Metallurgical Accounting in Practice: Performance Non-Negotiables

A Giblett1

1. FAusIMM, Director – Processing, Newmont Goldcorp Services, Subiaco Western Australia, aidan.giblett@newmont.com

ABSTRACT

Metallurgical accounting is a standard requirement in all mineral processing operations and recognisable at most levels of a mining organisation as an essential input into business reporting processes. The data produced by the metallurgical accounting system however has more fundamental value in defining the operational efficiency of the process plant and the economic value of the mineral resource. Sustained high performance in metallurgical accounting is an essential component of a well-run mining operation, facilitating timely and well directed action from the site management team. Metallurgical accounting is therefore a core business activity, providing a platform from which to improve the profitability of a mining venture and maximize stakeholder value.

Contrary to this broad value statement, too often the importance of good metallurgical accounting practices is not evident in plant design, nor in some cases plant management. This reality illustrates the prevailing attitudes towards metal accounting; while high levels of performance are expected, the value of this performance is evidently not sufficient to dictate capital investment or operational resourcing. The operational challenges are not helped by the limited guidance available to plant operators on how to enable consistently high performance within the constraints of their resourcing and numerous competing demands. The inevitable outcome is recurring performance issues, and the associated diversion of valuable resources into corrective investigations with uncertain outcomes.

Given the seemingly inevitable deficiencies in system design, and the guaranteed limitations of the processing department's resources, plant operations need a lean, focussed approach to metallurgical accounting system management. Such an approach can deliver the robustness and credibility required by the corporate and financial spheres, while being manageable and sustainable at an operational level. This paper proposes the core requirements of such a system specifically for gold plant operators, based on examples of best practice observed at a number of operations.