ABSTRACT
There is a flurry of activity worldwide to attempt to reduce the risk of catastrophic failure of tailings dams. The majority of this is focussed on higher standards and greater stringency in governance, site investigation, design and construction. Whilst this is commendable, there is a limit to the ability of the mining industry (in-house and through consultants) to adequately provide the level of scrutiny and support that is recommended by these guidelines. Furthermore, ICOLD Bulletin 121 showed that the main causes of tailings dam failures to be a general lack of understanding by site personnel and operators, of the features that control safe operation of tailings dams.

Clearly, site personnel at all levels including management, must have a reasonable degree of understanding of the background to the tailings dam design, the potential failure modes and the critical operational controls in order to safely construct and operate these facilities. In addition, site personnel, particularly the day to day operational staff, must be able to recognize signs of distress in the dam embankments and be properly trained to implement emergency responses if necessary. This understanding should be apparent through the preparation and use of an appropriate Operation, Maintenance and Surveillance (OMS) Manual. However, typically this is a document prepared by a consultant, with site operators having little if any input into the preparation and may not even have seen it.

The Paper presents the authors thoughts on how the mining industry should be improving the education of site personnel so they can provide a greater level of effective control of tailings dam safety including empowerment to develop their own documentation, monitoring and surveillance systems and to better liaise with specialist external technical staff or consultants.