at the time of reporting, whether or not the project is potentially viable and if it can be reasonably justified to recommend proceeding to a Pre-Feasibility Study. Although initial mining and metallurgical plans may have been developed during a Scoping Study, *the Scoping Study may not be used as the basis for the estimation of Mineral Reserves.*

The purpose of the **Prefeasibility Study** (PFS) is to provide information to justify the decision to proceed to a Feasibility Study, to continue data collection and assessment, or to abandon the project. It is the lowest acceptable level of study for the conversion of Mineral Resources to Mineral

Reserves. The accuracy of the inputs to a PFS should be derived from vendor budget quotes for major items combined with current cost database, benchmarking against similar projects with current or similar site labour costs, scale of operations and productivities etc. A PFS may include Measured and Indicated Mineral Resources, or a combination of these. If Inferred Mineral Resources are used the required disclosure as set out in Clause **Error! Reference source not found.** of the Code should be applied. No part of an Inferred Mineral Resource may contribute to a Mineral Reserve. Historical estimates, Exploration Results, Exploration Targets and Mineralisation may not be included in a PFS.

A **Feasibility Study** is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Prefeasibility Study. The accuracy of the inputs for a Feasibility Study (FS) should be derived from multiple vendor quotes for major items combined with a current cost database, current site labour costs, site specific productivities, detailed materials cost to site, etc.