Book review

ICOLD Bulletin 139: Improving Tailings Dam Safety – Critical Aspects of Management, Design, Operation and Closure

ICOLD. ICOLD, Paris, France, 2011, €50-00, 171 pp.

Bulletin 139 presents a wide-ranging overview of the aspects of tailings storage facility (TSF) management, design and operation, which must be considered to ensure construction, operation and post-closure safety. The intention of the bulletin is not to describe specific methods to ensure TSF safety, but rather to concisely cover each aspect in a single document, rather like an extended checklist for improving TSF safety. No figures, photographs or equations are given, and there are only a handful of tables and flow charts. For detail on how to carry out each aspect covered, a comprehensive list of references for further information is provided.

Following the introduction, the first main chapter emphasises the importance of corporate commitment to improving TSF safety and the

second describes the scope of training required for personnel from operator/supervisor level up to board member level.

The next four chapters cover the critical engineering aspects for tailings dams: design, environment, operation and closure. Each chapter gives a comprehensive list of the factors that need to be addressed to ensure best practice. However, the level of detail varies between each chapter. For example, while Chapter 4 (Design aspects) gives a description of each hazard that must be designed for, Chapter 5 (Environmental aspects) is more of a checklist of bullet points.

The final four main chapters describe current best practice in risk management, external auditing, emergency preparedness and the role of regulatory bodies in improving TSF safety, each with a complete list of references.

The bulletin is clearly written and laid out and appears to provide a well-judged level of detail on each of the factors covered. It is 171 pages long and presented in both English and French.

Tom Shire