

Improved sustainability through WHIMS Plant addition at Roy Hill

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Keywords: profitable, customer requirements, Brownfield risk, WHIMS Plant

ABSTRACT

The primary objective of mining companies is to function as a profitable business by delivering products that fit customer requirements in a safe and sustainable manner. Optimum resource utilisation is a critical focus area to achieve this objective, and the long-term sustainable business performance of a mining company is determined by the extent to which this is achieved. Technology improvements and/or new technology development could improve resource utilisation. However, adding new projects to a Brownfield operation carries risk. Overall project schedules, tie-in schedules and safety risks normally receive adequate attention, but the introduction and integration of new technology to a Brownfield site also carries the significant risk of failure to achieve design performance (quality or throughput). This risk must be addressed via rigorous design phase risk assessments and piloting. Post commissioning, the effective metallurgical integration of any new technology / circuit / process plant into an existing process plant calls for critical assessment, through circuit performance testing, and optimisation to ensure alignment with design criteria. In addition, this approach provides clear focus areas for further optimisation of the new plant and additional opportunity for overall plant optimisation. Roy Hill recently navigated this process successfully, and this paper provides feedback on the journey that lead to improved resource utilisation.