

European waste characterisation standards A/NRD prevention

I. Walder¹, M. Wahlstrom², T. Kaartinen², J.A. Drielsma³, I. Twardowska⁴

¹Kjeøy Research & Education Center, Kjeøy, N8412, Vestbygd, Norway, ifwalder@kjeoy.no; ²Technical Research Centre of Finland (VTT), Espoo, Finland; ³European Association of Mining Industries (Euromines), Brussels, Belgium; ⁴Polish Academy of Sciences, Zabrze, Poland

Abstract

Europe was once the most important mining region in the world and nearly every European country has remnants of historic mining. Though the importance of mining in most European countries has declined in recent decades, mining has the potential to re-emerge as the backbone of the economy in many countries of Central and Eastern Europe. Exploration for minerals is also active in Scandinavia, the Balkans and on the rim of Europe. In the aftermath of the Aznalcóllar (April 1998) and Baia Mare (January 2000) accidents, the European Commission published a “Communication on the Safe Operation of Mines” including two significant actions: 1) The development of a “Best Available Techniques” document on the management of tailings and waste rock; and 2) The development of European Directive 2006/21/EC on the management of waste from the extractive industry. The tailings dam failure in Hungary 2010, has further shown the need for better laws/regulations and enforcements of such.

When finalising the Directive, there were some open questions regarding waste characterisation methods. The Directive therefore calls for Euro-

pean-wide standards in waste characterisation, which are now being prepared by the European Centre for Norms (CEN) as mandated by the European Commission. Strong links between the CEN and the International Standards Organisation (ISO) are likely to be the vehicle by which new European requirements impact the industry globally.

This paper presents the European mine waste standards (acid-base accounting) and guidelines, (overall guidance on characterisation; kinetic testing; sampling) that are in a final stages of development. These guidelines build two international workshops on acid generation behaviour; a comprehensive review of existing international standards, and the validation of a preliminary European Norm (prEN 15875) on Static testing for determination of acid potential and neutralisation potential of sulphidic waste.

The CEN will work on the standards until early 2012. During this period the industry would be well advised to follow progress closely and to provide input where appropriate.